

SECTORAL ACTIVITIES PROGRAMME

Working Paper

Strengthening social dialogue in the utilities sector in Malawi:

The impact of structural reforms on social dialogue

by

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Working papers are preliminary documents circulated
to stimulate discussion and obtain comments

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Preface

The lack of a reliable supply of electricity and access to clean, fresh drinking water creates exceptional daily stress on the lives of those living in the world's poorer regions, particularly in sub-Saharan Africa. In Malawi, one of Africa's least urbanized countries, over 60 per cent of the population live in informal settlements beset by extreme difficulties and hazards in water collection and sanitation. Moreover, Malawi's electricity capacity accounts for a mere 2.7 per cent of national supply to a population of 13 million, for whom biofuel is the primary source of energy. Improving Malawians' standard of living is one of the Millennium Development Goals enumerated by the United Nations to address the enormous disparities in developing countries.

The Sectoral Activities Department of the ILO commissioned this report as part of its Action Programme of the ILO on Strengthening Social Dialogue in the Utilities (Water and Electricity Supply) Sector, to examine the current state of the public utilities sectors in Malawi, with special focus on water, sanitation and electricity, the challenges to be addressed, and the state of social dialogue in relation to reform measures. The report was validated in a workshop held in Lilongwe on 27–28 May 2009, with broad participation from the Government and the social partners.

The report finds that Malawi faces tall challenges to improve water and electricity supply. Social dialogue in the water and sanitation sector is weak, but is substantially better in the electricity sector, where generally stable industrial relations and effective collective bargaining take place. The need to strengthen social partners to participate fully in social dialogue is also discussed in the report.

The report aims at encouraging dialogue among stakeholders on the issues raised. The Action Programme aims to build on these findings and encourage the creation of permanent mechanisms of social dialogue in Malawi. The Programme also sponsors research and activities in Nigeria and Peru.

ILO working papers, such as this one, are a vehicle for disseminating information on topics related to the world of work and the evolution of social and labour policies and practices.

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List of acronyms

AES	Allied Energy Systems
AIDS	acquired immune deficiency syndrome
ARV	anti-retroviral medicine
BAT	British American Tobacco
BESTAP	Business Environment Strengthening Technical Assistance Project
BOC	British Oxygen Company
BWB	Blantyre Water Board
CBA	collective bargaining agreement
CIDA	Canadian International Development Agency
DWSF	District Water Supply Fund
ECAM	Employers' Consultative Association of Malawi
EIB	European Investment Bank
ESCOM	Electricity Supply Commission (or Corporation) of Malawi
ESI	electricity supply industry
ESKOM	Electricity Supply Company (South Africa)
ESU	ESCOM Staff Union
GDP	gross domestic product
HIPC	Highly Indebted Poor Countries
HIV	human immunodeficiency virus
ICEM	International Federation of Chemical, Energy and Mine Workers' Union
IDA	International Development Association
ILO	International Labour Office
JCC	Joint Consultative Committee
LPG	liquefied petroleum gas
LWB	Lilongwe Water Board
MBS	Malawi Bureau of Standards
MCCI	Malawi Chamber of Commerce and Industry
MCTU	Malawi Congress of Trades Union
MEGS	Malawi Economic Growth Strategy
MERA	Malawi Energy Regulatory Authority
MGDS	Malawi Growth and Development Strategy
MIWD	Ministry of Irrigation and Water Development
MSR	multi-sector regulator
NAC	National AIDS Commission
NECO	National Electricity Council
NGO	non-governmental organization

NHSP	National Hygiene and Sanitation Programme
NIPDS	National Irrigation Policy and Development Strategy
NSP	National Sanitation Policy
NWDP	National Water Development Project (Programme)
PCC	Petroleum Control Commission
PPP	public–private partnership
PSIA	poverty social impact analysis
PSP	private sector participation
PURP	Privatization and Utilities Reform Project
SADC	Southern Africa Development Community
sanplat	concrete sanitary platforms
SAPP	Southern Africa Power Pool
SBU	strategic business unit
SDR	special drawing rights
ufw	unaccounted-for water
UNDP	United Nations Development Programme
VIP latrines	ventilated improved pit latrines
WETUM	Water Employees’ Trade Union of Malawi
WSS	water supply and sanitation

Part A. Strengthening social dialogue in the electricity sector in Malawi

A.1. Introduction

A.1.1. Global perspective and background to study

Owing to the large sunk costs required to set up infrastructure, in both developed and developing countries, government-owned enterprises have traditionally provided infrastructure services. However, on the strength of evidence gathered over much of the 1980s and 1990s across the world, government ownership of infrastructure has proved disappointing in that increases in coverage have been limited, the quality of services has been deficient and the levels of operational efficiency have been low (see Guasch, 2004). In addition, given the scarcity of public funds for infrastructural investment, the reliance of most state-owned enterprises on government funding to achieve increase in performance and coverage has often conflicted with competing demands from the social sector. Infrastructure services' heavy demand for subsidies, coupled with their potential for cost recovery, has forced a number of countries to explore the potential for transferring the provision of infrastructure services to the private sector.

Along these lines, privatization of the electricity supply industry (ESI) is on the rise. Although activity outside industrialized countries has centred on Latin America, countries in other regions are taking steps to open the ESI to private sector participation (PSP) (see PSIRU, 2001). Privatization of the ESI typically involves unbundling the sector into separate activities: electricity generation; operation of the high-voltage national transmission network or grid (transmission); operation of the local network that takes power from the grid to final consumers (distribution); and retail of electricity to final consumers including wholesale purchase of electricity, reading consumers' meters and billing. In concert with these international developments, since 1998 the electricity sector in Malawi has been undergoing reforms, aimed at the vertical separation of the Electricity Supply Commission of Malawi (ESCOM) into three separate units: generation, transmission and distribution and imbuing them with a commercial motive. In addition, since 2008 the Government has established a multi-sector regulator (MSR) for the energy sector, the Malawi Energy Regulatory Authority (MERA).

The social welfare logic underlying privatization of utilities is that PSP ensures provision of better service and lower prices to consumers, while still providing the private owners with a fair rate of profit. The benefits of ESI privatization are premised on the assumption that the private sector will bring in efficiency gains due to the discipline imposed by the profit motive and will reduce the scope for political interference. The theoretic justification seems to rest on three pillars that privatization of the ESI will lead to: (i) improvement in managerial/financial systems (for example, to improve bill recovery) and bring in a more consumer-focused culture; (ii) increased ability to mobilize or attract finance for investment and for maintenance; and (iii) a reduction of political interference which may have impeded either efforts to disconnect non-payers or reform the tariff structure.

Although suboptimal quality of service provided by public infrastructure service providers is symptomatic of government failure, PSP in infrastructure may not be the panacea since it also opens up prospects for market failure in many respects: Firstly, firms will only be attracted to enterprises where they can make a profit; secondly, the drive for profit puts pressure on firms to reduce expenditure and therefore investment in anything

not related to revenue maximization may be accorded a low priority; thirdly, although privatization is premised on competition, the reality is that, in order to maximize profits, investors may prefer a less competitive and more relaxed regulatory regime; and, fourthly, even post-privatization the Government may still end up paying substantial subsidies because PSP does not absolve the Government from its social welfare mandate to increase access and maintain affordable and stable energy prices for the country. As such, private sector provision of infrastructure presents a conundrum for governments. The ILO Tripartite Meeting on Challenges and Opportunities Facing Public Utilities (Geneva, 19–23 May 2003) identified the main conundrum of PSP as:

... maintaining a balance between commercial and business concerns, calling for cost-efficient, profitable operations and broader public service values that emphasize the provision of affordable, reliable and widely accessible services, whether the ownership is public or private.

This study is in the context of the conclusions the said ILO Tripartite Meeting which recognized the need for national and regional activities to address and educate workers on the potential impacts of reforms and undertake “independent and specific research on economic and social issues in public utilities to supplement the report prepared by the Office”

A.1.2. Scope and objectives of the study

This study presents a situation analysis of the energy sector including major problems, issues and challenges facing the sole electricity utility in Malawi, the ESCOM. It also documents reforms undertaken in the past decade and analyses how these have impacted on employment levels, working conditions of staff, training, compensation schemes, industrial relations, and on access to and quality of the services provided by the ESCOM to society. Finally, the study concludes with recommendations as to how stakeholders should address both current issues and future challenges to ensure smooth social dialogue in the electricity sector.

A.1.3. Approach and methodology

The methodology utilized for this study included desk review and fieldwork. The desk study mainly focused on reviews of laws currently in force, such as the Energy Regulation Framework Laws (Acts No. 20-23 of 2004) and of the old legal framework including the Electricity Repeal Act (1998) and Petroleum Control Commission Act; review of other Government of Malawi publications including policy documents and poverty analyses; World Bank project proposals and project implementation reports, especially those pertaining to the Privatization and Utilities Reform Project (PURP).

With regard to the fieldwork, the methodology also included key informant interviews where interviews with management, a board member of the newly empanelled MERA. In addition, a focus group discussion with the ESCOM Staff Union (ESU) leadership was conducted and a semi-structured questionnaire was also administered to the current and former union leadership.

A.1.4. Summary of findings

Under the aegis of the PURP, Malawi has gone through two rounds of electricity sector reform. In the first phase, on 30 November 1998, the Malawi Parliament passed the Electricity Supply Corporation of Malawi (Repeal) Act (No. 21 of 1998), the substance of which was that the former ESCOM should continue as the Electricity Supply Corporation

of Malawi (ESCOM) Limited. In fact the creation of the new ESCOM preceded the enactment of the Act having been created on 29 July 1998 and registered as a limited liability company under the Companies Act of 1984, with nominal shareholding by the Ministry of Finance (99 per cent) and Malawi Development Corporation (1 per cent). Under the Electricity (Repeal) Act, the Government also established a regulator, the National Electricity Council (NECO), in January 1999 and provided for the vertical separation of the ESI into generation, transmission and distribution markets.

In the second phase, in 2003, an Energy Sector Policy was formulated and in 2004 the Energy Sector Regulatory Framework Laws were enacted which provide for creation of a multi-sector energy regulator instead of the subsector regulators, the NECO and the Petroleum Control Commission (PCC). A key element of the sector policy statement was that, apart from the separation of the ESCOM into generation, transmission and distribution units there was need for immediate commencement of privatization of the ESCOM's distribution unit with subsequent privatization of generation. However, due to the political economy consideration (due to change in administration), the ESCOM's privatization was suspended and it took four years after their passage for the energy regulatory law to be gazetted and another year for the regulator to be constituted.

Given Malawi's measured steps towards privatization of the ESCOM, there has not been any PSP in the electricity sector in Malawi. Therefore, some questions and impacts anticipated by the Terms of Reference of this study were not entirely applicable. For instance, under the Electricity Act of 1998, the new ESCOM inherited all assets and liabilities of the former ESCOM and thus there was no impact on permanent employment. Similarly, the new Electricity Act of 2004 also bound the ESCOM to employment contracts and ensured continuity of service.

The state of social dialogue in the sector is somewhat healthy given the number of employees and diversity of trades, occupations and interests. However, until recently, such has not always been the case. The ESCOM has had a very unstable management tenure with more than five people holding the office of chief executive in the past decade and workers in the corporation being represented by two competing unions which were affiliated to parallel national federations. In 2007 long-running discontent over early withdrawal of pension funds erupted in open industrial action.

Just like in the other utilities, energy sector reforms here and afar are driven by the World Bank and ministries of finance and the Department of Energy Affairs. The Ministry of Labour has not taken (or been given) its proper seat at the table of reforms. Unlike the unions in the water sector, workers in electricity are more aware of the reforms and more anticipatory. Yet, although unions in the electricity sector participated in information and education campaign about the first restructuring, their involvement in the reform process was not about whether or when but explaining the how, especially required to achieve employee buy in. They were not party to strategic preparation and direction, especially in the context of influencing the nature, substance and sequence of reforms.

Looking ahead, the ESCOM faces enormous financial and technical challenges which are aggravated by environmental issues. The challenge for the Government of Malawi is how to make the ESCOM attractive for PSP given its heavy debt burden, partly obsolete equipment and mounting technical problems. Malawi can learn from the experiences of countries that have already travelled this road and pre-empt some of the problems that attend to electricity reforms. Rather than take privatization as an article of faith, stakeholders ought to seriously think about how a debt-ridden enterprise like the ESCOM could be turned into an attractive investment for a private sector partner; to reflect on the fact that privatization may not absolve the Government from its social responsibility of subsidizing privatized electricity services; to consider how to provide effective regulation, while ensuring both affordability and price stability for consumers and that the privatized

entity is profitable; there is also need to reflect on procedural and substantive issues to ensure smooth transition, the least disturbance to employment and ensuring contract commitment from new companies.

A.1.5. Recommended stakeholder roles

A.1.5.1. *The ILO*

We recommend two activities for the ILO. First, the ILO needs to seize the opportunity to experiment with an education and information campaign which would capacitate workers and managers in the public utilities to meaningfully contribute to the design and implementation of subsequent levels of sectoral reforms which anticipate and mitigate the potential adverse impact of PSP in electricity. In addition, the ILO should also anticipate the fact that, upon privatization, the ESU may cease to exist and in its place at least three new unions will be born. The new unions will need capable leadership on their part and recognition from their respective new employers. The ILO can help in capacity building aimed at assisting current chapters to grow into fully fledged unions upon privatization.

A.1.5.2. *The Government of Malawi*

There are four things that we recommend for the Government of Malawi. First, to make the ESCOM an attractive investment, the Government needs to restructure or retire the ESCOM's debts and we recommend conversion of the debt into equity. However, that debt, whether retired or otherwise disposed, should be allocated according to assets acquired and now in use under the different strategic business units (SBUs). Second, the Government needs to strategize on a privatization road map. That is, if and when the ESCOM is sold, whether as a whole or in parts, there are potential "retrenchments" when everyone will be required to retire. However, even for those that will be rehired, they will have to start afresh under different terms of employment and conditions of service and some employees may even lose seniority. Therefore, the Ministry of Labour should claim its seat and play its protective role from the beginning at the table of reforms. In addition, the Ministry of Labour should organize education and information forum for workers and employers representatives to discuss the effect of implementing the Electricity Act in full and potential threats to decent work, and map out strategies for maximizing decent work. Third, since other major players in the energy sector are as yet unknown, we propose that the Government of Malawi should also work towards the creation of an interest reconciliation forum for the energy sector (i.e. all those affected by the Energy Regulation Act). Whichever private company eventually buys a stake in the ESCOM or its parts will of necessity be members of this forum. Lastly, the Government needs to seriously revisit its anti-trust policy. Although the law envisages that the energy sector will be competitive, the Government or regulator needs to be alive to possibility of upstream and downstream consolidation through subsidiaries or straightforward mergers and acquisitions which end up concentrating the market shares.

A.1.5.3. *Employees and their representatives*

In view of the reforms we recommend four things for unions. First, there is need for reorganization of union structure. When the ESCOM is privatized, there will be number of institutions with similar mandates each serving a smaller population, with narrowly based and unequally yoked unions since many issues will be company specific. There is need for foresight among union members in order to anticipate the restructuring of the union with presidency at the three levels (generation, transmission and distribution). Second, given

that electricity sector reform is part of a larger reform programme, we recommend the creation of union-level collaboration in public utilities. This would facilitate the formation of a consensus stance on privatization in utilities, and provide a joint forum for debate with representatives of the Government and development partners or afford opportunities for holding joint conferences on privatization-related proposals and experiences. Third, and in the same vein, we recommend joint training for union officials. This joint training of union officials in the infrastructure service providers, whether international or domestic, could be on the justification, timing, nature and procedures of anticipated reforms. Finally, we are of the view that that union leaders could benefit from joint exchange programmes, where they will learn from experiences of other African countries that have tried to privatize the ESI, for example, Cote d'Ivoire.

A.1.5.4. Employers

For the ESCOM as the sole employer, we observe the need for an employment reallocation road map. Although currently the ESCOM's head office acts as a holding company, when the ESCOM is privatized, some staff from the ESCOM's head office will have to be retrenched unless they can be relocated to SBUs because each new company will need to be self-contained in terms of support staff. Hence, we recommend that the ESCOM draws up a plan for reallocating some head office staff to SBUs before the company is up for sale. Second, with privatization, there will soon be the need for an industry-wide employers representative organization. Since many of the new employers will require the same skills set, we propose that, when the next phase of reforms is designed, regard should be had for an industry-wide representative organization for employers to harmonize the organizations in electricity who want to do something for the profession including negotiating and representing the interests of its members on the basis of technical, economic and legal aspects.

A.2. Malawi: Situation analysis

A.2.1. Structure of production

Malawi has a relatively young and small economy with the composition of output reflecting the legacy of colonial structure of production. The economy is heavily reliant on rain-fed agriculture which accounts for about 35 per cent of gross domestic product (GDP) and 85 per cent of employment. In recent years there has been structural change in the structure of production. Owing to economic liberalization, in the 1980s and 1990s, Malawi witnessed significant de-industrialization reflected by the declining share of manufacturing output in total output from 16.3 per cent in 1995 to 11.2 per cent in 2007. Second, in the past decade the share of the Government in GDP has declined from 11.8 per cent in 1995 to 7.8 per cent in 2007. The major gainers in all this structural change have been financial and professional services whose share in GDP has grown by 47 per cent. More important to note for this study is the fact that the share of utilities (both water and electricity) in GDP has remained constant at 1.45 per cent. In addition, Malawi has a very small formal sector and recent estimates suggest that only 9 per cent of individuals of the economically active age-group and about 21 per cent of household heads were employed in the formal sector. About 80 per cent of the labour force is engaged in the non-formal sector, which includes self-employment in small-scale agriculture, casual labour and vending (Gemini Report, 2000).

A.2.2. Evolution of economic policy

For the first 15 years after independence Malawi experienced high rates of economic growth averaging 5 per cent per annum, mostly buoyed by growth in estate agriculture and import substitution industrialization (Pryor, 1990). However, beginning in 1979 there were signs that all was not well from the viewpoint either of macroeconomic stability or balance of payments. A series of exogenous shocks, including the second oil shock, a major drought and closure of Malawi's traditional routes to the sea due to civil war in Mozambique worsened terms of trade by 30 per cent, affected the balance of payment position and by 1981 Malawi experienced negative growth.

Subsequent to these imbalances Malawi has been signatory to a number of structural and sectoral adjustment loans from the World Bank and currently Malawi has a programme with the IMF. Reforms included agricultural reforms that included the removal of fertilizer subsidy and restructuring of ADMARC and the liberalization of financial sector and creation of financial markets. In February 1994 Malawi liberalized exchange rates, consequent to which, between 1994 and 1996 the exchange rate depreciated by over 80 per cent and, due to inelastic demand for imports, the exchange rate depreciation fuelled inflation to an all time high of 89 per cent in 1996. As a result in much of the multiparty era, the economic climate has been characterized by volatility with economic growth ranging from as low as -4 per cent in 1995 and 2001 to as high as 8 per cent in 2007.

However, since 2004 the economy has steadied with Malawi's GDP, measured at 1994 factor prices, rising from MK12,619 billion in 2002 to MK16,928 billion in 2007 representing an average annual growth rate of 5 per cent. The good times were fortified on 31 August 2006 when Malawi reached the completion point of the Highly Indebted Poor Countries' (HIPC) initiative and qualified for debt relief. In total, the national debt stock was reduced by 90 per cent from US\$3 billion in nominal terms to around US\$400 million and annual external debt service obligations were reduced from \$115 million to only \$5 million, equivalent to a saving 15 per cent of the Government's annual budget. External debt as a ratio of GDP declined from 168.5 per cent in 2004 to just 8.2 per cent in 2007 and the debt service as a percentage of exports declined from a high of 24 per cent in 2003 to 8.1 per cent in 2007 (Reserve Bank of Malawi, 2007). This notwithstanding, Malawi still faces daunting balance of payments challenges. Although exports have doubled from MK31.71 million in 2002 to MK73.83 in 2007, over the same period imports have grown threefold from MK45.61 million to MK150.58 million. The current account deficit has grown by over 300 per cent from MK28.75 million in 2002 to MK103.52 million in 2007, and from 2001 to date Malawi's average official reserves position can provide import cover for just 2.1 months.

A.2.3. Demographics

Malawi is one of most densely populated countries in sub-Saharan Africa with 13.02 million people living in 2.9 million households occupying a land area of 118,484 km² (Government of Malawi, 2008). The population is unevenly distributed with 45 per cent in the South, 42 per cent in the centre and the remainder in the northern region and the structure is predominantly young with over half of the population below 18 years of age. As Malawi's population has grown by an average annual rate of 2.8 per cent since 1987, the corresponding population density has grown from 85 people per km² in 1987 to 105 in 1998 and now stands at 139 persons per km² (Government of Malawi, 2008). This has not only resulted in declining per capita land holding (both total and arable) but has also led to conversion of increasingly marginal and ecologically fragile land for agriculture. In turn, these poor land use patterns and resulting deforestation have resulted in rapid degradation of rivers upper catchment areas (World Bank, 2007).

A.2.4. Poverty and social welfare

With a per capita GDP of US\$170 in 2007, Malawi is classified as a low-income country and ranked 165th of 177 countries based on the United Nations Development Programme's (UNDP) Human Development Index (UNDP, 2005). The national unemployment rate is estimated at 3.1 per cent (NSO, 2007) although it averaged 11.2 per cent in urban areas (Lilongwe = 16.1 per cent and Blantyre = 8.1 per cent) and 2.1 per cent in rural areas, which perhaps reflects the reality that the problem in rural areas is underemployment or disguised unemployment. Consequently, about 52 per cent of the population live below the national poverty line of US\$146.83 per annum and, with a Gini coefficient of 0.52, income distribution is somewhat skewed (Government of Malawi, 2000, 2002a).

The pervasiveness of poverty and mal-distribution of income and lack of sustained growth at the macroeconomic level have had disastrous consequences for Malawi's epidemiological profile. With more than 20 per cent of the population having absolutely no access to health services, Malawi's health indicators are among the worst in the world and communicable diseases make up a large proportion of the disease burden. Currently, the infant mortality rate stands at 76 per 1,000 births while the under-5 mortality is 133 per 1,000. With maternal mortality currently at 984 per 100,000 births, the lifetime risk of dying while giving birth for Malawian women is 1:7, the world's second worst. In recent years, the human immunodeficiency virus (HIV) and the acquired immune deficiency syndrome (AIDS) have become the other major public health problem in Malawi. In 2008, HIV prevalence in adults was estimated at 12 per cent (NAC, 2008) and leading to reduction in life expectancy from 44 years in early 1990s to 38 years by 2008.

A.2.5. Household's sources of energy for cooking

The pervasiveness of poverty is also reflected in the demand and use of different types of energy for both cooking and lighting. Malawi is heavily reliant on biofuel for its cooking energy requirements and table A.2 shows that biomass, especially firewood and charcoal, accounts for 95 per cent of national energy requirements for cooking. In contrast electricity accounts for just 2.7 of national energy supply. However, there are significant variations in energy use by residential location in that rural households' reliance on biomass is 97 per cent while only 77 per cent of urban households rely on biomass and 20 per cent get their cooking energy needs from electricity. However, in urban households also rely on biomass the composition is different from the national picture. For instance in Blantyre up to 54 per cent of households depend on charcoal whereas about one third of households in the other cities rely on charcoal

Table A.1. Distribution of households by source of energy for cooking

Area	Electricity	Solar energy	Gas	Paraffin	Charcoal	Firewood	Other	Total
Malawi	2.7	0.1	0.1	0.9	8.6	86.9	0.8	100
Urban	20	0.2	0.2	0.6	43.6	35	0.4	100
Rural	0.5	0.1	0.0	1.0	4.2	93.3	0.9	100
Northern	1.4	0.1	0.1	0.7	7.0	90.7	0.1	100
Central	2.4	0.1	0.0	1.0	7.2	88.4	0.8	100
Southern	3.1	0.1	0.1	0.9	9.9	85.0	0.9	100
Mzuzu	10.3	0.1	0.0	1.4	31.4	56.6	0.2	100
Lilongwe	18.5	0.0	0.3	0.4	36.6	43.6	0.6	100
Blantyre	24.4	0.4	0.2	0.6	53.9	20.2	0.3	100
Zomba	10.0	0.0	0.1	0.8	27.4	61.5	0.2	100

Source: NSO (2007), Welfare Monitoring Survey.

A.2.6. Sources of energy for lighting household

The demand for and use of energy for lighting also seems to reflect the rural concentration of the population and pervasive nature of poverty. There is evidence that Malawians, regardless of area of residence, clearly distinguish between sources of energy for cooking and lighting. Nationally, paraffin (kerosene) is by far the predominant source of energy for lighting (86 per cent) with electricity coming as a distant second (7.6 per cent). However, whereas 97 per cent of households in rural areas rely on firewood and charcoal for cooking, 92 per cent use paraffin for lighting. In the urban areas, although only 20 per cent use electricity for cooking, up to 52 per cent of households use electricity for lighting while 38 per cent rely on paraffin.

Table A.2. Distribution of households by source of energy for lighting (percentage)

Area	Electricity	Paraffin	Candles	Firewood	Grass	Other	Total
Malawi	7.6	85.9	1.7	1.5	3.1	0.2	100
Urban	51.7	37.9	9.5	0.3	0.2	0.4	100
Rural	2.2	91.8	0.7	0.3	0.2	0.4	100
Northern	8.2	85.8	1.6	1.5	2.7	0.2	100
Central	6.3	86.0	1.8	1.5	4.4	0.1	100
Southern	8.5	85.9	1.6	1.5	2.3	0.2	100
Mzuzu	47.6	48.0	4.4	0.0	0.0	0.0	100
Lilongwe	46.0	43.5	10.0	0.3	0.2	0.0	100
Blantyre	59.3	28.6	10.8	0.3	0.2	0.8	100
Zomba	35.9	58.0	4.3	1.0	0.4	0.5	100

Source: NSO (2007), Welfare Monitoring Survey.

A.3. Structure of the energy sector in Malawi

This section briefly highlights the structure of the energy sector in Malawi. As indicated in the preceding section, biomass is the predominant source of energy. However, when we abstract from biomass and concentrate on energy sources for commercial or industrial use, the rest of the energy sector in Malawi comprises hydroelectricity, liquid fuels and gas and coal.

A.3.1. Hydroelectricity

Owing to historical and economic reasons, the ESCOM is the sole generator, transmitter, distributor and retailer of electricity in Malawi. It was established in 1957 initially as a department within the Ministry of Works and Supplies and subsequently constituted as a parastatal under the Electricity Act in 1964. The company was subsequently incorporated on 29 July 1998 as a limited liability company and registered under the Companies Act of 1984, for the purpose of acquiring the assets, liabilities and trade of the ESCOM. The ESI in which the ESCOM is the only player, comprises three levels: generation, transmission and distribution (which includes retailing)

A.3.1.1. Electricity generation in Malawi

The ESCOM operates an interconnected system of hydroelectric generation plants consisting of stations situated at Nkula, Tedzani and Kapichira on the Shire River. Nearly 95 per cent of Malawi's electricity supply is provided by hydropower from this cascaded group of three interconnected hydroelectric power plants located on the middle part of Shire River and a mini hydropower plant on the Wovwe River in the northern region. The total installed capacity of these hydropower plants is 282.5 MW. In addition, there are some thermal power plants that serve as stand-by for the interconnected system: a 15 MW gas turbine plant in Blantyre and a 1.1 MW diesel power plant in Mzuzu. Likoma District has two separate isolated systems with a total installed thermal power capacity of 1.050 MW. Therefore, the total present installed capacity for the ESCOM system, inclusive of standby thermal plants, is about 299.65 MW.

The first of the three cascaded power stations, Nkula power stations, consists of two independent power stations sharing the same intake pondage and located in Neno in Southern Malawi. As table A.3 below shows, Nkula A power station, the first power station in the country, was constructed between 1966 and 1967 and has an installed capacity of 24 MW while Nkula B Power station was constructed in phases between 1980 and 1992 and has an installed capacity of 100 MW. The Tedzani power stations comprise three power stations; Tedzani I, Tedzani II and Tedzani III located 7km downstream of Nkula hydropower stations on the Shire River. All the three power stations share a common intake dam but with separate Bell mouths. As the table shows, although these stations have an installed capacity of 92.7 MW Tedzani I and II have been out of operation since 2001. The last of the three power stations, Kapichira power station, is located in Chikwawa district. The power plant is designed for four machines but only two machines have been installed in phase I which was officially opened in September 2000 and has an installed capacity of 64 MW.

Table A.3. Generation capacity for the Electricity Supply Corporation of Malawi

Year of Installation	Type	Total potential capacity(kW)	Location
1966 & 1967	Hydro	24 000	Nkula Falls A
1973	Hydro	20 000	Tedzani Falls I
1976–77	Hydro	20 000	Tedzani Falls II
1995	Hydro	52 700	Tedzani Falls III
1980, 1981, 1986 & 1992	Hydro	100 000	Nkula Falls B
1995	Hydro	4 350	Wovwe
2000	Hydro	64 800	Kapichira Falls
1956	Diesel	1 100	Mzuzu
1975	Gas Turbine	15 000	Blantyre (Chichiri)
	Hydro	281 850	Malawi
	All	297 950	

A.3.1.2. Electric power transmission

Electric power transmission is one process in the transfer of electricity to customers and typically refers to the bulk transfer of electrical power from place to place. The essence of transmission is that power is transported between the generation plant and a substation near a populated area.

The ESCOM also owns the transmission lines and associated infrastructure in the interconnected system which includes high-voltage power lines, power transformers and switchgear. Typically, electricity is transmitted over long distances through overhead power transmission lines normally at high voltage. The ESCOM's transmission network comprises 1,250 km of wood pole lines and 815 km of steel tower lines. These lines transmit bulk power at 66 kV and 132 kV, and feed power to over 70 transformers which are located at 39 substations in the country. For the past 15 years, under the aegis of the Southern Africa Power Pool (SAPP) there has been an expectation that a 220 kV volts transmission line would link Malawi to Caborra Bassa in Mozambique thereby enabling the two countries' power utilities to conduct power trading.

A.3.1.3. Electricity distribution

The ESCOM has about 200,000 customers and is connecting about 15,000 new customers annually. Distribution is responsible for the operation and maintenance of medium and low voltage (33 kV and 1 kV) lines as well as the 400/230 volts lines together with associated equipment. In addition, the ESCOM exports power to some border towns: Lundazi in Zambia; and Milanje, Mandimba, Zobue and Villa Ulongwe in Mozambique.

In anticipation of the forthcoming privatization, the ESCOM's distribution unit was recently unbundled into business units representing the three political regions. The demand and supply of electricity is an artefact of the regional disparities in development. As table A.4 shows, due to the southern region's relatively higher level of industrialization, 60 per cent of the power distributed by the ESCOM is supplied to consumers in the region although this share has been in steady decline in the past decade.

Table A.4. Electricity distribution in Malawi

Year(s)	NES		CES		SES		ESCOM
	Sales (Gwh)	% of total	Sales (Gwh)	% of total	Sales (Gwh)	% of sales	Total (Gwh)
1995–96	31.3	4	227.3	31	469.2	64	727.8
1997–98	40.6	5	248.2	31	513.7	64	802.4
1998–99	40.2	5	259.9	31	546.6	65	846.6
1999–00	43.0	5	292.9	33	565.0	63	900.9
2000–01	50.5	6	297.0	33	556.9	62	904.4
2001–02	50.8	6	271.9	31	561.3	63	884.0
2002–03	57.0	6	291.8	31	588.3	63	937.1
2003–04	64.4	7	317.3	33	587.8	61	969.5
2004–05	67.0	6	354.0	34	635.2	60	1 056.1
2005–06	76.5	7	374.8	34	665.7	60	1 117.0
2006–07	83.7	7	369.8	32	686.1	60	1 139.6
Average	72.9	7	354.0	33	643.7	60	1 070.6

Note: NES – Northern Electricity Supply; CES – Central Electricity Supply; and SES – Southern Electricity Supply.

In urban, peri-urban and major rural centres, for customers requiring a new single phase service connection to existing power lines, the connection is done under the Namagetsi system of cost-sharing. Under this system, the capital cost of extending and connecting new services with electricity, currently estimated at MK65,000, is shared between the ESCOM and the customer with the ESCOM historically contributing over

80 per cent of the connection cost. On 1 September 2008, the ESCOM increased the customer capital contribution charge from MK9,000 to MK25,000. It was argued that the increase in the charge was necessitated by the increase in the price of materials required for a new Namagetsi connection.

For final consumers, the ESCOM's distribution charges are scaled on the basis of maximum demand per month. However, under the pre-paid meter system, customers are allowed discounts based on bulk units purchase. The unit charge for the first 1,000 units is K3.45, followed by discounts of 2.5 per cent on the next 1,500 units; 5 per cent for the next 2500 units; 7.5 per cent for the next 2500 units and 10 per cent for excess over 7,500 units. This tiered pricing system tends to favour the better-off consumers, whose average cost per unit consumed decreases with bulk purchase.

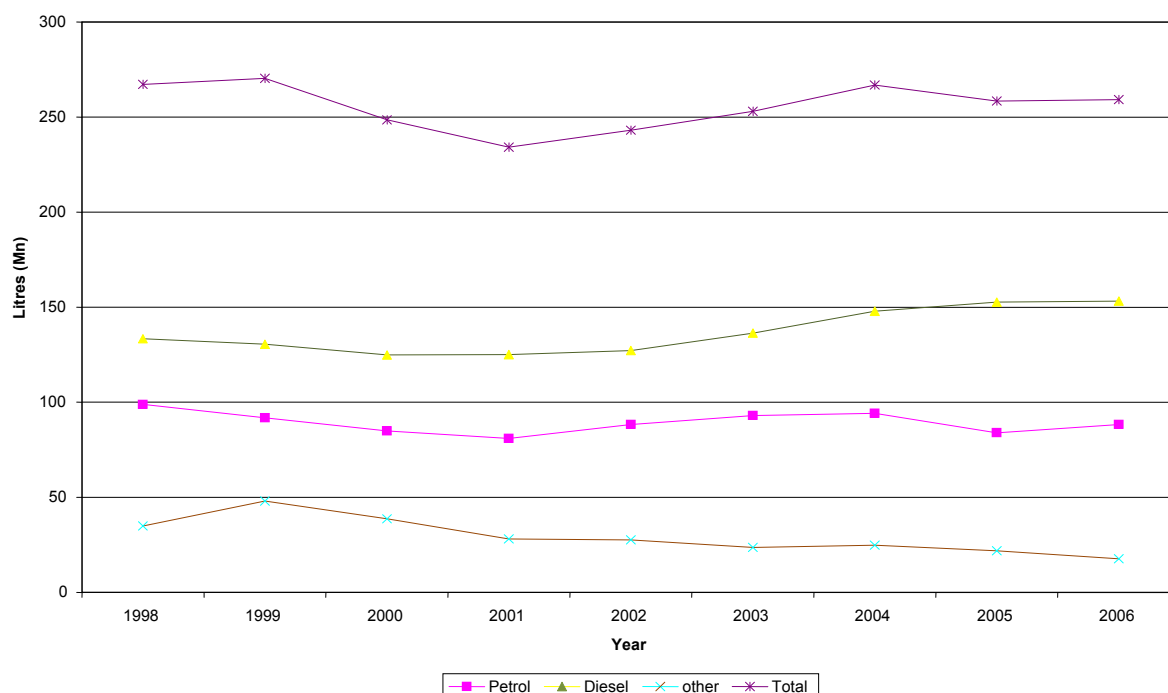
A.3.2. Liquid fuels sector

The liquid fuels and gas subsector in Malawi mainly consists of petrol, diesel, paraffin, gas and ethanol, the latter being a blending agent for petrol. The wholesale market has traditionally been dominated by international oil corporations who provide franchises to local Malawians to operate retail points. However, as we discuss below, due to changes in the law and liberalization of the sector, the structure of the liquid fuels sector has recently changed both in terms of number of players and their market shares. For instance, due to the takeover of Exxon Mobil's business by Total in Malawi and 16 other African countries, the company with the largest market share is now Total (37 per cent) followed by British Petroleum (32 per cent), Petroda (18 per cent) and Caltex (12.3 per cent). New entrants into the sector, NOIT, Energem and Injena, have yet to get a foothold in the market.

The process of supplying liquid fuels to final consumers in Malawi involves several stages, including importation, transportation, storage, distribution, wholesaling and retailing. At the importation stage, a consortium of oil companies, Petroleum Importers Limited imports the bulk of the liquid fuels into Malawi at international prices using a competitive tendering system at different ports (Dar es Salaam, Beira and Nacala). The second stage involves international haulage of fuels from the ports to the storage depots in Malawi. In 2004 the PCCs estimated that 50 per cent, 30 per cent and 20 per cent of Malawi's liquid fuels were procured and hauled through the ports of Beira, Nacala and Dar es Salaam, respectively. However, due to capacity problems on the Nacala route, by 2008 about 71.21 per cent of Malawi's fuel imports came through Beira, while 21.7 per cent came through Dar es Salaam and 6.64 through Mbeya.

Figure A.1 depicts trends in Malawi's imports of liquid fuels and shows that over the past decade Malawi has averaged 255 million litres of liquid fuels of which 136.8 million (or 54 per cent) is diesel and 89 million litres (or 35 per cent) is petrol and other fuels account for the remainder. It also appears that, while imports of diesel have steadily risen from 133 million in 1998 to 153 million in 2006, the petrol imports have been rather flat and even cyclical with higher than average imports in the penultimate and actual election years, for example 1998–99 and 2003–04.

Figure A.1. Malawi fuel imports (1998–2006)



At the third stage (storage), the international oil companies also own 92 per cent of the fuel storage capacity while the remainder is under government. With regard to retailing, the Liquid Fuels (Supply and Production) Act only allows oil companies to operate two filling stations, such that most retailing of fuel is done through franchising to local business enterprises in various parts of the country.

Prior to 2007, the liquid fuels subsector was regulated by the PCC, which was mandated with regulation of the whole supply chain from importation to retailing of liquid fuels, including safety issues in Malawi. On the other hand the pricing of liquid fuels was regulated by the multi-sector Petroleum Pricing Committee comprising of the Government, the private sector, the PCC as well as petroleum importers and wholesalers. The regulation covered the pricing of transport services, the distribution margin, wholesale price, retail margin and the pump price. The main principle underlying price setting was the automatic pricing mechanism which linked pump prices to procurement costs with exchange rate movements with a 5 per cent trigger band.

Liquid fuels are heavily taxed in Malawi. The duty and excise taxes are respectively 10 per cent and 29 per cent on petrol, 10 per cent and 30 per cent on diesel, and 5 per cent and 15 per cent on paraffin. To these taxes are added a number of levies which we discuss below.

A.3.3. Coal subsector

Coal in Malawi is mined by Coal Products Limited (Mchenga Coal Mines Limited) and Kaziwiziwi Mining Company Limited, both of which are privately owned. Mchenga Coal Mines Limited was a government-owned enterprise and was privatized in 2000 (Privatization Commission, 2000). A new mining company Mean Jalawe has just opened in the past three years and has yet to get a solid market share. According to MEPD (2005)

production of coal in 2004 was 40,891 metric tonnes, 13 per cent below the level produced in 2003. The coal mining subsector employed 629 people in 2004.

The coal industry in Malawi faces enormous cost-effectiveness challenges and Malawians find it cheaper to import than use domestically produced coal. Although domestic demand for coal is very high, domestic coal producers are at a competitive disadvantage due to high transport costs. To supply coal to customers in Malawi's industrial hubs in the southern region from Mchenga mines requires overland transporting of 800 kilometres (with no return load). In contrast, coal from Moatize in Mozambique covers only 230 kilometres. The lack of competitive edge is reflected in price since, although Mchenga sells coal at US\$38 per tonne (ex-mine) it costs US\$56 to transport a tonne of coal 450 km to Lilongwe and twice as much to Blantyre

A.3.4. Gas subsector

The gas market in Malawi is almost negligible with only 650 tonnes of imports per annum of which only 10–20 per cent is for domestic use (Government of Malawi, 2007). The market structure is monopolistic with BOC Malawi Limited, previously Industrial Gases Limited, having operated in Malawi for close to 40 years as the sole importer and supplier of gases. Apart from liquefied petroleum gas (LPG), the British Oxygen Company (BOC) also supplies carbon dioxide (CO²) for use in the manufacturing of carbonated drinks. It also supplies welding electrodes and accessories. In terms of ownership structure, 80 per cent of the shares in BOC are owned by the African Oxygen Company (Afrox) in which the BOC has a shareholding of 49 per cent. The remaining 20 per cent of BOC shares are owned by local investors.

A.4. Legal framework in the energy sector

The Department of Energy Affairs is in the fifth year of implementing the National Energy Policy of 2003. The Energy Regulation Act (No. 20 of 2004) calls for the establishment of a sector-wide regulator and empowers the regulator to conduct economic, technical and legal regulation. It also restricts the role of the State to governance, policy guidance and strategic planning.

On 28 December 2007 the Energy Regulatory Framework Law, which includes the Energy Regulation Act, the Electricity Act, 2004, the Rural Electrification Act, 2004, and the Liquid Fuels and Gas (production and Supply) Act, 2004, was gazetted. The gazetting automatically led to the formation of the MERA, automatic repeal of the Electricity (Repeal) Act of 1998, the Petroleum Control Commission Act of 1996 and the Petroleum Storage Act of 1951. However, two other energy sector bills are still outstanding before Parliament: the Coal Bill and the Renewable Energy Bill.

A.4.1. Energy Regulation Act (No. 20 of 2004)

According to its title this act seeks: (i) to establish a multi-sector energy regulatory authority (the regulator) to regulate the energy sector; (ii) to define the functions and powers of the regulator; and (iii) to provide for licensing of energy undertakings. Among its many functions, the regulator will have powers to receive, process, approve, enforce compliance and even revoke licences; approve tariffs and the price of energy sales and services; and prescribe and collect fees, charges and levies or rates.

The Act also gives the regulator conflicting mandates in that it stipulates the regulator shall exercise these functions with a view to promoting the interest of consumers of energy

with respect to energy prices and charges and the continuity and quality of energy supply; monitoring efficiency and performance of the energy undertaking's monitoring of the levels and structure of competition within the energy sector; facilitating increasing access to energy supplies; and promoting the integrity and sustainability of energy undertakings and seeking to ensure that energy undertakings, whilst providing efficient service, are able to finance and carry on of the activities which they are licensed to or authorized to carry on.

The energy regulator is to be financed from three sources: fees, charges and energy regulation levies, dues and rates; 50 per cent of all fines imposed under any of the energy framework laws; government subvention and grants in aid. With respect to the levies, the Act specifies two levies: the Energy Regulation Levy imposed on sales of energy to be paid by licensees, and the Rural Electrification Levy which seeks to promote and fund rural electrification. This levy which is 4.5 per cent of retail energy sales is paid for by every energy customer and remitted to the Rural Electrification Fund. The Act further stipulates that, if a licensee fails to remit the levy in a specific period, then a penal rate of 2 per cent above the bank lending rate.

A.4.2. Rural Electrification Act (No. 21 of 2004)

This Act makes provision for the promotion, funding, management and regulation of rural electrification. It defines rural electrification as “grid extension or off-grid electrification or renewable energy resource electrification whose internal rate of return is below 6 per cent and its generation capacity is below 5 MW or the line capacity is lower than 66 kV”. Section 3 of the Act establishes a Rural Electrification Committee which will among other things administer a Rural Electrification Fund (established under S12). The Fund, whose primary source of revenue is appropriations by Parliament, rural electrification levies, and sale of rural electrification lines and equipment, has a number of uses including funding capital, operational and maintenance cost associated with rural electrification and solar home systems, assuring availability of financing either through credit guarantees or direct contribution and fund, paying for research and consultancies and administrative fees

The Act (S24(2)) provides for separate licences for generation, distribution or renewable energy technologies and it envisages the possibility of a concessionaire operating within a concession area for a period up to 20 years. The concessionaire would pay the Concedante (Department of Energy Affairs) a monitoring and regulation fee and charge tariffs approved by the MERA. It also envisaged the establishment of rural electrification programme which would specify annual budgetary allocation for grid, off-grid extension renewable energy and prepare a priority list of projects based on internal rate of return.

A.4.3. Electricity Act (No. 22 of 2004)

The Act superseded the Electricity (Repeal) Act (Cap 73:01) of 1998 and seeks to make provision for the regulation of the generation, transmission, wheeling, distribution, sale, importation and exportation, use and safety of electricity. It stipulates that activities in the ESI shall be licensed (S3) and specifies five types of licences: generation of electricity for sale; operation of transmission network; operation of distribution network; importation of electricity into Malawi and exportation of electricity. The duration of licences varies from twenty years for distribution to thirty years for transmission, importation and exportation and 50 years for generation. Currently the application some sections of this law was suspended because it stipulates that no licensee shall hold more than one licence. As it is, the ESCOM currently generates, transmits and distributes and exports electricity.

The Act further stipulates that only one transmission licence will be issued in Malawi and that licensee shall build, operate and maintain the transmission network. The transmitter shall purchase electricity in bulk from generation licensees, sell to distribution licensees or import and export power when feasible. To this end, it is further envisaged that the transmission licensee shall own assets of and manage and operate a load dispatch centre which shall be responsible for coordination of generation, transmission, load dispatch and distribution of electricity in the interconnected system. Power generation will be competitive with many generators of electricity and all of whom are expected to comply with requirements of the load dispatch centre and shall all deliver their generation to the centre for load dispatch. All generators shall sign sale agreements with the transmission licensee for sale of their power at a price to be agreed between the parties but approved by the authority

The Act also gives a tariff structure for all operators and limits the tariffs that a licensee can charge. In general all tariffs are to be approved by the MERA, are subject to the Authority's review every four years and shall comprise: (a) a base tariff; and (b) a tariff adjustment formula which takes into consideration exchange rate movements, consumer price index increases and other unavoidable cost increases and expected efficiency gains in the sector. The main principle underlying tariff adjustment seems to be that tariff charges should be set at levels sufficient to allow the licensee an opportunity to recover his cost of service, including a reasonable return on capital and encourage efficiency. In addition practical principles include that the Authority should have regard to predictability of adjustments; financial sustainability of licensees; price stability; cost of service; equity and fairness and quality of service and the value of the Malawi Kwacha in relation to foreign currencies.

A.4.4. Liquid Fuels and Gas (Production and Supply) Act (No. 23 of 2004)

This Act superseded the Petroleum Control Commission Act (Cap 50:08) and Petroleum Act (Cap 50:03) and makes provision for the production, blending, extraction, conversion, importing, transforming, transporting, storing, distributing and selling of liquid fuels and gas in a liberalized market. The principles underlying the act seek to strike a balance between sustainable supply of liquid fuels and safety. That is, it seeks to assure the protection of public and occupational safety; ensuring equitable access to liquid fuels; while at the same time promoting the empowerment for Malawians by encouraging more competition and eliminating chance for monopolistic behaviours in any segment of the supply chain. The Act specifies two broad types of licences applicable to persons or entities participating in the sector: production, and construction and operation licences. There are four types of production licences: production of crude and gas; refining of crude oil into refined products; the production of ethanol fuels and the production of bio-diesel and their validity ranges from one to five years depending on type of activity. In addition, the act also specifies five licences that regulate the operation of liquid fuel activities. Separate licences are required for construction or operation of installations and facilities in the supply chain of liquid fuels including: (i) importation; (ii) wholesaling; (iii) storage; (iv) transportation; and (v) retailing of liquid fuels.

The Act mandates the regulator to approve price bands throughout the supply chain for liquid fuels and gas. In addition the liquid fuels sector generally acts as a cash cow for the Government so that S38 gives the Government freedom to determine and impose some five levies which are added to the fuel price build-up. These levies are of two types: fixed and ad valorem. The fixed levies on liquid fuels include the road levy, rural electrification levy, maize/drought levy (safety net 1 levy and safety net 2 levy); and the two ad valorem levies are the Malawi Bureau of Standards (MBS) cess and the fuel price stabilization levy (Petroleum Stabilization Fund).

These energy framework laws were enacted at the same time and implied significant structural changes in the energy sector in Malawi. In the next chapter we consider the ramifications of those changes on the structure of the energy industry with special focus on electricity sector.

A.5. Structural reforms in the electricity sector

In 1997 the Government of Malawi with technical assistance from World Bank began a series of reforms in key infrastructure sectors through a four point action plan: (i) liberalization of markets where competition was feasible; (ii) privatization of public enterprises; (iii) establishment/strengthening of regulatory institutions to monitor compliance with new sector policies and licensing; and (iv) improving access to services, especially by the rural population. Consequently, the Government of Malawi requested the International Development Association (IDA) for a credit to fund transactions advisory services for large privatization transactions which could not be financed from existing government resources (World Bank, 2008). The PURP was designed as a response to this government request and to address the identified constraints faced by the Government and private sector with regard to utility infrastructure services.

A.5.1. Privatization and Utilities Reform Project

The PURP sought to assist Malawi in the reform and preparation for commercialization of the major public utilities. The goal was to increase the percentage of the population with grid-based electricity from 4 per cent to 6 per cent by 32 December 2004. The main planks of the electricity sector reform included the establishment of SBUs; conversion of outstanding government loans into equity; and corporatization of the ESCOM by replacement with a limited liability company registered under Companies Act for the purpose of acquiring the assets, liabilities and trade of the ESCOM. Originally the project had five components and was later redesigned to have six but only four directly related to ESCOM: privatization, support for regulatory institutions, pre-privatization assistance and later post privatization assistance.

- (i) *Privatization*: In relation to the ESCOM, this component sought to support the development of divestiture options and support the implementation of the chosen divestiture methods for electricity distribution and transmission. When it was redesigned this component also supported a strengthened public awareness and stakeholder outreach campaign.
- (ii) *Support for regulatory institutions*: This component supported the creation and strengthening of a sound regulatory framework and capacity for the telecommunications, energy and transport sectors. Although the initial focus was to help in enhancing the operations of the NECO in power regulation, this component also assisted in evaluating the necessity and benefits of establishing a multi-sectoral regulatory agency since under the component the Government of Malawi hired a consultant to evaluate the benefits and disadvantages of establishing MSRs.
- (iii) *Pre-privatization assistance*: The objective of this component was to support the restructuring of the ESCOM, which involved dividing the ESCOM into three autonomous SBUs – generation, transmission and distribution. To that end, the component funded the conducting of a tariff study, establishment of a financial management system and separation of financial statements of the SBUs and the purchase of high-voltage metering equipment.

-
- (iv) *Post-privatization monitoring (new component)*: This component sought take on board the lessons learnt from implementing the project over the preceding four years and also from successful privatization programmes elsewhere. It would support the Public Enterprises Reform Monitoring Unit through building its capacity to carry out its mandate of pre and post privatization monitoring. The support would include provision of technical assistance, training and equipment, and financing a post privatization impact study.

A.5.2. Results of reforms

On 30 November 1998, Parliament passed the Electricity Supply Corporation of Malawi (Repeal) Act (No. 21 of 1998) and on 8 December 1998 the Act received presidential assent. The substance of the Act was that the former Electricity Supply Commission of Malawi should continue as the Electricity Supply Corporation of Malawi Limited as though the change was merely one of name except in so far as the constitution of the body was necessarily amended to bring the later in line with provisions of the companies act. In fact the new ESCOM had preceded the Act having been created on 29 July 1998 and registered as a limited liability company with nominal shareholding by Ministry of Finance (99 per cent) and Malawi Development Corporation (1 per cent). The capital was fully paid at a premium of MK12.20 per share and through cancellation of certain loan and interest arrears due to the Government of Malawi as at 31 March 1999 under an agreement dated 30 March 1999. Consequent to this, the ESCOM was supposed to be delisted from list of statutory corporations except for application of audit provisions and loan guarantees.

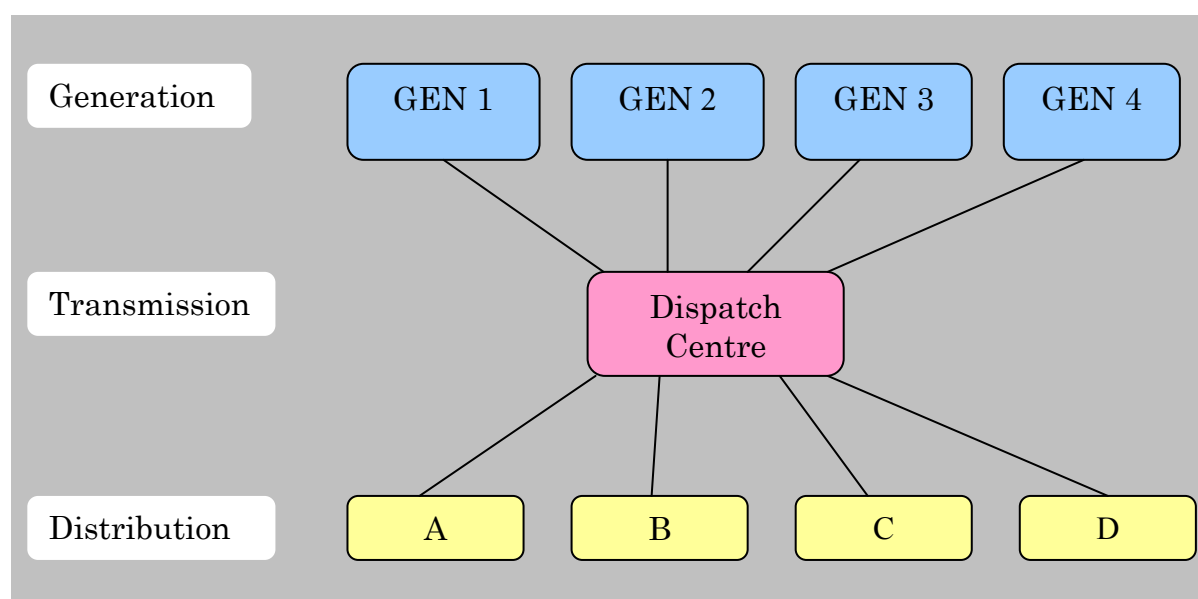
The actual implementation of the ESCOM's restructuring and reorganization followed a report from consultants from the Electricity Supply Company (South Africa) (ESKOM). Implementation of the broader reform agenda commenced with the establishment of the NECO in January 1999, as the electricity regulator. The other pillar of the reform programme was the "vertical separation of the [Electricity Supply Industry – ESI] into generation, transmission and distribution markets" in order to achieve efficiency and effectiveness in service delivery by attracting competition and meaningful PSP was partly achieved. The ESCOM implemented a new organogram, and began commercialization of transactions between the different levels in the ESI. The restructuring of the ESCOM into SBUs was conditional on procurement of new metering facilities. Unfortunately, by 2000 when the ESCOM was indeed broken down into SBUs, the metering facilities at the interfaces between the generation, transmission and distribution units had not been procured.

In addition, a task force was constituted to oversee the commercialization programme as well as to formulate a power sector policy statement. This has since resulted in the Energy Sector Policy of 2003 and the Electricity Act (No. 22 of 2004). The key elements of the sector policy statement were that apart from the separation of the ESCOM into generation, transmission and distribution units there was need for immediate commencement of privatization of distribution with subsequent privatization of generation. In addition, a master plan for power development in Malawi for 2000–15 and an associated investment plan for the first ten years was developed by Lahmeyer International of Germany and Knight Piesold of the United Kingdom finished.

Figure A.2 presents the proposed structure of the ESI after vertical separation. It can be noted from the foregoing that as it currently stands the ESCOM has been unbundled into five business units (generation, transmission and three distribution units). Although the Act envisages the creation of one monopoly for the transmission of electricity, currently generation is also monopolized by the ESCOM's generation unit. However, the Electricity Act proposes to introduce more competition partly by the privatization or

divestiture of the existing generating plants into different generating units. The Electricity Act bundles distribution and retail supply and further envisages several distributors purchasing electricity from the transmitter for sale to customers.

Figure A.2. Proposed structure of electricity subsector



Source: Government of Malawi (2004).

A.5.3. Reforms and energy regulation

Subsequent to the initial reform, the NECO was formed as a regulatory body set up under the Electricity Act of 1998 to oversee the ESI in Malawi. The Council became operational on 1 January 1999. The PURP provided training to Electricity Council on regulations, inspections, and tariffs. The NECO's main regulatory activities included licensing, tariff approval, inspection of utility substations, and electrical installations and generators, ensuring the maintenance of safety standards in the electricity industry, ensuring the maintenance of high grade and quality service by utilities, and receiving customer complaints and dispute resolution by arbitration and administrative hearings. The Council's major operating finances were derived from licensing fees from utilities (ESCOM) and a levy on electricity sales from the utilities.

Although studies done under the PURP recommended a combined water and energy regulator, due to the multiplicity of players and stakeholders in the water sector and outright resistance from the public about PSP in water, progress has been relatively faster in the energy regulation. Efforts to merge the PCC and the NECO started in May 2000 when the PCC relinquished its monopoly on petroleum imports into the Malawi paving the way for the private sector to import about 80 per cent of the country's fuel. However progress had been slow and even when the Energy Sector Regulation Act was passed in 2004, it has taken another four years for government to finally dissolve the PCC and the NECO to form sector regulator, the MERA. The gazetting of the MERA was done only in December 2007 with board members appointed in early 2008. The MERA continues to be at a very early stage of development and just became functional. It has oversight over electricity and petroleum but not the remaining energy sectors (gas, coal, renewable energy).

A.5.4. Future reforms

The future status of the ESCOM remains uncertain as a result of continued delays in the implementation and subsequent review of the 2003 Power Sector Strategy which began in 1999. The participation of the private sector in this sector is politically sensitive, in part due to the expectation that there would be increased pressure to move towards cost-reflective tariffs in order to attract private sector participants and the Government of Malawi continues to ponder the best way forward. Indeed, in the energy sector, cuts in service and frequent outages continue to act as a constraint on private sector growth and competitiveness and the search for sustainable power sector reforms remains a work in progress.

In the mid-1990s, the SAPP was founded with the ESCOM as founding member following the signing of an intergovernmental Memorandum of Understanding by the Government of Malawi and other Southern Africa Development Community (SADC) member States. The SAPP established that the member power utilities would coordinate the planning and operation of their power systems so as to benefit from economies of scale. Since then, it has been a refrain from the Government¹ that the ESCOM reforms are further envisaged to facilitate the country's potential to benefit fully from regional initiatives aimed at integrating the industry, the Southern African Power Pool initiative in particular. Subsequently, with funding from the Swedish International Development Association, SwedPower was hired to update a study on a 200 km 220 kV transmission line from Matambo in Mozambique to Blantyre in Malawi. Initially the line was 120 km in Mozambique and 80 km in Malawi.

As part of the second phase of the Southern African Power Market Programme, on 19 July 2007 the World Bank approved a loan for the Mozambique–Malawi Transmission Interconnection Project (APL-2). The APL-2 seeks to implement the Mozambique–Malawi interconnection to: increase access to diversified, reliable and affordable supplies of energy; and expand opportunities for power trading for Malawi and Mozambique within the broader framework of the SAPP. The project has three components: (a) Mozambique–Malawi interconnection which entails construction of the transmission interconnection from the Malawi electricity grid to the Mozambique electricity grid, thereby interconnecting Malawi with the SAPP network; (b) capacity building and technical support for upgrade and expansion to support power trading to: (i) strengthen and expand the networks to maximize the benefits of power trading; (ii) improve the ESCOM's efficiency, quality of service delivery and financial; and (c) improved infrastructure to support power trading and to replace worn-out, inadequate or obsolete equipment. Under the Business Environment Strengthening Technical Assistance Project (BESTAP) the IDA is also funding the setting up of a public–private partnership (PPP) framework, enacting of a PPP Act and also financing capacity building for professionals in the PPP Unit. Unfortunately, due to power imbalances, the bill that sought Malawi Parliament's authority to borrow has yet to be debated and passed.

A.6. Social dialogue in the electricity sector

This section presents an evaluation of the role of the social partners in the reform process. On the one hand, we find that the nature, tone and substance of social dialogues in the electricity sector are much a reflection of the management styles, loss institutional and corporate memory due to frequent change in management. On the other hand, given that managerial instability and the degree of employee engagement, given the high

¹ Every Economic Report since then indicates that Malawi is ever closer to connecting to Mozambique. Yet, it is now 15 years.

concentration of very educated people in the sector, we find that social dialogue can be characterized as health.

A.6.1. Management of the ESCOM and the reform process

As an employer, the ESCOM is a member of the Employers' Consultative Association of Malawi (ECAM) and as commercial enterprise it has membership in the Malawi Chambers of Commerce and Industry. However, in many respects developments in social dialogue in the ESCOM have been driven more by internal dynamics more than restructuring and development in the law. First, in the restructuring process it appears that the ESCOM's top management has been well informed, was widely consulted and acted strategically. The ESCOM's management contributed to the sector policy that was approved in 2003 and the Electricity Act (No. 22 of 2004). However, it also appears though that given that the ESCOM is such a monolith, many in management have vested interests in the reforms and seem to be staking their territory in the post-ESCOM companies, whether as future managers or even shareholders in new electricity companies. In that regard, it is important to recognize that while the Energy Regulation Act restricts participation of members or employees of the MERA in activities of a licensee for at least two years, the same does not apply to former management, who may be instrumental in restructuring with a view to securing future employment or other benefits.

Second, the ESCOM has been characterized by instability and high turnover rates of management. In the restructuring period, the ESCOM has had no fewer than five Chief Executives, mostly in acting capacity. Whereas the Malawian managers rose through the ranks, they sandwiched a team of foreign managers from ESKOM South Africa, who presided over the restructuring of 2001–03/4 under a management contract. This reality is important in two respects. First, although in principle management represents and implements shareholders' wishes and interest, managers are nonetheless employees and at the ESCOM it appears that the higher one goes the less secure their tenure becomes. Second, due to this high turnover, institutional memory is lost and the substance of some collective bargaining agreements (CBAs) with workers are not honoured by subsequent management teams leading to industrial tensions and discomfort.

Third, as we show below, the ESCOM's management was instrumental in the setting up of a Joint Consultative Committee (JCC), and the subsequent metamorphosis of the JCC into a union. Management funded joint management–worker teams to organize at various establishments and faithfully executed a recognition agreement with the witness of the Ministry of Labour. In addition the ESCOM funded a joint foreign study tour to Zimbabwe and South Africa to study the design of pension schemes.

These positives notwithstanding, on many occasions the ESCOM's management has not given a good account of itself to the public. In terms of customer relations, the ESCOM's motto of "Power All Day, Every Day" is being contested under litigation from consumer groups who claim that the motto is both misleading and outright dishonest given the irregularity of electricity supply and persistence of black-outs in Malawi. In addition, some senior ESCOM staff have been probed, arrested and prosecuted by the Anti-corruption Bureau for corrupt practices and flouting procurement procedures. At the conclusion of one such case, there was public disagreements and debate about the company's employment and re-engagement policy.

A.6.2. Unionism in the electricity sector

The ESCOM's employees are currently unionized under the ESU, which is an amalgam of two competing unions within the ESCOM (Electricity Employees Union and the Electricity and Energy Employees Union). These two unions broke out of an original union which morphed out of the JCC that was formed following the political unrests of 1992 and in the transition to multiparty politics. The ESU is affiliated to the Malawi Congress of Trades Union (MCTU) and the International Federation of Chemical, Energy and Mine Workers' Union (ICEM). The Union was also a founding member of the Southern African Energy Workers' Network and provided the network's secretariat.

The union was first organized at power house and subsequently a joint team of employees and management organized chapters at the different stations. The current structure is one where each of the ESCOM's establishments has a chapter led by a chapter president and has a local committee. The ESU is thus an apex union of these chapters. Before the split, the union had membership of 75 per cent of the workforce (i.e. over 2,000 members). This feat is remarkable considering that unlike many companies, the ESCOM's workforce has a significant portion of very educated and professional workers. Beyond addressing its in-house issues, ESU leadership played a part in organizing newer unions especially in public utilities or infrastructure providers, including the Water Employees Trade Union of Malawi (WETUM), the Malawi Housing Employees Union, Malawi Posts and Telecommunications Workers Union (which later split to Postal and the MTL).

A.6.3. Collective bargaining

Upon its formation, the ESU signed a recognition and negotiating agreement with management which was executed in 2002. In respect of collective bargaining, it is customary for many unions in Malawi to "agree" with management without necessarily signing and executing a formal CBS. The union has had some achievements of note. First, the union was instrumental in overhauling the pension scheme. As alluded to earlier, the ESCOM's management funded an external study tour of a joint union/corporate services team to Zimbabwe and South Africa which culminated in a white paper that recommended the withdrawal of the pension funds from Indetrust to start a self-managed ESCOM pension fund. The union amongst other things negotiated for house allowance for everyone (previously only male senior staff was entitled). In addition, it secured medical allowance for everyone: when previously, families of female employees were not accorded medical cover under the ESCOM medical scheme; It also negotiated for a Revolving Housing Loan Policy Fund for everyone, which fund had the very ambitious goal of ensuring that at the end of ten years of employment every employee should be able to own a house. Finally the union also negotiated for revolving car loan fund for staff including staff in lower categories.

A.6.4. Industrial relations

The state of industrial relations has generally been stable. The ESU succeeded in lobbying for procedural and substantive changes to the ESCOM's Terms of Employment and Conditions of Service, and streamlined them to be consistent with workers' rights enshrined in the new Constitution and labour legislation. These changes included grievance handling procedures and the setting up of disciplinary committees at all levels. The union and management had permanent negotiating teams which met periodically.

This arrangement notwithstanding, some of the industrial relations issues arise from sheer breakdown of communication. In 2006, due to breakdown in communication, ESCOM staff went on strike demanding early access to retirement funds in their pension scheme. Similarly, in December 2008, ESCOM staff staged a sit-in upon hearing erroneous news that a proposed 10 per cent salary increment had been turned down by the board.

A.6.5. Problems in the ESCOM Workers' Union

In its heyday, the forerunner of the ESU, the EWU, was well organized, trained and capacitated and its president was the president of the national federation, the MCTU. The union leadership underwent training in management, finance and leadership skills and participated in a number of international forums in Africa and Europe. In turn, the union executive run seminars and workshops for its lower strata and the union had strong study-circle programmes. The union was also financially secure since ESU raised its finances from a one per cent salary deduction on all members. However, its success in terms of extending benefits to all employees not only exerted considerable strain on the finances of the ESCOM but also alienated some senior people. Management subsequently, sought to weaken union power by encouraging the formation of a competing union. ESCOM management then suspended an agreed check-off system they had with the ESU and redirected the funds to the newly created rival union. Whereas the EWU was affiliated to the MCTU, the splinter Union initially aligned itself with the Congress of Malawian Trade Unions (COMATU). Although the two unions reunited, they lost their allure and influence within the national federation.

A.6.6. The role of unions and the reform process

Although the EWU, as a corporate body, was not party to the design of the commercialization programme, when the programme was agreed and implementation loomed, it accepted to educate its membership about the process and substance of the commercialization programme. The union was used to allay fears of jobs losses and explain to lower level workers the implication of the restructuring. However just like they did not act strategically then, the union does not seem to be positioning itself in readiness of the forthcoming privatization. This time around, they might as well be told what to say. The unions are still pre-occupied with traditional issues of salaries for which little vision or foresight is required.

A.7. Impact of reforms

A.7.1. Impact on production and efficiency

Although not a result of the restructuring, the ESCOM's performance has been less than stellar. From a capacity point of view, although the ESCOM boasts of an installed capacity of 297 MW, since the early part of this decade the ESCOM has experienced declining availability of capacity from 93.2 per cent in 2001 to 79.4 per cent in 2005. Although, much of this decline is on account of the closure of Tedzani I and II which have been out of service for the past seven years, even the capacity availability at Nkula I (68.8 per cent) has been lower than it was in 2001. Certainly the entire system is operating at below the industry's target level of 90 per cent.

The ESCOM's efficiency has equally been disappointing from the view point of transmission. Table A.5 below shows the growth in the ESCOM's output in term of units generated, sent out and eventually sold. In a nutshell, since the restructuring, the ESCOM's output (in terms of units generated) has increased by 48 per cent from 977 GHW before commercialization to 1,453 GWH in 2007, representing an average annual growth of 4.5 per cent. However, as output has increased, the efficiency of the transmission and distribution system has not gotten worse. Between 1990 and 1997 system losses, the percentage of electricity lost between generation units and sales units, averaged 15 per cent. However, the lower part of table A.4 shows that over time system losses have increased, albeit slowly, from an average of 17 per cent before reforms to an average of 21 per cent since. In other words the inter-connected system is about 79 per cent efficient in delivering electricity generated.

When the ESCOM began restructuring, one of the targets was to increase the fraction of the population with access to electricity from four to six per cent. It appears the ESCOM has taken this seriously and made efforts to grow its customer base. Since the reforms began the number of the ESCOM's customer has doubled from 66,068 in 1997 to 163,147 in 2006–07. The number of new connection has grown from 4,000 in 1997 to 15,000 by 2007.

A.7.2. Impact on financial performance

The ESCOM'S financial position has been unstable. Although revenues have grown overtime on account of increases in tariffs, growth in expenditures has not been systematic and at time outpaced revenue growth. The data in table A.5 shows for instance that in 2003 and 2004 the ESCOM had negative operating surplus. However, even in years when there was positive operating surplus, the surplus has typically not been enough to cover the value of loans maturing. Indeed since the restructuring, the value of outstanding loans has grown, with the exception of 2004 when the Government converted some loan into equity. In fact, the water and electricity utilities account for 80 per cent of the total debts owed by Malawi's 65 statutory corporations.

Table A.5. Electricity production and efficiency

Financial year	1997–98	1998–99	1999–2000	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07
Production										
Units generated (GWH)	977	1 021	1 071	1 128	1 128	1 177	1 231	1 358	1 390	1 453
Units sent out (GWH)	974	1 019	1 067	1 103	1 126	1 174	1 228	1 351	1 385	1 447
Units sold	802	847	901	904	884	937	969	1 056	1 117	1 166
Efficiency										
Sent out/generated	100	100%	100%	98%	100%	100%	100%	99%	100%	100%
Units sold/generated	82%	83%	84%	80%	78%	80%	79%	78%	80%	80%
System loss	–18%	–17%	–16%	–20%	–22%	–20%	–21%	–22%	–20%	–20%

Source: ESCOM

Table A.6. Financial performance of the ESCOM (1998–2005)

Year	Revenue (Mn MK)	Expenditure (Mn MK)	Operating surplus (Mn MK)	Maturing loans (Mn MK)	Outstanding loans (Mn MK)
1998	674.1	550.4	123.7	196.7	3 375
1999	1 130	950.0	180	513.4	6 349
2000	1 675	1320	355	644.5	7 974
2001	2 635	1 523	1 112	1 007	12 164
2002	3 402	2 928	474	937	10 960
2003	3 415	3 428	–13	3 548	15 319
2004	3 793	4 569	–776	1 628	6 904
2005	5 832	4 715	1 117	2 376	8 997

A.7.3. Impact of reforms on redundancies and employment

Immediately after the transition to multi-party politics in 1994 the ESCOM engaged management consultants to advise on staffing levels, rationalization of certain activities and appropriate level of human resources. Although the report recommended retrenchment, it mainly affected temporary employees whose number fell from 1,196 to 319 between March 1995 and 1996. However, the ESCOM opted for a freeze of external recruitment so that permanent establishment fell from 2494 to 2414. The reduction in establishment was however, met by employment freeze so that as employees retired they were not replaced. An adverse effect though of the restructuring was that, due to job evaluation and regrading, the relative worth of some job became less and in the end some people lost seniority.

In contrast, when the ESCOM changed from Commission to Corporation in 1998, the Electricity (Repeal) Act stipulated that any properties, assets, funds, liabilities, obligations and agreements be transferred free of any fees or duties in the name of the company and that the right of employees should be continuous from the date of their initial employment by the predecessor body. That notwithstanding permanent employment has steadily declined from the peak of 2,494 in 1995 to 2319 in 1998 and down further to 2174 in 2007.

With the coming into enforce of the Energy Framework Laws of 2004, there is potential for both job losses and growth in some occupations. First, due to the creation of the MSR for energy, the MERA, the employment status of some employees who previously worked for two regulators, the PCC and the NECO remains unclear. Between them, the two regulators had about 60 employees. Second, even at the ESCOM, if and when the Electricity Act is implemented in full, each business unit will have its own accounts and administration departments. As such, the head office, which in essence is the ESCOM holding company, is expected to downsize and business units to grow.

A.7.4. Impact of reforms on social protection

A.7.4.1. Retirement benefits

Due to restructuring, since 1999, the ESCOM changed its accounting rules to comply with international accounting standards. On 1st April, an ESCOM Pension Fund, managed by the company was separately instituted. The fund, which was previously managed as part of a combined fund by Indetrust Limited, exists to provide employees with pension and

gratuity upon retirement. In that regard it adopted an accrual evaluation methodology in which current service costs are charged to the income statement systematically over the expected working life of those employees that are entitled to receive the retirement benefits. Currently, upon retirement, employees who have worked for a period greater than 15 years are entitled to one and half year's salary as retirement benefit. Those employees who retire after working for the company for between ten and 15 years are entitled to a retirement benefit of one year's salary. However, this fund remained underfunded for the first two years.

A.7.4.2. HIV and AIDS policy

ESCOM has long operated seven clinics and a medical scheme that covers all permanent employees and their declared dependants. Under the scheme employees have a set medical entitlement according to their positions. If a member's illness requires medical attention beyond their entitlement then the cost of extra care would be subsequently converted into a loan and recouped from employee's salary. However, subsequent to 2000, the ESCOM experienced increased staff attrition due to death. For instance, between 2001 and 2005 the annual employee attrition rate from the ESCOM averaged 120 employees out of which 52 were arose from death. Increased morbidity and mortality resulted in increased medical costs and funeral expenses to the extent that some junior staff would exhaust their full annual medical entitlement before the end of the financial year. In addition absenteeism and funeral attendance were producing negative productivity effects.

In its business plan for 2001, the ESCOM committed MK500,000 as seed money for the development and implementation of HIV/AIDS Workplace policy. The initiative received encouragement from management which had been subcontracted from ESKOM South Africa, and was well aware of the impact of the pandemic in their homeland. In the spirit of the SADC protocol and with technical assistance from Project Hope, Malawi, the ESCOM developed its HIV/AIDS workplace policy, which was executed in August 2002, and formally launched with a recognition event graced by the Ministry of Labour and Vocational Development. The ESCOM's HIV/AIDS policy aims at creating HIV/AIDS awareness, instituting preventive measures, providing care and support and removing stigma and discrimination against/amongst employees on the basis of real or perceived HIV status.

To date the ESCOM's HIV/AIDS programme has trained 145 peer educators, graduated 11 trainers of trainer and trained five counsellors. In addition it has and managed to form Steering committee and institutionalize workplace committees and station committees through education by health care providers on HIV/AIDS to all patients that attend ESCOM clinics; Intensified treatment of opportunistic infections at the Corporation's health clinic; Distribution of free prophylaxis to employees; Disseminates HIV and AIDS education messages through a newsletter, employees pay slips; Incorporation of HIV/AIDS education in the training courses for employees; Promotion of Voluntary Counselling and Testing (VCT) by health care providers and peer educators. These strategies are paying off as following the introduction of anti-retroviral medicines (ARVs) in July 2003 many employees have gone for voluntary testing for HIV. The ESCOM is currently providing Antiretroviral drugs to employees including their declared dependants (209 individuals), who have disclosed having tested positive for HIV, through the medical scheme.

The success of the ESCOM's programme also owes much to its design in that the annual appraisal of the HIV and AIDS coordinator not only depends on their narrow technical job description but also on how well the coordinator administers the programme. However the ESCOM is facing a moral problem. For instance, how should the company

deal with employees who were encouraged to test and are on ARV when they leave their employment? As such it is critical for government to roll out ARVs.

A.7.5. Impact on training

The restructuring seems to have had mixed effects on training. On the positive side, by its very nature, restructuring and commercialization require managers and staff to be reoriented towards the new system and ethos. However, this training is top heavy. In fact in the first year of restructuring (1998–99), the training programme which was geared towards the old ESCOM was curtailed and local training slated for the second half of the year was cancelled. In the past decade the number of people sent on training has varied from as low as 84 in 2001 to a high of 597 in 2003.

A more disheartening externality has been the reduction in number of apprentices that ESCOM is willing to host. Prior to commercialization ESCOM used to have a full training centre and hosted over 100 apprentices from Malawi's technical college system. Today, while the ESCOM still runs its training centre, the number of apprentices that the ESCOM hosts has gone down drastically under the constant refrain that the ESCOM is there to be commercially viable and not as a training ground.

A.8. Challenges facing the electricity sector

A.8.1. General

Although the ESCOM is slated for privatization, it faces enormous challenges, including financial, technical and problems emanating from public attitude and loyalty. The single major challenge facing the ESCOM is the need for very high fixed costs which of necessity require foreign funding. Since much of this funding is foreign currency denominated, and yet the ESCOM charges in Malawi Kwacha, the ESCOM frequently experiences exchange rate losses. Over the years as the exchange rate has depreciated, tariff adjustments have not kept pace leading to exchange rate losses on existing assets and liabilities and inability to service growing amounts of maturing foreign currency denominated debt. When Malawi qualified for debt relief under the Heavily Indebted Poor Countries initiative, certain loans from the Community Development Committee Group plc, the European Investment Bank (EIB) and the Industrial Development Company (IDC) of South Africa were waived. However, under the conditions of debt relief, these loans are payable to the Government of Malawi in Malawi Kwacha at the conversion to grant and repayment terms remain unchanged.

A.8.2. Power generation

Technical problems arising from environmental conditions are by far the single largest source of headache for the ESCOM's generation department. Due to conversion of ecologically fragile land for agriculture along the Shire River and its tributaries, significant deforestation has occurred resulting in soil erosion and accumulation of silt in intake reservoirs. This is exacerbated by leached out fertilized carried by run-off into the rivers which provides rich nutrients for aquatic weeds that also clog intake reservoirs downstream, reduce generation capacity and necessitate frequent shut-downs and load-shedding.

The second problem is obsolescence of technology. Changes in technology have affected the ESCOM in two ways: first, due to vast changes in generation technology,

ESCOM has been unable to procure exact spare parts for some equipment for the older stations. This is the main reason for the shutdown of Tedzani I and II stations. Consequently, some of the older plants, for example Nkula have not undergone thorough refurbishment as could have been expected. Second, the machines have inherited design and installation problems in that intakes of power stations cannot be accessed for repairs without complete shutdown of the station resulting in a big generation deficit.

In addition, the ESCOM suffers from capacity constraints: As indicated above, for some time the ESCOM has been going through financial hardship. The results of this are inadequate maintenance funding and delayed project implementation such as modernization of the excitation and control systems. The time and financial resources devoted to maintenance of the machines is just adequate to keep the machines going and not to add value and extend their useful life.

A.8.3. Transmission and distribution

Since the ESCOM transport power over long distances, the first problem associated with transmission is System or technical losses: As shown in table A.5, the ESCOM loses an average of 21 per cent of energy between generation and sales. In addition, the ESCOM faces unremunerated electricity due non-technical losses of electricity especially arising from meter tampering and illegal connections. For instance, in 2004 there were 711 cases of meter tampering and 368 meter bypasses and 28 unmetered supplies while in 2005, there were 680 cases involving meter bypass, meter tampering and unmetered supplies.

The second major problem facing ESI is vandalism of infrastructure and installations. Two types of installations are usually targeted by vandals: transformers and the conductor cables. Transformers are attractive because they contain transformer oil, copper windings, blades and copper cables at the transformer/earth mat. Whereas in 2004 faults in 119 transformers were adjudged to have arisen from vandalism, in 2005 incidents of vandalized transformers had risen to 152. Regarding the later, as the sole transmitter and distributor of electricity, the ESCOM is the country's largest user of electrical conductors. Both aluminium and copper are highly sought after in the scrap metal market with copper being the more desirable of the two due to its much higher price in the market.

On top of the loss of revenue, vandalism diverts resources by forcing the ESCOM to replace damaged installations, thereby tying up the ESCOM in fault repairs instead of routine maintenance and construction of new lines. In 2007 the Southern Electricity Company lost 14,112 metres of conductor cable at a cost of MK61.6 million. This also affects overall efficiency in that due to unscheduled faults and repair work, customers wait for longer period to be assisted and persistence of blackouts negatively affects the investment climate in country thereby deterring potential investors. A case in point is British American Tobacco (BAT) who closed their cigarette factory in Malawi due to losses arising from intermittent power supply

Third, since the ESCOM's transmission infrastructure consists of wood structure, there is an ever present problem of termite attacks, bush fires leading to burning of wood poles and vandalism on both wood and steel tower structures. For instance, in 2005 the ESCOM replaced 4,349 poles, compared to 2,305 in 2004. This is also aggravated by natural processes. For example, due to their height towers are amenable to lightning strikes. However, they are also victim of floods which erode tower foundations and bring the towers down.

A.9. The way forward

To appreciate the road that the ESCOM has to travel in the quest for privatization, it is important to remember that the transfer of public infrastructure services to the private sector – whether through privatization or concession- typically involves a number of stages. These are:- sector restructuring and unbundling, where public companies slated for sale are broken up (or unbundled) to facilitate competition and reduce potential abuses of monopoly powers or dominant positions; followed by regulatory reform, where regulations are implemented and regulatory agencies are established to restrict natural monopoly advantages and to protect users from monopolistic behaviour and investors from arbitrary government action; then prequalification, which sets the basic technical or economic conditions (or both) that competing private operators must fulfil to be eligible for the bidding and selection processes; followed by competitive bidding (or auctioning) mechanism which seeks to dissipate monopoly rents and select the most efficient operators among interested private operators; Award of the concession contract; and concession contract enforcement and regulatory oversight which is provided by the regulatory agency if it exists, if not then by the sector ministry.

In the specific context of the electricity sector, restructuring usually involves unbundling the sector into separate activities: electricity generation; operation of the high voltage national transmission network or grid (transmission); operation of the local network that takes power from the grid to final consumers (distribution); and retail of electricity to final consumers including wholesale purchase of electricity, reading consumers' meters and billing. Viewed in this context, the process the ESCOM's privatization has just completed the second stage since the corporation was unbundled and a regulator (MERA) has been established. According to the Energy Sector Policy of 2003, after the initial vertical separation of the ESCOM into generation, transmission and distribution, the first level to be privatized would be distribution. The primary justification is that privatization of electricity distribution would provide better service and lower prices to consumers, while still providing the private operators with a fair rate of profit. The efficiency and welfare gains are hypothesized to arise from three main avenues: (i) improved managerial and financial systems (for example improved bill recovery) which will usher in a more consumer-focused culture; (ii) improved ability to mobilize and attract finance for investment and for maintenance; and (iii) through a reduction of political interference which may have impeded efforts to disconnect non-payers and reform the tariff structure.

Despite these empirical and theoretical justifications, electricity privatization in general, and distribution in particular in Malawi remains fraught with danger in four respects: firstly, firms will only be attracted to enterprises where they can make a profit; secondly, the drive for profit can conceivably exert pressure on firms to reduce expenditure and therefore investment in anything peripheral to revenue collection may be ascribed low priority; thirdly, given a choice investors would prefer a less competitive and more "relaxed" regulatory regime than a strict regime in order to maximize profits; fourthly, privatizing may not absolve the Government from its mandate to maintain affordable and stable energy prices for the country. As we argue below even when these considerations do not affect the consumer, for employees, these considerations may imply changing employers and possibly changes in terms and conditions of employment.

A.9.1. Making the ESCOM an attractive investment

At the very minimum, one of the first things governments have to do when privatizing an electricity distributor is to make the enterprise attractive to investors. In the case of the ESCOM this will certainly not be easy because one of the key reasons for privatizing is that the company has accumulated large debts (in excess of MK10 billion) under

government ownership has long imposed considerable strain on the public fiscus. At the moment it is not even clear how the different units of the ESCOM will share the debt stock. In addition, absent any incentives, it is difficult to see why private operator would be interested in a loss-making, debt ridden ESCOM, or section of it.

If the ESCOM is to attract any serious suitors with the capacity for sustainable service provision and investment, there exist three options before the Government of Malawi. First, the Government ought to assume the ESCOM's debts or convert them to equity so that the private operators take on investments that are debt free. Alternatively, if the debt cannot be written off, then the sector has to be re-organized in a way that ensures that some monopolistic structure is maintained so that the prospective investors will be more likely to make supernormal profit in order to retire the debt. Third and less acceptable, would be for the Government or the MERA to allow for tariff adjustments that would guarantee a return to investors and cover any inherited liabilities. The reality of privatizations in many countries is that the first option is the only option. This conundrum is affirmed by the reality of the investor landscape in that although many countries are being encouraged to privatize electricity, there is just a small pool of international investors who participate in these international tenders.

A.9.2. The ESCOM's privatization and social policy

When the ESCOM was commercialized, one argument which was used and is also used in the present case, is that PSP in furtherance of commercial goals reduces the company's reliance on public subvention and there reduces fiscal pressures. However, the case of Malawi Railways, now Central East Africa Railways clearly demonstrates that even, under PPP, privatization does not absolve the Government from continuing subsidies. Private investors are looking for a commercial return and have little interest in maintaining service for merely socially responsible reasons. The problem that the Government of Malawi faces is that, since energy is a substantial input into most production processes and price fluctuations may have major knock-on effects, the Government of Malawi would be reticent about large increase in electricity tariffs due to economic, political and even social ramifications. Since the Energy Regulation and the Electricity Act bind the regulator to ensure affordable prices, the privatization of the ESCOM is unlikely to remove the Government's need to provide affordable power and its social responsibility to ensure that the poor are not excluded from the electricity supply because of costs.

At any rate there will be need for a delicate balancing because the alternative is scarier for the investor. By its very nature, the provisions of the Energy Regulations Act to have industry regulator may end creating a situation where it is easier for government to impose tariff restrictions on private service providers rather than subsidize them.

A.9.3. Investment and performance

Privatization is premised on superior performance from private firms. This means that they need to be more efficient in order to provide a reliable service. To achieve this, presumably in the long run they will need to provide capital investment to maintain and enhance the capacity of the infrastructure. Yet lack of investment has been a contentious issue between governments and private firms. Experience from electricity privatizations in Latin America seems to suggest that while companies might be quick to improve billing mechanisms and invest in meters, longer term investments in infrastructure are less forthcoming. Companies might also scrimp on safety and back up costs where possible – with potentially disastrous consequences.

A.9.4. Privatization and monopoly power

It is not by accident that the current structure of the electricity sector is monopolistic. Despite the nobility of intention, by seeking to create private enterprises in markets that are incontestable, privatization of electricity can actually expose the sector to monopolistic practices that may be difficult to remove. Across the world privatization has just replaced public monopolies with private ones as private operators have recreated vertical and horizontal monopolies through mergers and acquisitions. Evidence from across the world, the electricity landscape is dominated by the US firm Allied Energy Systems (AES) which is taking over distributors in all regions covering Latin America to Eastern Europe, Africa and Asia. Second, in the same way that international firms are recreating horizontal monopolies above, some are now buying down and upstream firms to give greater control of their electricity supplies, despite efforts by governments to break up vertical monopolies. Owners of distribution firms are buying electricity generation assets and vice versa. For instance, the AES now owns generation and distribution assets in the Dominican Republic, Georgia, Kazakhstan and in the Indian state of Orissa (see PSIRU, 2001). The danger is that privatization of electricity can potentially open Malawi to greater vulnerability if its electricity networks eventually become assets, and relatively small ones, in a big portfolio of multinational conglomerates.

Third, controlling monopolistic tendencies is difficult because electricity distribution companies change hands frequently due primarily to deals between parent companies. For instance in the UK, all of the 12 distribution companies which were created on privatization, have now been taken over by multinational companies, mostly based in the US or in other European countries.

A.9.5. Privatization and private sector governance

The foregoing arguments suggest that, after the dust settles, privatization of electricity may end up creating a private rather than public monopoly. This may present opportunity for firms to exploit their position against the public interest. Following the United Kingdom's privatization model, the solution put forward in the Energy Regulatory Framework is to create a regulator to regulate the conduct of privatized companies. Regulation is perceived as an interim measure that is only required until the sector becomes competitive and the Government can take steps to increase competition.

Privatization is portrayed as a step towards allowing for operation of market forces. However, according to the Electricity Act, in the electricity sector a key feature of the market mechanism – price – will be set by the regulator and it can be said that the stance of the regulator will not entirely be independent of politics. Therefore, for Malawi, privatizing in a regulatory vacuum could be disastrous. If the Government of Malawi is currently unable to manage the ESCOM, how can it effectively control the activities of multinational companies for whom the Malawi utility may be a minor asset on the company's balance sheet.

A.9.6. Stakeholder roles

A.9.6.1. *The ILO*

With the establishment of the MERA, substantive reforms in electricity sector have begun in earnest. Therefore, the ILO needs to seize the opportunity to experiment with an education and information campaign which would capacitate workers and managers in the public utilities to meaningfully contribute to the design and implementation of subsequent

levels of sectoral reforms which anticipate and mitigate the potential adverse impact of PSP in electricity.

The ILO should also anticipate the fact that although the ESCOM has one union, upon privatization the EWU may cease to exist and in its place at least three new unions will be born. The new unions will need capable leadership on their part and recognition from their respective new employers. The ILO can help in capacity building aimed at assisting current chapters to grow into fully fledged unions upon privatization.

A.9.6.2. The Government of Malawi

(1) Retirement of the ESCOM's debt

The preceding sections suggest that before further moves are made towards privatization, the Government of Malawi and its development partners need to resolve how the ESCOM's debt will be carried forward. Even as we write the ESCOM is contemplating contracting further debt. Knowing that a prospective buyer will be reticent about taking on such liabilities, we propose that the debt be retired by converting it into equity so that it will be part of the equity make-up of the company before the final break-up and sale. Second, in terms of attribution and to avoid free riding, the debt or the derived equity should be apportioned to the different SBUs according to the use the debt served.

(2) Strategizing on the privatization road map

If and when the ESCOM is sold in parts, there are potential "retrenchments" when everyone is required to retiree. However, even for those that will be rehired, they will have to start afresh under different terms of employment and conditions of service and some may even lose seniority. Therefore, the Ministry of Labour should claim its seat and play its protective role from the beginning at the table of reforms. Even before the Government (whether the Ministry of Finance or through the Privatization Commission) appoints transactions advisors, the Ministry of Labour should organize education and information forum for workers and employers representative, to discuss the effect of implementing the Electricity Act in full and potential threat to decent work, and map out strategies for maximizing Decent Work.

(3) Creation of the Interest Reconciliation Forum

Since other major players in the energy sector are as yet unknown, we propose that the Government of Malawi should also work towards the creation of an Interest Reconciliation Forum for the energy sector (i.e. all those affected by the Energy Regulation Act). The Reconciliation Forum can be a unique tripartite forum for negotiations between management, workers and the State (not the Ministry of Labour, but other ministries, for example, finance and energy affairs). Whichever private company eventually buys a stake in the ESCOM will, as part of the deal, be granted membership into this forum.

(4) Anti-monopoly policy

Malawi has a competition watchdog and the both the Energy Regulation Act and Electricity Act envisage that the electricity sector will be competitive. However, instances from the United Kingdom and Latin America suggest the Government (or the MERA) needs to be alive to possibility of upstream and downstream purchases through subsidiaries or straightforward mergers and acquisition which end up concentrating the market shares.

A.9.6.3. Employees and their representatives

(1) Reorganization of union structure

When the ESCOM is privatized the scenario will look much like what we have in the water sector (a number of institutions with similar mandates serving a smaller population, with narrowly-based and unequally yoked unions). There is need for foresight among union members and anticipate restructure of the union with presidency at the three levels (Generation, transmission and distribution). Many issues will be company specific but workers must anticipate industry level issues that will need collaborative effort.

(2) Create union level collaboration in public utilities

Although sectoral issues vary, there is need for union-level collaboration between the Electricity Workers Union and the WETUM and even the Municipal Workers Union to facilitate the formation of a consensus stance on privatization in utilities, and provide joint forum for debate with representatives of government, development partners or hold joint conferences on liberalization-related proposals and experiences.

(3) Joint training for union officials

There is need for joint training, whether international or domestic, of union officials in the infrastructure service providers (including union representatives of already concessional infrastructure like Central East African Railways) on the justification, timing, nature and procedures of anticipated reforms and others contentious one which remain on the drawing board like Air Malawi.

(4) Joint exchange programmes

There is need for regular exchange of experience and joint training programmes between the Electricity Workers Union and unions of African countries that have tried to privatize ESI. For example much can be learned from Cote D'Ivoire which has undergone electricity sector restructuring.

A.9.6.4. Employers

(1) Need for employment reallocation road map

Since new companies need to be profitable, they are more likely to choose to be leaner. If and when the ESCOM is privatized, some staff from the ESCOM's head office may have to be retrenched unless they can be relocated to SBUs. Currently, the head office acts as a holding company, mainly discharging financial, managerial and coordination duties. When the company is sold in parts, each part will need to be self sustaining and have its own accounts and human resources team. Therefore, as privatization progresses, the ESCOM's Head Office is expected to shrink. What is not yet clear is whether the ESCOM will manage to reallocate head office staff to SBU before the company is up for sale.

(2) Industry-wide employers' representative organization

In the electricity sector currently there is one major employer, represented by management of the ESCOM, which is answerable to government. Soon there will be many employers and there will be need to have industry wide employers' alliance. We propose that when the next phase of reforms are designed regard should be had for an industry-wide representative organization for employers to harmonize the organizations in electricity who want to do something for the profession, to negotiate and represent the interests of its members on the basis of technical, economic and legal aspects.

Part B. Strengthening social dialogue in the water and sanitation sector in Malawi: Investigating the impact of structural reforms on social dialogue

B.1. Introduction

B.1.1. Global perspective and background to study

Economic theory and practice have shown that infrastructure services are critical to the operation and efficiency of a modern economy. Infrastructure services begin as critical inputs in the provision of goods and services and significantly affect the productivity, cost and competitiveness of the economy and the alleviation of poverty. Poor infrastructural services often limit competitiveness in other markets, and limited coverage and access foster poverty. Therefore, policy decisions regarding infrastructure service provision and sector development have ramification throughout the economy.

In both developed and developing countries government-owned enterprises have traditionally provided infrastructure services owing to the large sunk costs required to set up infrastructure. However, on the strength of evidence gathered over much of 1980s and 1990s across the world, government ownership of infrastructure has proved disappointing in that increases in coverage have been limited, the quality of services has been deficient and the levels of operational efficiency have been low (see Guasch, 2004). Given the scarcity of public funds for infrastructural investment, the reliance of most state-owned enterprises on government funding to achieve increase in performance and coverage has often conflicted with competing demands from the social sector. The heavy demand for subsidies coupled with their potential for cost-recovery has forced a number of countries to explore the potential for transferring the provision of infrastructure services to the private sector. That transfer has often been accompanied by sector restructuring before privatization or concessioning and by implementation of a regulatory framework.

In the water and sanitation sector, the need for self-sustaining infrastructure providers conflicts with the Governments' social responsibilities to their citizens and raises a number of issues for all stakeholders including governments themselves, management and workers in public utilities and consumers. Paramount among these concerns is the possibility of leaving the provision of a service that is essential to peoples' daily needs and critical to national economic growth in the hands of private interests with potential of monopoly power and market concentration unleashing detrimental effects on competition, consumer welfare and employment. The ILO Tripartite Meeting on Challenges and Opportunities Facing Public Utilities (Geneva, 19–23 May 2003) identified the main conundrum of PSP as:

Maintaining a balance between commercial and business concerns, calling for cost-efficient, profitable operations and broader public service values that emphasize the provision of affordable, reliable and widely accessible services, whether the ownership is public or private.”

This study, is in the context of the conclusions of the said ILO Tripartite Meeting which recognized the need for national and regional activities to address and educate workers on the potential impacts of reforms and the need to undertake “independent and

specific research on economic and social issues in public utilities to supplement the report prepared by the Office”.

B.1.2. Scope and objectives of the study

This study presents a situation analysis of the water and sanitation sector in Malawi including major problems, issues and challenges facing public utilities (water and sanitation sector). It documents reforms undertaken in past five to ten years and analyses how those reforms have impacted on employment levels, working conditions of staff in the privatized organizations and of those remaining in state enterprises, retraining, redeployment and compensation schemes, industrial relations, and on access and quality of the services provided by the privatized utilities to society. The study concludes with recommendations on how current issues and challenges could be dealt with in the immediate and long-term to ensure sustainable development of the water and sanitation sector.

B.1.3. Approach and methodology

The methodology utilized for this study included reviews of laws and legislation such as the Water Resources Act (1969) and the Waterworks Act (No. 17 of 1995); review of other Government of Malawi publications including sector policy documents, poverty analyses and ad hoc studies relating to the water and sanitation sector; and World Bank project proposals and project implementation reports. In addition, there was fieldwork which included semi-structured interviews with management, relevant trade union representatives as well as employees on the shop-floor were conducted. Water sector workers were represented by the WETUM while sanitation workers by the Municipal Workers' Union. All water boards were visited, except for the Northern Region Water Board and statistical information in this report is based on annual reports from various water boards. In addition, information on sanitation services and capacity was obtained through phone interviews which were conducted with city engineers or managers of sanitation departments of all city assemblies. The information generated through the interviews consisted of key informants' best-informed "guesstimates" and their knowledge based on office files and their daily work experiences. While the information gathered was not based on an extensive survey, it is nevertheless very useful in painting a canvas of the situation of water and sanitation sector in Malawi.

B.1.4. Summary of findings

The idea of reforms in the water and sanitation sector dates back to 1998 when the Government of Malawi and World Bank commissioned an options study. Prior to that, there had been two other reforms of note in the water sector. The first, under the National Water Development Project (NWDP) resulted in the creation of a Ministry responsible for water services, a National Water Resources Board and three regional water boards. The existing city water boards were restructured and their mandates reconfigured towards commercial viability and full cost-recovery. In the second phase of reforms, under the aegis of the PURP, the two city boards were slated for PPP in the form of either a lease agreement or concession and the Malawi Privatization Commission had commenced the process of designing the modalities of that transfer. However, arguing that a full poverty social impact analysis (PSIA) had not been conducted, the Government of Malawi suspended the reforms and, to date, the water sector reforms have yet to begin in earnest. Proposed reforms under the umbrella of the National Water Development Programme (NWDP) and the World Bank's second NWDP are in essence an attempt to revive the reforms process that stalled under the PURP in 2004.

Given Malawi's measured steps towards PSP a number of questions and impacts anticipated in the Terms of Reference of this study were not applicable. To date, all water and sanitation workers remain public service employees. As indicated above, the first and second set of reforms, which resulted in mere structural reorganizations, had little impact on general employment levels, and terms and conditions of employment. The only exception was for government workers who hitherto were under the District Water Supply Fund (DWSF) and subsequently joined the newly created regional water boards. The majority (65 per cent) of workers under the DWSF opted to remain in the employment of the Government and were reassigned within the civil service. Workers that opted for water boards had to retire and were compensated by government prior to engagement with the water boards. The water boards offered better conditions, including initial salaries that were higher than in civil service, coverage in contributory medical schemes, pension schemes and life insurance. However, career progression has been sluggish and since joining the boards, the majority of the former civil servants have never been promoted.

The water and sanitation sector continues to beset by many challenges including old reticulation systems that results in high non-revenue water, poor operational performance due to delayed approval of new tariffs and operating tariffs that are less than the capital and cost recovery rate; ever increasing operating cost due to rising cost of inputs; declining commercial performance due to ever increasing debtors; high foreign debt; lack of capital investment and new raw water source development; lack of enforcement capacity by the water resources board; suppressed and increasing demand; and intermittent supply due to intermittent electricity supply. The sanitation sector can hardly cope with demand for water borne and solid waste disposal in planned areas; does not serve the fast growing unplanned settlements; and sanitation is not prioritized by many households.

Social dialogue in the sector is not healthy. At the macro-level, the water and sanitation sector reforms are driven by the World Bank and Government of Malawi through the Ministries of Finance and Irrigation and Water Development. The Ministry of Labour has not taken (or been given) its proper seat at the table of reforms. At the industry level, trades unions in the sector are vivacious but under the veneer of vibrancy the ground is shifting. The unions are increasingly getting frustrated by government's refusal to approve even token salary raises granted to other public employees. The unions' preoccupation with traditional "bread and butter" industrial relations has rendered them reactive to sectoral developments and lacking in strategic preparation and direction, especially in the context of influencing the nature, substance and sequence of reforms.

In summary, Malawi's experience with water sector reforms is a classic case of cold feet and measured steps. Yet this cautious approach affords all stakeholders hitherto bypassed another opportunity to participate in the re-design of the reforms package and to produce an outcome in a way that minimizes potential adverse effects. In view of the lack of consultation and limited availability of information, we propose four things:

B.1.5. Recommended stakeholder roles

B.1.5.1. The ILO

The fact that Malawi's reforms have stalled gives the ILO immense opportunity to experiment with an education and information campaign which would capacitate workers and managers in the public utilities to meaningfully contribute to the design and implementation of sectoral reforms which anticipate and mitigate the potential adverse impact of PSP in water and sanitation.

B.1.5.2. *The Government of Malawi*

At the very least, the Ministry of Labour should claim its seat and play its protective role from the beginning at the table of reforms. Even before the Government (whether Ministry of Finance or through the Privatization Commission) appoints transactions advisors, the Ministry of Labour should organize education and information forums for workers and employers representative to discuss proposed legislation and potential threats to decent work, and map out strategies for maximizing decent work.

B.1.5.3. *Employees and their representatives*

(1) Create union-level collaboration in public utilities workers

There is need for union-level collaboration between the WETUM, the Municipal Workers Union and even the Electricity Workers Union to facilitate the formation of a consensus stance on privatization, and provide joint for a for debate with representatives of government, development partners or hold joint conferences on liberalization-related proposals and experiences.

(2). Joint training for union officials

There is need for joint training, whether international or domestic, of union officials in the public infrastructure service providers (including union representatives of already concessioned infrastructure like Central East African Railways) on the justification, timing, nature and procedures of anticipated reforms.

(3) Joint exchange programmes

There is need for regular exchange of experience and joint training programmes between the waterworks and sanitation unions of the neighbouring countries. For example much can be learned from the United Republic of Tanzania which went full throttle with water sector reforms but has recently been in retreat.

B.1.5.4. *Employers/Management*

(1) Creation of interest reconciliation forum

We propose the creation of an interest reconciliation forum for the water and sanitation sector. The reconciliation forum can be a unique tripartite forum for negotiations between management, workers and the State (not the Ministry of Labour, but other ministries which act as the sole-shareholder, regulator and single largest consumer).

(2) Creation of an industry-wide employers representative organization

In waterworks and sanitation services there is no representative employer alliance and since all managers individually answer to government, they are unequally yoked. We propose an industry-wide representative organization for employers to harmonize the organizations in water and sewer services who want to do something for the profession, to negotiate and represent the interests of its members on the basis of technical, economic and legal aspects.

B.2. Malawi: Situation analysis

B.2.1. Structure of production

Malawi has a relatively young and small economy with the composition of output reflecting the legacy of colonial structure of production. Since Malawi became independent in 1964, rain-fed agriculture has been the backbone of the economy contributing about 35 per cent to GDP and 85 per cent to employment. When we control for the dominance of agriculture, it can be observed that in recent years the structure of the economy has evolved, albeit slowly in three respects (see table B.1). First, owing to economic liberalization in the 1980s and 1990s, Malawi has witnessed significant de-industrialization reflected by the declining share of manufacturing output in total output from 16.3 per cent in 1995 to 11.2 per cent in 2007. Second, in the past decade the share of government in GDP has declined from 11.8 per cent in 1995 to 7.8 per cent in 2007. The major gainer in all this structural change is financial and professional services whose share in GDP has grown by 47 per cent.¹ More important to note for this study is the fact that the share of utilities (both water and electricity) in GDP has remained constant at 1.45 per cent.

Table B.1. Structure of the Malawi economy (1995–2007)

Sector	Share in GDP (%)			
	1995	2000	2005	2007
Agriculture	31.3	39.5	35.7	35.0
Mining and quarrying	–	1.4	1.3	1.5
Manufacturing	16.3	12.9	11.6	11.2
Utilities	1.5	1.4	1.5	1.4
Building and construction	1.9	2.2	3.2	3.1
Distribution	24.9	20.9	23.1	21.5
Transport and communication	5.3	4.2	5.6	5.7
Financial/Professional service	6.7	8.0	9.5	9.9
Ownership of dwellings	1.6	1.4	1.5	1.3
Private social services	2.1	2.1	2.2	1.9
Government	11.6	9.0	8.8	7.8
Unallocatable finance charges	–3.0	–2.9	–4.0	–0.3
Total GDP	100	100	100	100

Source: Reserve Bank of Malawi, Financial and Economic Review (various issues).

In turn, Malawi has a very small formal sector and recent estimates suggest that only 9 per cent of individuals of the economically active age group and about 21 per cent of household heads were employed in the formal sector. About 80 per cent of the labour force are engaged in the non-formal sector, which includes self-employment in small-scale agriculture, casual labour and vending (Gemini Report, 2000).

¹ The number of banks has risen from four in 1995 to ten viz: Ecobank, First Merchant Bank, First Discount House Bank, Indebank, Malawi Savings Bank, National Bank of Malawi, NBS Bank, Nedbank, Opportunity International Bank of Malawi and Standard Bank.

B.2.2 Evolution of economic policy

For the first 15 years after independence Malawi experienced tremendously high rates of economic growth averaging 5 per cent, mostly buoyed by growth in estate agriculture and import substitution industrialization (Pryor, 1990). However, beginning in 1979, it became clear that all was not well from the view point either of macroeconomic stability or balance of payments. A series of exogenous shocks, including the second oil shock, a major drought in 1981 and the closure of Malawi's traditional routes to the sea due to civil war in Mozambique, increased the landed cost of imports, worsened terms of trade by 30 per cent, balance of payment position worsened and by 1981 Malawi experienced negative growth.

Subsequent to these imbalances, since 1981 Malawi has been signatory to a number of structural and sectoral adjustment loans from the World Bank and to date Malawi has a programme with the IMF. Reforms included agricultural reforms that included the removal of fertiliser subsidy and restructuring of ADMARC and liberalization of financial sector, and creation of financial markets. In February 1994 Malawi liberalized exchange rates, consequent to which, between 1994 and 1996 the exchange rate depreciated by over 80 per cent and, due to inelastic demand for imports, the exchange rate effect fuelled inflation to an all time high of 89 per cent in 1996. As a result in much of the multiparty era, the economic climate has been characterized by volatility with economic growth ranging from as low as -4 per cent in 1995 and 2001 to as high as 8 per cent in 2007.

However, in the past five years, the economy has steadied with Malawi's GDP, measured at 1994 factor prices, rising from MK12,619 billion in 2002 to MK16,928 billion in 2007 representing an average annual growth rate of 5 per cent. The good times were fortified on 31 August 2006 when Malawi reached the completion point of the HIPC' initiative and qualified for debt relief. In total, the national debt stock was reduced by 90 per cent from US\$3 billion in nominal terms to around US\$400 million and annual external debt service obligations were reduced from \$115 million to only \$5 million, equivalent to a saving of 15 per cent of the Government's annual budget. External debt as a ratio of GDP declined from 168.5 per cent in 2004 to just 8.2 per cent in 2007 and debt service as a percentage of exports declined from a high of 24 per cent in 2003 to 8.1 per cent in 2007 (Reserve Bank of Malawi, 2007). This notwithstanding, Malawi still faces daunting balance of payments challenges. Although exports have doubled from MK31.71 million in 2002 to MK73.83 in 2007, over the same period imports have grown threefold from MK45.61 million to MK150.58 million. Therefore, the current account deficit has grown by over 300 per cent from MK28.75 million in 2002 to MK103.52 million in 2007, and between 2001 to date Malawi's average official reserves position can provide import cover for just 2.1 months.

B.2.3. Demographics

Malawi is one of most densely populated countries in sub-Saharan Africa with 13.02 million people living in 2.9 million households and occupying a land area of 118,484 km² (Government of Malawi, 2008). The population is unevenly distributed with 45 per cent in the South, 42 per cent in the centre and the remainder in the northern region and the structure is predominantly young with over half of the population below 18 years of age. As Malawi's population has grown by an average annual rate of 2.8 per cent since 1987, the corresponding population density has grown from 85 people per square km in 1987 to 105 in 1998 and now stands at 139 persons per square kilometre (Government of Malawi, 2008). This has not only resulted in declining per capita land holding (both total and arable) but also resulted in the conversion of increasingly marginal and ecologically fragile land for agriculture. In turn these poor land use patterns and resulting deforestation have resulted in rapid degradation of rivers upper catchment areas (World Bank, 2007).

B.2.4. Poverty and social welfare

With a per capita GDP of US\$170 in 2007, Malawi is classified as a low-income country and ranked 165th of 177 countries based on the UNDP's Human Development Index (UNDP, 2005). The national unemployment rate is estimated at 3.1 per cent (NSO, 2007) although it averaged 11.2 per cent in urban areas (Lilongwe = 16.1 per cent and Blantyre = 8.1 per cent) and 2.1 per cent in rural areas, which perhaps reflects the reality that the problem in rural areas is underemployment or disguised unemployment. Consequently, about 52 per cent of the population lives below the national poverty line of US\$146.83 per annum and with a Gini coefficient of 0.52, income distribution is somewhat skewed (Government of Malawi, 2000, 2002a).

The pervasiveness of poverty and maldistribution of income at the micro-level combined with a lack of sustained growth at macroeconomic level have had disastrous consequences for Malawi's epidemiological profile. With more than 20 per cent of the population having absolutely no access to health services, Malawi's health indicators are among the worst in the world and communicable diseases make up a large proportion of the disease burden. Currently, the infant mortality rate stands at 76 per 1,000 births while under-five mortality is 133 per 1,000. With maternal mortality currently at 984 per 100,000 births, the lifetime risk of dying while giving birth for Malawian women is 1:7, the world's second worst. In recent years, HIV and AIDS has become the other major public health problem in Malawi. In 2008, HIV prevalence in adults was estimated at 12 per cent (NAC, 2008) and leading to reduction in life expectancy from 44 years in early 1990s to 38 years by 2008.

B.2.5. Availability of water

Malawi has a large network of surface water bodies covering 21 per cent of the country's area, the most prominent of which is Lake Malawi which is 567 km long, covers an area of 28,900 km² and is Africa's third largest lake. The availability of total renewable water resources, estimated at 17.3 km³/year or 1,617 m³/capita/year is below the SADC regional average of 8,922 m³/cap/year. Availability of water is further threatened by changing climatic conditions and land use patterns. Although the national mean annual rainfall is estimated at 1,100 mm/year it ranges from 650 mm in the lower shire to 1,600 mm in Northern Lakeshore (World Bank, 2007).

Malawi has widespread groundwater resources and its potential is estimated at 1.4 km³/year. However since ground water abstraction is unregulated and uncontrolled it is difficult to know whether it is sustainably pumped. As of 2006, there were 30,000 boreholes and 8,000 shallow wells equipped with hand-pumps. There is evidence of increasing emphasis on access to safe drinking water and sanitation. The national average for access to safe water has risen from 65 per cent in 2005 to 81 per cent in 2007 (see table B.2).

Table B.2. Access to safe water

Area	Proportion with access to safe water (%)					
	National	Piped into dwelling	Communal standpipe	Protected well	Unprotected wells	River/lake
Malawi	81	10	64	7	14	4
<i>Residence</i>						
Urban	98	54	38	5	1	1
Rural	79	4	67	8	16	5
<i>Region</i>						
Northern	80	15	59	6	12	8
Central	76	9	56	11	20	4
Southern	85	9	71	5	11	4
<i>Cities</i>						
Blantyre	97	48	45	4	1	2
Lilongwe	99	63	29	7	1	0
Mzuzu	99	61	33	5	1	0
Zomba	99	37	61	1	1	0

Source: NSO (2007), Welfare Monitoring Survey.

B.2.6. Water service delivery arrangements in urban areas

Water-supply arrangements in cities are artefacts of town planning rules. In cities there are planned and unplanned or traditional housing areas. In general, planned areas are supplied with municipal services and therefore qualify for piped water at individual points. The challenge for city assemblies has been unplanned settlements which are usually not aesthetically appealing and are associated to criminality and the assemblies fear that service provision in these areas would be construed as their legitimization (Kaluwa, 2003). For a long time, the city water boards have been influenced by this and have taken the communal access/kiosk mode as their primary mode for initiating piped water supply to unserved high-density informal settlements. The kiosks and standpipes, common access points, fall within several different categories:

- *Water board kiosks.* Constructed and operated by water board staff. Provided at 500 m intervals in the unplanned areas.
- *Leased kiosks.* Constructed by the water board, which leases them to private individuals
- *Community kiosks.* Constructed by the water board and administered by community committees through arrangement with the water board.
- *Private standpipes.* These are privately owned water connections but the owners sell water on to neighbours.

In addition to the services provided through the water board, there are a range of community associations, non-governmental organizations (NGOs) and donors active in the

low-income areas of Malawi. Low-income customers may also request an individual connection which will be provided depending on the customer's ability to pay the connection fee, payment of a meter deposit, and the backlog of the water board. If the connection point is within 25 metres of a distribution main, there is a set fee. If the distance is greater, customers are charged a fixed amount for each additional unit of distance. The water board is able to respond within about a month in planned areas. Connections in unplanned areas require an assessment and can take longer.

B.2.7. Access to sanitation (toilet facilities)

Table B.3 shows that in Malawi access to sanitation is more problematic than access to water with just 47 per cent of households with access to proper sanitation. That figure belies the true picture of sanitation and hygiene in Malawi since nationally only 3.9 per cent have access to flush to sewer toilets and 4.6 per cent to ventilated improved pit latrines (VIP latrines). The rest of the population, however, relies on mainly traditional pit latrines which are typically of poor quality. As might be expected the picture is much better in urban areas where for instance in Blantyre, flush toilets accounted for 30.3 per cent of households, while VIP latrines for 22.5 per cent, while for Lilongwe the respective coverage was: flush toilets (29.4 per cent); VIP latrines (0.1 per cent). In addition, achieving urban hygiene is challenging because unreliable water supply reduces the efficiency of flush to sewer systems and there are very few public toilets, and the septic tank emptying services are very few and charge very high fees.

Table B.3. Access to sanitation in Malawi

	Households with toilets (%)	Toilet facilities (%)				
		Flush to sewer	VIP latrines	Covered pit	Uncovered	None
Malawi	47	3.9	4.6	38.6	44.3	8.6
Residence						
Urban	79	28.7	12.3	37.6	20.9	0.4
Rural	43	0.8	3.7	38.7	47.2	9.6
Region						
Northern	52	3.3	9.0	3.3	41.1	7.3
Central	51	3.9	3.9	43.3	40.6	8.3
Southern	43	4.0	4.2	35.0	47.6	9.1
Cities						
Blantyre City	73	30.3	22.5	20.4	26.5	0.3
Lilongwe City	83	29.4	0.1	53.8	16.4	0.3
Mzuzu	87	23.	20.9	43.2	11.5	1.4
Zomba	79	21.4	0.7	56.5	21.5	0.0

Source: National Statistical Office (2008).

B.2.8. Provision of sanitation services (sewerage)

The state of sanitation and hygiene in the urban areas is better captured by the city assemblies' capacities to clean or dispose of water borne and solid waste. Malawian cities are facing both supply- and demand-side problems in the provision of sanitation services. On the supply side, sewerage systems in the cities are mostly blocked or broken down due to old age, misuse and vandalism. On the demand side, sewerage systems have become

inadequate due to high increase in population using these systems and emergence of unplanned settlements.

With a population of 666,000 residents, Blantyre has three sewage treatment plants in Limbe, Soche and Zingwangwa (see table B.3) Owing to the assembly's failure to adequately maintain and re-invest in the city's sewerage systems, currently only the Zingwangwa sewage is functional and it is estimated that 80 per cent of the sewage produced by industry and residents with sewerage connection flows into the rivers draining the city, untreated, which water is subsequently used downstream by poorer sections of the city for bathing and washing clothes. The situation is less severe in Lilongwe, which used to have a number of sewerage treatment plants in township but in 2001 a major sewerage treatment plant was constructed at Kauma and most sewerage treatment plants located in townships were closed and effluent rerouted to the main sewer line.²

B.2.9. Provision of sanitary services (solid waste disposal)

The city assemblies' refuse collection systems, though still in operation, are not adequate in terms of refuse collection vehicles and basic equipment for refuse collection. Table B.4 shows that Lilongwe has one garbage truck for every 51,461 residents while in Blantyre one garbage truck covers a population of 50,800 and Zomba has one truck per 42,000 people. While this ratio is significantly lower for Mzuzu at one truck per 32,000 residents it important to note that Mzuzu does not have a proper garbage dump site, and the site hitherto used in Mchengautuwa has been encroached and surrounded by residential developments and graveyard. Fifty-nine per cent (59 per cent) of the Blantyre households had rubbish pits compared to 50 per cent for Lilongwe (Kaluwa, 2003).

Table B.4. Sanitation capacity of city assemblies

City assembly	Population ('000)	Sewerage treatment plants	Garbage collection trucks	Garbage dumps
Blantyre	661	3	13	1
Lilongwe	669	1	13	1
Mzuzu	128	0	4	1
Zomba	87	1	2	1

Source: Author's interviews.

B.3 Government policies and programmes

B.3.1. Malawi and the Millennium Development Goals

The Government of Malawi has committed itself to the Millennium Development Goals (MDGs) and has widely used them as a basis for its poverty reduction strategy. Since 1994 Malawi adopted the concept of poverty reduction both as its development philosophy and objective. This concept is consistent with the spirit of the MDGs which are also centred on eradicating poverty and hunger; achieving universal primary education; promoting gender equality and empowering women; reducing child mortality; improving

² These include treatment plants at Area 18, Kamuzu Central Hospital and Bottom Hospital.. However, two are yet to be connected to the main line: the one at Kamuzu Barracks and the other for the industrial zone in Kanengo.

maternal health; combating HIV/AIDS, malaria and other diseases; ensuring environmental sustainability; and developing a global partnership for development.

B.3.2. Malawi Vision 2020

Prior to 1996, Malawi's development aspirations were outlined in the Statement of Development Policies (1987-96). At the expiry of that Statement, national consultations backed by the UNDP culminated in long-term perspective strategy, the Vision 2020. The Vision rests on a number of pillars: good governance, sustainable economic growth and development, vibrant culture, well developed economic infrastructure, food security and nutrition, science and technology-led development, social sector development, fair and equitable distribution of income and wealth, and sustainable environmental management. Issues of water provision fall under well-developed infrastructural development and were expected to be given life under specific short to medium term framework, starting with the poverty reduction strategy, the Malawi Economic Growth Strategy (MEGS) and the Malawi Growth and Development Strategy (MGDS).

B.3.3. Malawi Growth and Development Strategy

In March 2005 in Paris, donor and developing countries agreed to improve aid effectiveness and monitoring for results. This emphasized the need for country ownership of development plans and processes and Malawi utilized this opportunity to develop the MGDS (2006–11). The MGDS is now the overarching operational medium-term strategy for the next 5 years. The overall objective of the MGDS is “to reduce poverty through sustained economic growth and development” and it answers well to the requirement of the water sector because its thematic framework represents a policy shift from social redistribution towards economic growth and infrastructure development. Of its six focal areas three deal with irrigation and water development; infrastructure development; energy generation and supply; and the others are agriculture and food security; integrated rural development; and prevention and management of HIV and AIDS. Obviously absent from these themes is sanitation.

In highlighting the importance of improved water resources management and development, the MGDS identifies the following as key issues: empowering national authorities to manage water resources using integrated water resource management approach; establishing good hydrological monitoring system improving the quality of surface and ground water and developing a system for pollution control; and improving the reliability of access to water be main water services.

B.3.4. Legal framework

The main legal and regulatory frameworks for water resources management in Malawi are the Water Resources Act (1969) and the Waterworks Act (1995). The former outlines the institutional and organizational arrangement under which the water sector operates, including the abstraction of water, the pricing and tariff principles and the water supply and sanitation (WSS) services delivery norms and rules. The Waterworks Act established three regional water boards and reconstituted the city water boards.

Although the Waterworks Act (1995) also seems to have transferred responsibility for sanitation, especially sewerage systems, to water boards, in reality they have remained under city assemblies. In 1998, Malawi enacted a new Local Government Act (1998) which transfers administrative and political authority to the district and municipal levels, and integrates governmental agencies at these levels into one administrative unit. Even

though the water policy and law were drafted at approximately the same time as the Local Government Act was passed, they do not take its provisions into account. Instead, the Ministry of Water Development has proposed to create a parallel structure based on ecological units and involving the creation of catchment management authorities appointed by and answerable to the National Water Resources Board and ultimately the Minister.

Other laws guiding the functioning of the water sector include the environmental Management Act (1996), the Fisheries and Conservation Management Act (1997), the Forestry Act (1998) and the Local Government Act (1998). In addition as parastatals all five water boards are subject to the Public Finance Management Act, the Public Procurement Act and are under the general oversight of the Department of Statutory Corporations for day-to-day operations, the Ministry of Finance for financial reporting and the Ministry of Irrigation and Water Development (MIWD) for substantive sectoral issues.

B.3.5. Policy framework

B.3.5.1. National water policy

To date Malawi has had three policies that relate to the water sector. The lynchpin of the first Water Resources Management Policy of 1994 was the NWDP the major successes of which were the creation of a new ministry responsible for water issues (Ministry of Water Development), the creation the three regional water boards out of the CBA; and the reconstitution of the Water Resources Board and city water boards (Lilongwe and Blantyre). Whereas the 1994 policy emphasized water service delivery in 2000 Malawi approved a successor policy whose main focus was water resources management. This policy was not as successful due lack of clarity and specificity in terms of what it sought to achieve.

In 2005 Malawi developed its third National Water Policy which seeks to address all aspects of water including water resources management, development and service delivery. This policy, whose vision is “Water and sanitation for all, always” seeks to promote an integrated approach to water resources management and defines the primary policy objectives as the sustainability of both the resources and service delivery. The policy declares objectives and principles which are consistent with the Dublin Principles and specifically emphasizes the need for an integrated approach to water resources management with equitable access to water; promotes the availability of safe portable water for all users; the need for preparedness and contingency plans for drought and floods and outlines principles of water utilization for the main water using sectors (irrigation, WSS, hydropower, fisheries, tourism and forestry).

The National Water Policy is complimented by the National Irrigation Policy and Development Strategy (NIPDS). The latter focuses on issues such as promoting PPPs in irrigation development, full participation of key beneficiary farmers in irrigation management and introduction of full cost recovery principles. The NIPDS was further elaborated in the Irrigation Act (2001)

B.3.5.2. Sanitation policy

In 2008 Malawi adopted a new National Sanitation Policy (NSP) which provides a framework for development of national and local programmes that address hygiene and sanitation problems. The vision for the sector, “Sanitation for all, always” is the last part of the vision in the national water policy of 2005. The NSP calls for a National Hygiene and Sanitation Programme (NHSP) which shall cover the implementation of the NSP over a 12-year period from 2008 up to the year 2020.

The policy proposes that the NSP be implemented through a “Hygiene and Sanitation SWAp” and identifies five activity levels investments in which are deemed critical the implementation of the policy. These include, national-level investment for capacity building to run the sanitation directorate and developing enabling legislation; investment that enhance capacity for district hygiene to run rural sanitation programmes; investment in urban, municipal, town and market centres sanitation; school hygiene and sanitation investment, and hygiene and sanitation investment for health-care facilities.

B.4. Reforms in the water sector

B.4.1. Historical background

The provision of urban water supply dates back to 1929 when the Blantyre Water Board (BWB) was formed to supply water to Blantyre and peripheral areas. After independence the activities of the BWB were regulated under the Waterworks Act (Cap 72:01) and Blantyre Waterworks Act (Cap 72:02). The broader mandates about use of water resources were clarified and defined under the Water Resources Act of 1969. The Lilongwe Water Board (LWB) was formed in 1947 initially as department under the Lilongwe town assembly. Although operations of the LWB were also governed by the Water Resources Act, it was not until 1982 that the LWB ceased to be a department within the city assembly, gained its own autonomy and began operating as a full parastatal under the Waterworks Act (Cap 72:01) and the Lilongwe Waterworks Act (Cap 72:04). Both water boards were subsequently reconstituted with an emphasis on commercial viability and full cost-recovery in service provision under the Waterworks Act (No. 17 of 1995) which replaced the Waterworks Act.

For the rest of the country rural water supply has relied on piped water or boreholes while town and market centre water supply was piped and supplied under the DWSF in the Ministry of Water. In 1995 the Waterworks Act created three water boards and transferred the mandates of the DWSF to the newly created boards.

B.4.2. Current structure of the water and sanitation industry in Malawi

The main national institutions for water resources management in Malawi include the MIWD which includes sections dealing with surface water, ground water, hydrogeology and irrigation. Related institutions include those responsible for natural resources (forestry, fisheries, lands, environment), the Water Resources Board. Five water boards are responsible for implementation of water and sanitation services include the BWB, LLWB and three regional water boards.

B.4.3. Reforms undertaken

B.4.3.1. National Water Development Project I

The objective of the NWDP was to support the implementation of the Government of Malawi's Water Resources Management Policy by reforming and upgrading the management of water resources and the provision of water-related services in order to: ensure convenient access to safe water supplies for domestic use for a progressively larger proportion of the community; provide water infrastructure capable of underpinning economic development; and assure protection and management of water resources and of aquatic and riparian environments. Improved sector sustainability and upgraded physical

and financial performance were subordinate objectives, considered vital to the attainment of the primary objective. This was to be achieved through three components:

- *Central services and water resources management*, which sought to engender sustainable and environmentally sound water development and conservation. This component also involved reconstitution the Water Resources Board (WRB) as a high-level body with stakeholder representation, to provide leadership in water resources management and policy advice to Government of Malawi and upgrade the Water Resources Act.
- *Rural water supply and sanitation* aimed at sustainably enhancing the health status of communities through provision of potable water and improved sanitation by increasing the capacity of sector actors to sustainably deliver potable water and improved sanitation facilities to rural communities in ten districts of Malawi.
- *Urban water supply*, sought to achieve improved water supply services in small urban centres by establishing three financially viable regional water boards; increasing water supply coverage and improving water supply services by restructuring the city water boards.

B.4.3.2. The Privatization and Utilities Reform Project

In spite of their reconstitution and tariff increases, the financial condition of the city water boards kept deteriorating and provision of water services to the urban poor at affordable prices had yet to be addressed. The main objective of the PURP project was to improve the quality of and access to economic and physical infrastructure for private sector development. The broader core activities in the project were to prepare for privatization and then privatize parts of the ESCOM, Malawi Telecommunications Limited and the LVB and the BWB (World Bank, 2007). It further sought to establish regulatory capacity in those sectors.

To this end, the Government launched a PSP options study to examine the potential for the BWB and the LWB to enter into partnership with the private sector. In 2003 the PSP Options Study determined that there was likelihood that a private partner would be interested in a lease or longer term management contract for the urban areas of Malawi if the Government of Malawi restructured the debt of utilities, was up to date in its own bill settlement with the water utilities and clarified the economic and technical regulatory framework.

With regard to increasing access for urban poor population, as part of the preparatory work for PSP an initial profile was developed of the low income populations and their service issues. The profile was meant to inform the transaction advisors in developing a strategy that would address the requirements of low income areas. After the survey the Government of Malawi had identified a reform strategy that was appropriate to attract PSP (Skilling, 2006).

Armed with the two studies, in April 2004, the Government of Malawi approved plans to proceed with PSP in the urban water sector and announced its intention to appoint Transaction Advisors. The Privatization Commission also tendered for advisors to help implement new regulatory agencies, including a combined regulator for power and water. However, when the issue was reviewed by stakeholders including the new administration, it was felt that the PSP design study did not adequately take into account the wishes and priorities of low income groups and potential impact of reforms on poverty. Therefore, it was shelved and a PSIA in the water sector was recommended. Consequently, Malawi went back to the drawing board and it is envisaged that forthcoming reforms will be based on an amalgam of the initial PSP proposal and the PSIA outcomes.

B.4.3.3. National Water Development Programme

Malawi's current water reform strategy is based on the pooling of all resources dedicated to the water sector under the NWDP following Sector wide Approach (SWAp). The NWDP has pooled together financial and technical support from multilateral donors including the World Bank, the EIB, European Union, African Development Bank, Canadian International Development Agency (CIDA), United Nations Children Fund and the Japan International Cooperation Agency. In the spirit of the Paris Declaration, these donors will adopt common implementation strategies, utilize a common programme management unit and conduct joint annual programme reviews and share the cost of capacity building.

At its inception, the NWDP was envisaged to attract a funding of about US\$260 million over five years aimed at assisting the Government of Malawi to improve the management of water resources and ensure delivery of efficient, reliable and sustainable WSS services. Given these resources it was expected that Malawi would increase rural coverage from 65 per cent to 79 per cent and urban coverage from 70 per cent to 79 per cent. If the project was implemented accordingly and follow-up action taken it was hoped that Malawi could achieve universal coverage by 2025. The NWDP has five subprogrammes:

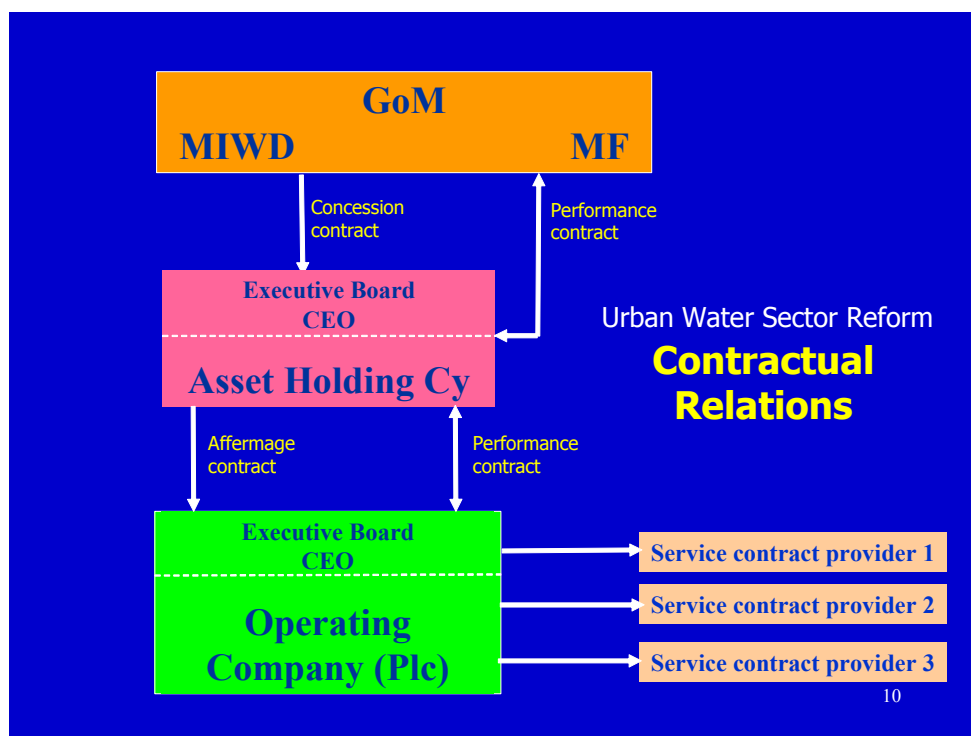
(1) Urban water supply and sanitation for city water boards

This component, which requires about US\$60 million, mainly seeks to prepare the institutional framework for PSP in the city water boards. The gist of this component is the proposal for the conversion of the LBW and the BWB to public limited liability operating companies, creation of a Government owned asset holding company and establishment of water regulatory capacity. However, to that end, the component also seeks to aid in preparation of strategic plans so as to improve operational efficiency, engage in infrastructural rehabilitation, replacement of worn out equipment and expansion of the distribution networks; identifying and developing new sources of water supply for the cities.

Figure B.1 shows the proposed institutional structure and governance of the urban water sector. This proposed institutional structure and governance implies that:

- (a) The Government of Malawi, through the Ministries of Irrigation and Water and Finance will be the sole shareholder of a yet-to-be-created asset holding company which will take ownership of current assets of the city water boards. The holding company will be accountable to government based on conditions of its concession contract and performance contract.
- (b) The Government, through the holding company will offer operating concession (use rights) to a limited liability operating company which will account for its stewardship to the holding company through an affermage and performance contract.
- (c) The operating company can provide the water services or outsource service rights to specialized service provider(s).

Figure B.1. Proposed institutional structure



Source: The World Bank, 2005.

(2) Town, market centre and rural piped water supply and sanitation

This component seeks to improve efficiency and expand water supply to some cities, towns and peri-urban areas covered by the three regional water boards (southern, central and northern) including the cities of Mzuzu and Zomba; to develop water supply for towns and market centres with difficult hydrologic condition and rural piped water supply.

(3) Rural water supply and sanitation

This element seeks to assist district assemblies to build capacity so as to develop and implement their own programmes for rural WSS and hygiene; build capacity of local service providers to assist villages to establish and maintain their own water supply facilities and planning and construction of single or multi-village water supply systems.

(4) Water resources management

This component seeks to strengthen the capacity of the Ministry of Irrigation and Water and Water Resources Management Board to manage water resources by preparing enabling legislation, preparing water resources investment strategy and undertaking social and environmental impact assessment related to the strategy.

(5) Programme management

This element seeks to build capacity in the MIWD to execute and manage the sector wide programme especially capacity in planning, accounting and procurement and monitoring and evaluation; it will also design and implement district-based hygiene and sanitation promotion programmes.

B.4.3.4. Second National Water Development Project

Within the NWDP the anchor project is the US\$50 million World Bank-led second NWDP II which became effective in 2008. This is the successor project to the first NWDP which closed in December 2003 and seeks “to increase access to sustainable WSS services for people living in cities, towns, market centres and villages and improve water resources management at the national level” (World Bank, 2007:8). As such the project is divided into four components: (i) urban WSS; (ii) town, market and rural WSS; (iii) water resources management; and (iv) sector management and water sector reform. Although there is considerable symmetry in labels between components of the national programme and the World Bank project, it should be noted that due to its unwavering faith in privatization or commercialization, the World Bank’s project is tilted more in favour of privatizing the city water boards.

B.5. Outcomes of the reforms so far undertaken

B.5.1. Structure of the water sector

The first NWDP resulted in the formation of three regional water boards and streamlining of the activities and services of the city water boards. In addition, following the PSP option study, the city water boards were divided into zones each of which is an autonomous cost centre and is expected to deliver services to areas under its jurisdiction. Whereas the BWB has three zones, the LWB has four zones. These zones are presumably in anticipation of the forthcoming concessioning of the boards under the PSP.

In the regional water boards, the corresponding arrangement has resulted in creation of water schemes. However, unlike the zones in the cities, under the NWDP II the schemes have been given further mandate to supply water to town centres which were previously under district assemblies. It is also envisaged that under contract, the regional water boards will undertake infrastructural development on behalf of communities and subsequently hand over the operation and maintenance of the infrastructure to district assemblies and community based organizations, especially the water users’ associations.

B.5.2. Impact of reforms on employment and working conditions

B.5.2.1. Impact on job tenure

Section 65 of the Waterworks Act (No. 17 of 1995) makes three provisions with regard to employment transition by requiring employees who at the passage of the bill were employees in the Department of Water to choose between becoming board employees, public servants or even retirees. Section 65(1) says that “Any person who, immediately prior to the Commencement of this Act, is employed by the Department of Water may, at any time within twelve months thereafter, by notice in writing to the Minister, elect to become an employee of the Board or retire from the public service on terms and conditions on which he was employed prior to the commencement of this Act”.

In addition the Act protects the terms of employment and conditions of service of the transferee. Section 65(3) provides that “A person who becomes an employee of the Board pursuant to subsection (1) shall enter such service on such terms of employment and under such conditions of service as may be applicable to employees of the Board: Provided that in no case shall such terms of employment or conditions of service be less favourable than

the terms and condition he enjoyed, or were applicable to him while employed in the Department of Water immediately prior to the commencement of this Act.”

B.5.2.2. *Impact on employment*

When the BWB and the LWB were reconstituted under the Waterworks Act of 1995, it had little impact on employment. The new boards inherited the assets and liabilities of the former boards including employees. However, at about the same time both Boards had engaged management consultants from Malawi Institute of Management and Deloitte and Touche to advise on rationalization of certain human resources levels. Although the consultants recommended downsizing by about 25 per cent of the staff establishment, the political climate (transition from one-party to multiparty state) militated against mass redundancies and in the end the Board opted for partial employment freeze and downsizing using voluntary retirement. Permanent employment for the BWB declined from 505 in 1995 to 417 in 2000 before steadily picking up to 437 in 2005. Similarly, the LWB has deliberately pegged its permanent employment below its establishment of 422. In 2000 the permanent employment was 381 and in 2005 it was 389.

The situation was slightly more complicated with the regional water boards which partly morphed out of the DWSF in the Ministry of Water. There is consensus that at the time, employees were given enough information to make, in principle, informed choice between staying with the Ministry of Water and joining the newly created water boards. In reality though, there was a limited number of posts that could be taken and so it was not practicable for everyone who was under the DWSF and desired to move to the water boards to do so. In the end about 30 per cent of the workforce could be absorbed into the regional water boards and the rest were reassigned within the Department of Water.

B.5.2.3. *Impact on social protection*

The reforms had significant impact on the welfare of those workers who joined the boards from the Ministry of Water in three ways. First, employees who joined the boards experienced an implicit increase in salaries since water boards remunerated at a higher level than did the public service for an equivalent job. Second, whereas civil servants are entitled to gratuity and non-contributory pension based on length of service upon retirement, all water Boards maintain contributory pensions. Pension funds are managed by independent insurance companies and the employee contributes about 5 per cent of their salaries and the Board contributes about 15 per cent. If an employee resigns or otherwise leaves their employment before the mandatory retirement age they are entitled to a refund of their contributions. Third, water boards offer medical and life insurance to their employees and some have clinics, in contrast to civil servants who are not covered by any medical or life insurance scheme.

B.5.2.4. *Impact on training*

Generally, at all water boards study leave for up to two years and leave for educational seminars and short courses may be granted. For lower and middle-level staff, a soft loan of 100 per cent of tuition fees may be advanced and refund of such training costs effected if one passes the relevant examinations. There does not seem to be explicit policies on further training, e.g. on who qualifies at what stage for what type of courses. It seems this is left to the employee's initiative and devices and the discretion of bosses. If it affects “work”, this may be used to deny the required leave at any level of the management chain. However, training opportunities tend to be top-heavy and this is probably for two reasons. First, owing to closure of Ministry of Works Training Centre in Zomba, Malawi lacks specialized training centre for water personnel for the lower class of workers.

Second, because managers have participated in reform forums, they have used the informational advantages over staff about the availability and options for external and internal training provided under different projects. Since 2004, a significant number of people in middle to upper management have attended external training courses, while many with professional or technical qualifications (e.g. engineering) have sought to boost their business and managerial acumen through Master in Business Administration (MBA) courses. However, there was discontent among technical and clerical staff who felt that some of the training undertaken by senior staff was at a level befitting lower level technical staff.

B.5.2.5. HIV/AIDS

All water Boards recognize the enormous impact that HIV and AIDS have on worker productivity, the company's financial and material resources and the physical and psychological health of workers infected and affected by HIV. In all boards, there are HIV workplace policies and also trained peer educators and counsellors. The city water boards have clinics which offer general medical treatment, voluntary counselling and testing for HIV and free antiretroviral treatment to workers that test positive for the HIV. The clinics have also begun offering recommended food supplements to the HIV-positive workers.

B.5.2.6. Security of the water supply

The security of water supply can be viewed in two dimensions. First, in terms of water quality and second, in terms of illegal access and use. On the first issue, the water boards are inspected by the MBS to check if the water quality is consistent with World Health Organization standards of drinking water. On the second, the high rate of non-revenue water indicates that water supply is not as secure as it should be, especially since employees in the sector can connive with people who have swimming pools and effect illegal connections. The rate of unaccounted for water (ufw) is very high with as high as 40 per cent at the BWB.

B.5.2.7. Gender issues

Although women comprise 20 per cent of the workforce in the water and sanitation sector, they comprise less than 5 per cent of top management. The Employment Act is silent on the participation of women in the water and sanitation sector. Across the sector, recruitment and promotions policies and procedures are gender-neutral. Although adverts customarily indicate that "qualified women are encouraged to apply", the women will first be screened based on qualification before affirmative action is considered. Water and sanitation sectors require a significant dose of technical expertise and due to socio-cultural and historical reasons, most technical and professional personnel are male. As such, the reforms have not been gender-neutral. Most of the services that have been outsourced are those dominated by males e.g. maintenance workshops and guard services. The exception is to be found in female-friendly occupational areas which are more supportive like cleaning.

B.6. Social dialogue in water and sanitation

This section presents an evaluation of the role of the social partners the reform process. In summary, we find that although the water sector is unionized, these unions have concentrated on traditional reactive industrial relations. There is no evidence of union pro-activity and involvement especially with regard to reforms undertaken and those being anticipated. It also appears that since reforms are driven more by the World Bank on the

one hand and Ministries of Finance, Water and Irrigation and Statutory Corporations on the other, the Ministry of Labour has not taken (or been given) its seat at the table and issues of labour are not well articulated or anticipated.

B.6.1. Unionism in the water sector

The history of Unionism in the water sector dates back to 1992/93 when, in a bid to obviate the growing number and intensity of industrial unrests that characterized Malawi's return to multiparty politics, the Ministry of Labour encouraged establishments of bipartite forums for social dialogue – the JCC. The two city water boards took advantage of this development and as was the expectation from the Ministry of labour, both the BWB and the LWB JCCs morphed into the Blantyre and Lilongwe Water Board Trades Unions. Prior bipartism ensured that both unions were immediately granted recognition agreements.

As such, the city water boards unions predate the sector union, the WETUM since the latter was formed in 1999 and was registered in 2000 with chapter membership from Blantyre and Lilongwe Water Board Trades Unions. They were later joined by the Southern Region Water Board followed by the Central Region Water Board and the Northern Region Water Board. The WETUM has a membership of about 2,000 of which 20 per cent are women. The congress, which is held after every four years is the supreme body of the WETUM. During congress, resolutions are made and leadership of the union is elected through a secret ballot.

At branch levels (the five water boards) follow the same procedure when electing their leadership. Membership is open to all employees except executive management and a membership affiliation fee of 1 per cent per employee is remitted to the respective branches. In addition, every month all five branches remit K12,500 to the WETUM.

B.6.2. Unionism in the sanitation sector

With regard to social dialogue in the sanitation sector, it is important to remember that sanitation services belong to city assemblies in cities, district assemblies in the towns and then Ministry of Health in the rural areas. Employees of the city assemblies, including those in sanitation departments, are members of the Malawi Municipal Workers Union, formerly the Local Government Union. The union has 40 chapters (all 28 district assemblies, four city assemblies and eight town assemblies) and has 5,000 paid-up members but a potential membership of 20,000. Issue that this union deals with are broader and apply to local assemblies than sanitation sector.

B.6.3. The role of unions and reform process

Our research established that there was no pre-reform consultation during the first and second NWDP with unions. The little consultations that occurred were mainly geared at galvanizing public support for the forthcoming reforms. It appears that armed with finding by Kaluwa (2003) and recommendations from Webster and Stone (2003) the Government's modus operandi was just to inform water boards who in turn bore responsibility of informing their workers of impending changes. At no level does there appear any serious attempt to solicit workers contribution regarding the design and implementation of reforms in the water sector. During the reform, the WETUM met and made resolutions but it only learnt afterward that part of the reform would be PPPs.

It is clear that the WETUM's approach to issues of reforms in the water has neither been strategic nor pro-active, although this deficiency of strategy seems to reflect the union's preoccupation with immediate bread and butter issues. However, the WETUM was critical in resisting reform and lobbying for their suspension in 2004. The WETUM's lack of concise position on reforms needs to be understood from two perspectives. First, although the water sector employees belong to the WETUM, the member unions are unequally yoked. The WETUM is charged with promoting issues of commonality in terms of employment and conditions of service, yet government's approval of the same is based on financial performance of individual water boards not common economic conditions faced by the sector.

Lately, an area of much discontent has been the fact under the operational charters signed by water boards which emphasize cost recovery and commercial goal orientation, water board employees are no longer entitled to automatic pay adjustments when the rest of the public sector employees get an adjustment. Thus employees in the sector have witnessed their wages being eroded by rising cost of living because when individual board management budgets for a salary increase it is flatly rejected by government arguing non-performance.

B.6.4. Collective bargaining

In principle, the existence of recognition agreements between management and unions signifies that channels for social dialogue exist and the parties can enter into negotiations and end up with a CBA. However, the reality is that the water boards cannot make any CBAs that have financial or pecuniary implications because any such CBAs are subject to a government veto. To obviate this quandary, a somewhat innovative development in terms of social dialogue, and reminiscent of the JCCs, was undertaken in the water sector recently. In 2008, following governments refusal to endorse salary increment at all the water Boards due to non-performance, a joint ad-hoc committee of management and worker representatives was constituted. The committee, led by the Chief Executive of Southern Region Water Board, issued a communiqué on the water sector's position on salary adjustments to government through the Department of Statutory Corporation.

B.6.5. Industrial relations

In many respects, though, the outcomes from joint ad hoc arrangement, howsoever beneficial, are more palliative than curative. First it is not yet clear why this forum and mechanism has not been allowed to operate to educate workers on issues surrounding impending reforms. Second, although the ad-hoc committee and the WETUM came out with a unified position, two individual unions (Central Region Water Board and the LWB) had already notified the Ministry of Labour of their intention to proceed on industrial action. Although this time around the Central Region Water Board was one of the two unions agitating for industrial action, by and large, it is the city water Boards that have a higher propensity and history of industrial action. A case in point, is that as the said negotiations with government protracted, in December 2008 workers of the LWB went on industrial action and disrupted the water supply for four days despite management's protestations about the legality of the strike and broader legal ambiguities about whether water sector employee (being workers in essential services) can indeed go on a legal strike. Indeed union leaders arrested and charged with various crimes which were later dropped due to lack of evidence. This though makes the point that the Government is not shy about arrests.

B.6.6. Training

As it has been mentioned elsewhere, due to the reforms substantial training has taken place in the water sector especially since 2004. However, we find that while this training is in anticipation of forthcoming restructuring and PSPs, unions have not been consulted or party to the generation of the training programme. At the moment, with emphasis on commercial acumen of managers, the training has been administered through human resources managers, mostly moving from the top cadres down and union members that have benefited from training did so in their individual capacities.

B.6.7. Social dialogue in the sanitation sector

The issue in the sanitation sector is less complicated. Although the Waterworks Act seems to have transferred jurisdiction of water borne waste disposal systems to water boards, in reality sewerage systems have remained in the hands of the local assemblies. Due to the lack of sanitation policy, there has not been as much reform or restructuring in the sanitation sector. However, the entire local government system has been undergoing reforms due to decentralization. Although decentralization has sought devolve decision making and responsibility to the local assemblies, much of this process has been driven by the Local Government Decentralization Commission.

Yet, the local assemblies have experienced their fair share of volatile industrial relations. Most of the disagreements are on traditional bread and butter issues of salaries but in some cases there have been deeper underlying policy and management style issues. On two occasions, workers at Lilongwe City Assembly locked out the Chief Executive and forced him to proceed on long unscheduled leave with threats of physical violence and bodily harm. Similarly employees of the Blantyre City Assembly have had running grievances against their management. At the writing of this report both the Lilongwe and Blantyre City Assemblies have had no chief executive officers for over six months.

B.7. Challenges in the water and sanitation sectors

B.7.1. Challenges in the water sector

B.7.1.1. High non-revenue water

Non-revenue water is in two parts: visible and non-visible. The visible component includes overflow, water loss due to pipe bursts either due to erosion of topsoil which exposes pipes or vandalism. The invisible part mainly comprises underground leakages due to blockages and old reticulation system; loss due to illegal connections which bypass meters (especially for people with swimming pools) and also under registration of water consumption due to over-aged meters. All water boards are above the regionally acceptable rate of ufw of 22 per cent and the case is more dire in Blantyre where non revenue water is as high as 40 per cent in the BWB, down from 53 per cent.

B.7.1.2. Poor operational performance due to delayed approval of new tariff increases

Malawian water boards are practically insolvent. It appears that since the Government is the single largest consumer and regulator, its position as consumer affects its decision as regulator especially on tariffs. Between 2001 and 2005, water tariffs for the city water boards were stagnant and thus declining in real terms. In 2006 and 2007 all boards missed

their revenue targets because the revenue targets were based on a 15 per cent tariff adjustment whose approval delayed by five months.

B.7.1.3. Operating tariff being less than the capital and cost recovery rate

Even after the tariff was adjusted the margin are too low to cover replacement costs and expansion. As such most boards are unable to rehabilitate, upgrade and extend the plant and systems. Consequently, the liquidity ratios for all water boards make them practically insolvent (e.g. for the LWB it was 30 per cent)

B.7.1.4. Ever-increasing operating costs due to rising cost of inputs

Water boards in Malawi charge and collect revenue in local currency while chemicals are bought in foreign currency. Although the currency has been stable in the past two years, due to heavy catchment degradation due to uncontrolled buffer zones, the amount of chemical required has increased. Similarly the cost increases have resulted in rising costs in local currency. In addition, an old reticulation system has raised maintenance costs due to frequent water service interruption and increasing pipe busts. In the case of the BWB, since the city is 800 metres above the water in-take at Walkers Ferry, it requires considerable electricity and in the past five years electricity bill has risen from MK15 million to MK50 million per month.

B.7.1.5. Declining commercial performance due to ever-increasing debtors

In the past five years the number and value of customers in arrears has grown. Although the Government has now become current in its payment, for a long time it has been the single largest defaulter and its role as sole-shareholder, regulator and single largest consumer make it difficult for water boards to enforce compliance. In addition the increase in unplanned high density areas increased arrears. In 2004, the BWB owed the ESCOM MK110 million because the Government owed it MK300 million.

B.7.1.6. High foreign debt

High outstanding loans have resulted in high gearing ratio which comes in the wake of high interest rates and currency devaluations. Cases in point are that at the beginning of 2008, the gearing ratio for the LWB was 100 per cent while for the Southern Region Water Board it was 97 per cent. In other words, 100 per cent of LWB assets and 97 per cent of SRWB's assets are practically owned by lenders. Unfortunately, the debt position will keep on deteriorating as most boards have not been servicing their debt waiting for debt restructuring. For instance, for SRWB its net debt of MK2.8 billion has grown to K5 billion through interest capitalization and for the debt to be liquidated the water tariff needs to rise from the current price of K79/m³ to MK200/m³.

B.7.1.7. Lack of capital investment for new raw water sources development

All major works undertaken by water boards have been externally funded. Since the boards are already reeling under heavy foreign debt, there is lack of investment to enable Boards meet any future demand in the various water supply areas due to heavy dependence on external funding for the sector.

B.7.1.8. *Lack of enforcement capacity by the Water Resources Board*

Although statute and by-laws stipulate the conditions and qualification for supplying water, a weak Water Resources Board has resulted in nominal regulation and proliferation of boreholes in areas under water boards, which not only suggests loss of revenue on the part of boards but also poses increased the risk of system contamination.

B.7.1.9. *Suppressed and increasing demand*

Due to inadequate and/or poorly designed plant and system (pumping, treatment, storage facilities and distribution networks) the water boards cannot meet the demand for water in their jurisdictions. This is compounded by high rates of urbanization which has led to mushrooming squatter settlements for which there was clear policy to neglect. For example, one of the LWB's by-laws stipulates, "no individual water supply will be provided to informal settlements and in areas outside Board's jurisdiction except to public institutions e.g. schools etc.". One of the effects of this is that the low-income areas where the Board has no "full water reticulation" are left out of connection charge reduction schemes. Now the LWB has relented and is considering extending service to unplanned settlement.

B.7.1.10. *Moral hazard problems (community water points)*

Although community water points are proliferating, in the initial periods the Boards found it challenging to police and maintain the kiosks and found it difficult to collect payment. More importantly, there was great contradiction where the operators to made and skimmed profits, yet at the same time accumulate arrears to the water boards.

B.7.1.11. *Impact of HIV and AIDS epidemic*

HIV and AIDS has affected every facet of Malawian life resulting in loss of productivity on the part of the sick and caretakers, loss of human capital upon death of employees and since the city water boards run clinics it also translates into high welfare expenses.

B.7.1.12. *Lack of professional training facilities*

Malawi has no professional training facility for the water sector leading to lack of qualified personnel. Although the Government has plans to open specialized college for the water sector its main focus seem to be heavily weighted more towards irrigation technology than water supply.

B.7.1.13. *Intermittent supply*

Blantyre city has the most unreliable water supply of any city, due to intermittent electricity supply or pump failure. In addition, since the Board and City Assembly do not have enough water bowsers, residents resort to drawing and using unsafe water in ponds and boreholes within their residential areas, raising the risk of contamination and water-borne diseases.

B.7.2. *Challenges in the sanitation sector*

Apart from the general lack of policy and emphasis on hygiene, the sanitation sector faces other challenges that emanate from attitude and practices of residents.

B.7.2.1. Low prioritization

Due to lack of policy, sanitation and hygiene improvement tends to have a low priority. In general, City Assemblies operate on the basis that materials and the construction of pit latrines are the responsibility of communities. Due to the private nature of benefits from proper sanitation and hygiene even the interest of outside stakeholders is also low.

B.7.2.2. Lack of relevant technical options

The technical options typically available for sanitary facilities in the communities include:

- (a) septic tanks based subject to water connections;
- (b) integral pit-based septic tanks including VIP latrines;
- (c) concrete sanitary platforms (sanplat) plus improved superstructures;
- (d) sanplat plus traditional superstructures; and
- (e) completely traditional materials.

B.7.2.3. Attitude and insufficient capacity

Many areas are inundated with garbage from households. On the one hand, most of the problems with solid waste are attributable to resident's behaviour because in some communities the City Assemblies provide skips at central locations. On the other hand, the skips tend to be few and far apart and poor households do not prioritize waste disposal enough to invest in rubbish bins.

B.8. The way forward

B.8.1. Steps in water sector reforms

Many types of participation occur in the provision of infrastructure services, ranging from public supply and operation, at the one extreme end to private supply and operation on the other, with different combinations in the middle.³ Each type of participation differs in terms OF government participation levels, risk allocations, investment responsibilities, operational requirements, and incentives for operators. Across the world in sectors like water and sanitation, the most common types are concessions because the sale of public utilities to private parties (which are usually foreign owned) is often impeded by to legal, political and constitutional restraints (Guasch, 2004). Even when there are no legal and political impediments to full privatizations, concerns about performance have led government to retain some control in the sector.

To appreciate the road that Malawi has to travel it is important to bear in mind that the transfer of public infrastructure services to the private sector – whether through

³ These include outsourcing, corporatization and performance agreements, management contracts, leasing (affermage), franchise, concession, build, operate and transfer, build own operate, divestiture by licence, divestiture by sale.

privatization or concession- typically involves the following stages. These are sector restructuring and unbundling: where public companies slated for sale are broken up (or unbundled) to facilitate competition and reduce potential abuses of monopoly powers or dominant positions; regulatory reform, where regulations are implemented and regulatory agencies are established to restrict natural monopoly advantages and to protect users from monopolistic behaviour and investors from arbitrary government action; prequalification, which sets the basic technical or economic conditions (or both) that competing private operators must fulfil to be eligible for the bidding and selection processes; followed by competitive bidding (or auctioning) mechanism which seeks to dissipate monopoly rents and select the most efficient operators among interested private operators; award of the concession contract; and concession contract enforcement and regulatory oversight which is provided by the regulatory agency if it exists, if not then by the sector ministry.

B.8.2. Prospects for successful reforms

Viewed in this context, Malawi has not even started the process. Reading through government and World Bank documents one gets the impression that reforms in the water sector are a matter of when and not whether. Yet differences in understanding of all aspects including whether, what, and how the reforms would be undertaken abound. The BWB and the LWB have proceeded with unbundling and creation of zone offices while the regional water boards have created schemes. Due to asymmetries in information, even chief executives of different water Boards understand the impending reforms differently. Whereas some envision that the utilities will be broken down into smaller self-contained service providers, others think of vertical unbundling where water treatment and pumping would be divorced from distribution. Yet others conceive of the reforms in terms of outsourcing of particular services like meter reading, billing and maintenance while the board retains the core functions.

B.8.3. Reforms and potential pitfalls

B.8.3.1. Contract commitment and renegotiation

Malawi has had negative experience with attempts at private participation in infrastructure services. The Malawi Privatization Commission slated a number of infrastructure service parastatals for privatization or concession including Malawi Railways, Air Malawi, the BWB and the LWB. In short, Malawi's current approach can be characterized as one of cold feet and measured implementation of reforms because when Malawi privatized the then Malawi Railways, the concessionaire, Central East African Railways (CEAR), agreed to provide both cargo and passenger services. However, when they commenced operations, the CEAR discovered that the rail line was in such a state of disrepair that operating costs were high and social services (passenger services) were unprofitable and it reneged on the contract. It sought to renegotiate the concession with government, offering to resume passenger service if the Government agreed to pay for it.

This case is all the more important because the Government's commitment to meeting the MDGs and ensuring "Water for all, always" may require the incoming operators to extend coverage to areas representing higher per unit costs. Yet the Government's social responsibility imbues it or the future regulator with natural reticence about giving the operator a free hand in adjusting tariffs to cover capital and operating costs. This conflict makes it almost impossible for the concessionaire to operate at a profit and create conditions for contract renegotiation or reneging.

B.8.3.2. Principal agent issues

The proposed reforms envisage the creation of a government-owned asset holding company, which will grant operating rights to a limited liability operating company, which in turn can operate through service providers. The problem with this is that at all three levels, there will be principal-agent problems and the contracts designed may in fact be incomplete. Once a concessionaire gets the use-rights, there is always a danger that the agent will not live up to what the principal intended in agreement. The incompleteness of contracts arises from the fact it is impossible to take into account all contingencies that may affect a contractual relationship or outcomes. For instance, the holding company, operating company and, in their bids, the service provider will commit to performance outcomes prior to operations. Once operations begin, either government or the concessionaire will discover that the commitments are not consistent with market realities and this gives rise to regulatory opportunism, monopoly risk and regulatory capture which may not only cause parties to seek renegotiation of the contract but monopoly risk creates condition where the operator appropriates all surpluses.

B.8.4. Implications for social dialogue

The enabling legislation for water sector reforms has not yet been promulgated. Neither the Government, current managements of board nor workers know for certain how the reforms will be implemented. Indeed it is not yet clear whether the operating company will be wholly new, or in the form of a management buy-out, workers' company or as is more likely a foreign company. Given the investment requirement in the sector, it is inconceivable that a Malawian company would have the financial wherewithal to operate. In that case the plausible outcome will be Malawian companies specialized as operators and service providers.

This raises two issues: first to what extent will the proposed law bind a private local or foreign owned company to take over workers currently employed in the sector? What fraction is "politically acceptable?" Second, what safeguards will be put in place to protect workers who are either not absorbed in the new set up or indeed are absorbed in the commercially oriented firms.

B.4.4.1 Government

In order for players in the labour sector to be clear about the impact of the proposed reforms on social dialogue, the Government should proceed with appointing transactions advisors who should design and recommend the stages through which the process should pass and associated regulatory framework. Once the enabling legislation or regulatory framework is passed the Ministry of Labour, as a matter of urgency, should initiate tripartite dialogue which would educate workers and managers about the nature and implications of the reforms.

B.8.4.2. Employees

We propose three initiatives for workers to deal with impending reforms.

(1) Union-level collaboration among affected public utilities workers

Each water board union has workplace-level recognition agreement, the main characteristic of which is the contractual expression of employment, wage and social issues relating to local specifics. However, there is need for union level collaboration between the WETUM, the Municipal Workers Union and even the Electricity Workers Union. In

addition to the customary contacts, this collaboration would facilitate the formation of a consensus stance on privatization, and provide joint forum for debate with representatives of government, development partners or joint conferences on liberalization-related proposals and experiences.

(2) Joint training for union officials

There is need for joint training, whether international or domestic, of union officials in the infrastructure service providers (including unions' representatives of already concessioned infrastructure like CEAR) on the justification, timing, nature and procedures of anticipated reforms. Unions in enterprises slated for privatizations could learn from experiences of those workers in organizations that are already in private hands.

(3) Joint exchange programmes

There is need for regular exchange of experience and joint training programmes between the waterworks and sanitation unions of the neighbouring countries. For example much can be learned from the United Republic of Tanzania which went full throttle with water sector reforms but has recently been in retreat. Funds permitting Joint Study tours to failed and successful PPPs can be organized to allay workers fears.

B.8.4.3. Employers

(1) Interest reconciliation forum

We propose the creation of an interest reconciliation forum for the water and sanitation sectors. The practical justification for this is that, although water and sanitation services are provided by water boards and local governments, they cannot be operated without sufficient central government budget resources or central government authorization. This forum express the fact that public utilities are a special type of service, cannot be operated on a strictly business basis and it is this environment which also determines the general employment conditions of the sector and provide the common negotiation theme for the various branch unions. Unlike traditional social dialogue, the interest reconciliation forum can be a unique tripartite forum for negotiations between management, workers and the State (not the Ministry of Labour but as the sole-shareholder, regulator and single largest consumer).

(2) Industry-wide representative organization

In waterworks and sanitation services there is no representative employer alliance. When the Government designs reforms it considers the sector as a whole, yet since managements of different water boards are unequally yoked, there is no independent social organization for the mediation, negotiation and representation of interest, commercial development and engineering services, in the sector. We propose an industry-wide representative organization for employers to harmonize the organizations in water and sewer services who want to do something for the profession, to negotiate and represent the interests of its members on the basis of technical, economic and legal aspects. For example the BWB, the ESCOM and Blantyre City can form Blantyre public utilities forum. They will not only meet at the negotiations table, but also operate joint forums where they all assist in the work collectively. This is important because in future it might become necessary that not only representatives of affected enterprise participate in negotiations on sectoral reforms; but rather, any and all organizations must be invited if they have any stake in the process or outcome.

B.9. Case study: Lilongwe Water Board

B.9.1. Background

Lilongwe City is the capital of Malawi. It is located in Lilongwe District in the Central Region of the country. The City has an area of 350 km² and recent estimates peg its population at 669,000 (NSO 2008) of which 72 per cent are served by the LWB. The history of the LWB dates back to 1947 when it was established as a department under the Lilongwe Town Council to provide portable water to residents. Subsequently, its operations were governed by the Water Resources Act of 1969 and it continued to operate as a department in the city assembly until 1982 when it was de-linked from the assembly and re-constituted as a Statutory Corporation under its own act of Parliament (the Waterworks Act (Cap 72:04)).

As a statutory corporation, the LWB gets its policy guidance and strategic direction from a board of directors, comprising the board's general manager and seven appointed directors and three ex-officio members appointed by the Minister for Water Irrigation and Development, each of whom serve a three year term. It is answerable to the Minister of Water on technical issues, the Ministry of Finance of pecuniary matters and the Department of Statutory Corporations.

The Board has two major dams, Kamuzu I which was commissioned in 1966 and Kamuzu II, commissioned in 1992 and recommissioned in 2001. Associated with these dams are Treatment Plants I and II. The Board pumps water northward to three tanks in Areas 3, 10 and 29 and southward to Biwi Triangle and Area 23 which is then redistributed from the storage tanks to consumers by gravity.

B.9.2. Structural reforms

Following the passage of Water Resources Management Policy of 1994, the LWB's core mandate was redefined in the Waterworks Act (No. 17 of 1995) as "the provision of water, either treated or untreated, and by way of bulk supply or distribution system to the customers (individual, commercial, industrial and institutional); and/or the provision of wastewater collection, treatment and disposal facilities within the urban and pen-urban centres." The Board's new mandates also came with a reorientation of the Board's outlook from looking at water as purely social good to an economic good so that the LWB was supposed to be operated and managed as a full "commercial entity" charging "full cost recovery" rates for the water sold and all the related services rendered, thereby ensuring financial self-sufficiency.

In addition, in 2004 following recommendation of the PSP options study, the board partially decentralized its operations into three operational zones which are closer to the customers. Each zone is under the oversight of zonal manager and is responsible for all customer service delivery operations ranging from faults, meter reading and data validation.

In the spirit of the PSP in water, in July 2005 the Board formed water user associations (using the local institutional arrangements) in the communities who basically manage and oversee the running of water kiosks in the areas. The aim of the associations is to increase coverage in terms of population served; to ensure that people access water within acceptable walking distances and to improve service levels from communal water points to individual connections.

B.9.3. Impact of reforms

B.9.3.1. Impact on production and efficiency

Current the LWB has 32,000 metered customers and 752 kiosks. Table B.5 below shows that in the past five years annual water production has averaged 23 million cubic metres, although it fluctuated significantly ranging from 19.8 million to a high of 30.7 million. More importantly though, it seems reforms have had little impact on efficiency with an average water loss of 30 per cent in ufw.

Table B.5. Water production and efficiency

	Water produced (million M ³)	Water sold (‘000 M ³)	Unaccounted-for water (%)	Sales value (nominal terms)	Sales value (real term)
2001–02	20.2	14.8	29.64	440	358.6
2002–03	21.7	14.8	32.4	507	360.1
2003–04	30.7	19.0	32.9	651	421.9
2004–05	25.5	16.3	33.4	795	462.2
2005–06			30.0	1 050	530.3
2006–07			29.29	1 237	547.3

B.9.3.2. Impact on financial performance

In nominal terms, between 2001 and 2007 the LWB’s operating profits increased from MK109 million in 2001–02 to MK226 million in 2000–06. However, except for 2001 and 2007 the Board had net losses which as high as MK233 million in 2002 representing an average net rate of return on fixed assets of -0.38 per cent. The Board’s financial position is adversely affected by two major problems: long term debt and growing debtors. When the LWB constructed the second Kamuzu Dam and second treatment plant, under the second Lilongwe Water Supply Project, the Board contracted the special drawing rights (SDR) and Euro-denominated loans on lent to through the Government of Malawi from the World Bank and the EIB. Over time, since the LWB charges tariff in local currency, depreciation of the Malawi kwacha has resulted in exchange losses and escalating interest payments. Although a significant portion of these loans was forgiven when Malawi qualified for debt relief under the HIPC initiative, a precondition of the debt forgiveness was that the borrower institutions should continue with scheduled repayment of the loan and interest to government which would redirect the savings to other social sectors. The Board recently entered into dialogue with Government to convert the loans into Malawi kwacha and turn the loans into equity.

The Board used to face many problems in debt collection from government institutions. At the beginning of 2007, the LWB was owed MK334.16 million by domestic and commercial debtors and MK78 million by the Government. The average debt collection time for the Board has fallen from 193 days in 2002 to 90 days in 2007. However, the problem with government is that it is the sole-shareholder, regulator, consumer and lender and thus it is difficult for the Board to disconnect water supply to government institutions for non-settlement of bills.

B.9.3.3. Impact on operational performance

The LWB does poorly on the single most important measure of operational efficiency: ufw. Although the LWB has managed to reduce ufw from an average of 33 per cent in 2003–04 to 29.28 per cent in 2006 against this is higher than the internationally accepted standard for African utilities of 22 per cent, according to the World Bank and the Water Utility Partnership. Similarly, due to its reluctance to downsize, when we measure efficiency on the basis of water production per employee, the LWB operates at 17 persons per megalitre per day in contrast to the international standard of 12 persons per megalitre per day. However, the reform process has boosted the LWB's effectiveness in that the Board has reduced response time to faults and the percentage of failures that exist for more than 12 hours has declined from 6 per cent in 2001 to 4 per cent in 2006. Similarly, whereas 74 per cent of new applications were connected within four weeks, by 2007 over 95 per cent of new applications got connected within a month.

B.9.3.4. Impact of reforms on redundancies and employment

The reform process in Malawi and its lack of results, or sluggish output, is due to bureaucratic inertia. In mid 1990s the LWB engaged consulting firm, Delloite and Touché to conduct a job evaluation and recommend restructuring and rationalization of jobs. At the time, the LWB had over 400 employees and the consultants recommended that the establishment be reduced to about 300. However, given the political transition of 1994, the board did not affect the recommendation and opted for not filling positions after people retired. As table B.6 shows, the LWB's average employment for the past decade is 381 and recruitment has averaged eight people with a slight spike in 2004 following the establishment of a kiosk management unit which is responsible for supply and delivery of water service in low-income areas.

Table B.6. Trends in permanent employment

Year	2001	2002	2003	2004	2005	2006
Activity						
Average establishment	381	356	372	393	389	390
Recruitment	8	4	24	–	6	8
Resignations	3	2	2	1	1	–
Training						
– Internal	48	9	25	110	73	11
– External	12	5	4	25	29	12
Deaths	5	7	5	9	1	4
Retirements	2	1	–	2	–	6

B.9.3.5. Impact of reforms on social protection

As table B.1 also shows, in the past five years the annual death rate among LWB employees has averaged five. However, in view of the negative impact that HIV and AIDS exert on labour productivity and the board's material and financial resources, the LWB promulgated a set of medical and HIV/AIDS policies. The medical policy provides for full medical cover for all employees in return for a contribution of 5 per cent of one's salary per month. The HIV policy seeks to educate workers about the nature, dangers and management of HIV both at home and workplace and encourages employees who are HIV positive to disclose their status to a selected and trained committee of peers and counsellors. In addition, employees that are HIV positive are provided with free antiretroviral treatment from the board as long as they are in the Board's employment.

B.9.3.6. Impact on training

The impact of reforms can also be seen on trends in training for the Board. Between 2000 and 2006, a total of 363 employees undertook some training of which 276 did it locally and 87 abroad. Due to restructuring under the World Bank project the number of people on external training jumped from six fold and the total expenditure on training more than doubled from MK9.3 million in 2002–03 to MK23.4 million in 2003–04.

B.9.3.7. Impact on industrial relations

The state of social dialogue at the LWB is a qualified collegial one although forces outside the Board affect its responsiveness to workers complaints. The LWB is a member of the ECAM and the Malawi Chamber of Commerce and Industry (MCCI). In the early 1990s employees of the Board formed a JCC from which later morphed into the Lilongwe Water Board Trade Union (LWBTU). When the union was formed a recognition agreement was signed and it outlined issues that were supposed to be discussed between workers and management. The LWBTU is affiliated to and is a founding member of the Water Employees Union of Malawi (WETUM) which is itself affiliated to the MCTU as a mother federation.

Although the union has managed to negotiate for better terms of employment and conditions of work like provision of transport for workers to and from work, non-discriminatory medical scheme, housing allowance increments and housing scheme and raises in retirement benefits the state of social dialogue has recently been characterized by anxiety due to governments refusal to effect salary increments when the Board is posting losses. Government's insistence on performance based wage adjustment resulted in a strike in December 2008 which was cancelled after four days after management sought court intervention.

B.9.3.8. Challenges

The Board faces a number of challenges some which have already been highlighted, for example, an old reticulation system, high ufw. However, there are other challenges that are policy related:

- (1) *Tax burden:* While the LWB cannot raise enough funds internally for large infrastructural projects, the Board pays taxes on internally funded projects such as Ngwenya project (worth over MK100 million). It would be more conducive if such projects could attract tax exemptions.
- (2) *Lethargic tariff adjustment:* Water tariffs are not set on a full cost-recovery basis and are negotiated annually. An Automatic tariff adjustment could help overcome this problem or allowing the Board to operate at full cost recovery by speeding up the approval process.
- (3) *Technical misjudgements:* In its forecast, the LWB believed that the city would grow northwards and developed storage facilities in anticipation to that. Unfortunately the city has started growing southwards and there is a need to look for alternative sources of water for the future.
- (4) *Heavy external debt:* The Board is reeling under heavy external debt from the EIB and the World Bank and has entered into dialogue with the Government to convert the loans into Malawi kwacha and turn the loans into equity.

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- (5) *Rising cost of inputs:* The Board imports most of the materials used in the production and treatment of water. The cost of these materials includes input surtax which is not passed on to customers because water is surtax exempt. This has pushed the cost of production higher than would be were the inputs surtax exempt.

References

- Bayliss, K. PSIRU, 2001. "Privatization of electricity distribution: Some economic, social and political perspectives", Public Services International Research Unit, University of Greenwich, Report No. 2001-04-E-Distrib.doc.
- Blantyre Water Board. Annual Report (various).
- Central Region Water Board. Annual Report (various).
- Chirwa, E. W.; Mangani, R.D. 2005. "Energy pricing framework for multi-sector regulatory (energy) establishment", draft Final Report submitted to the Ministry of Economic Planning and Development, Lilongwe.
- Government of Malawi. 2002. Malawi Poverty Reduction Strategy Paper, Lilongwe: Ministry of Finance and Economic Planning.
- . 2004. Liquid Fuels and Gas (Production and Supply) Act (No, 23 of 2004), Zomba: Government Printer.
- . 2004. Rural Electrification Act (No. 21 of 2004), Zomba, Government Printer.
- . 2004. The Electricity Act (No. 22 of 2004), Zomba, Government Printer.
- . 2004c. Energy Regulation Act (No. 20 of 2004), Zomba, Government Printer.
- . 2002. Malawi Poverty Reduction Strategy Paper, Lilongwe.
- . 2005. National Sanitation Policy, Lilongwe.
- . 2005. National Water Policy, Capital Printing Press, Lilongwe.
- . 2000. Ministry of Agriculture and Irrigation, National Irrigation Policy and Development Strategy, Lilongwe, June.
- . 1998. Ministry of Local Government, National Decentralization Policy, Lilongwe.
- . 2000. Ministry of Water Development, Water Resources Management Policy and Strategies (WRMPS), Lilongwe.
- . Ministry of Water Development. Draft Water Act, Water Resources Development Policy and Strategies, resubmission, May 1999.
- Guasch. 2004. "Granting and renegotiating infrastructure concessions: Doing it right", World Bank Institute, Washington. DC.
- IDA. 2005. Malawi: Privatization and Utilities Reform Project – (Credit No. 33950-MW), proposed amendment to the Development Credit Agreement, World Bank, Washington, DC.
- IMF and IDA. 2000. "Malawi: Decision point document for the Heavily Indebted Poor Countries (HIPC) Initiative", International Monetary Fund and World Bank, Washington, DC, 7 Dec. 2000.

Kaluwa, B. 2003. "Financing/payment requirements for improving services in low-income areas: Community, households and other stakeholder perspectives, unpublished Report for Blantyre and Lilongwe Urban Water Supply Project.

Lilongwe Water Board. 2006., *Madzi News*, Vol. 6 (9).

—. Annual Reports (various).

PPIAF. 2003. "Gridline summary: Increasing private sector participation in the provision of water supply services in Malawi", PPIAF, Washington, DC, Oct. 2003.

Southern Region Water Board. Annual Reports (various years).

Stone and Webster. 2002. "Preliminary PSP Options Report: Consultancy services for private sector participation", Options Study for Blantyre Water Board and Lilongwe Water Board, PPIAF, Washington, DC.

World Bank. 2000. "Malawi: Privatization and Utility Reform Project", World Bank, Washington, DC.

—. 2004. "National Water Development Programme: Implementation Completion Report", Report No. 29336, World Bank, Washington, DC.

—. 2007. "Second National Water Development Project, Project Appraisal Document", Report No. 38457-MW

—. 2008. "Malawi: Privatization and Utility Reform Project: Implementation Completion and Results Report", World Bank, Washington, DC.

Sectoral working papers ¹

	Year	Reference
The Warp and the Web Organized production and unorganized producers in the informal food-processing industry: Case studies of bakeries, savouries' establishments and fish processing in the city of Mumbai (Bombay) (Ritu Dewan)	2000	WP.156
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¹ Working Papers Nos 1–155 are not included on this list for reasons of space, but may be requested from the Sectoral Activities Department.

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