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INTERNATIONAL DEVELOPMENT ASSOCIATION

PROGRAM DOCUMENT

ON A PROPOSED CREDIT

IN THE AMOUNT SDR 64.9 MILLION
(US\$ 100 MILLION EQUIVALENT)

TO THE

UNITED REPUBLIC OF TANZANIA

FOR A

FIRST POWER AND GAS SECTOR
DEVELOPMENT POLICY OPERATION

February 26, 2013

Poverty Reduction and Economic Management 5, AFTP5
Eastern Africa Country Cluster 1, AFCE1
Africa Region

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TANZANIA - GOVERNMENT FISCAL YEAR

July 1 – June 30

CURRENCY EQUIVALENTS

Exchange Rate Effective (as of January 31, 2013)

Currency Unit	Tanzania Shilling (T Sh)
US\$1.00	T Sh 1,616.00
Currency Unit	Special Drawing Right (SDR)
US\$1.00	SDR 0.64878612

(Weights and Measures
Metric System)

ABBREVIATIONS AND ACRONYMS

Bcf	Billion Standard Cubic Feet
BoT	Bank of Tanzania
CAG	Controller and Auditor General
CAS	Country Assistance Strategy
CCGT	Combined Cycle Gas Turbine
CIDA	Canadian International Development Agency
CPIA	Country Policy and Institutional Assessment
CPTDC	China Petroleum Technology and Development Corporation
COSS	Cost of Service Study
CSO(s)	Civil Society Organization(s)
CY	Calendar Year
DBSA	Development Bank of Southern Africa
DfID	Department for International Development (United Kingdom)
CMEC	China Machinery Engineering Corporation
DPs	Development Partners
DPO(s)	Development Policy Operation(s)
DSA	Debt Sustainability Analysis
EDPG	Energy Development Partner Group
EITI	Extractive Industries Transparency Initiative
EMA	Environmental Management Act
EPA	External Payment Arrears
EPC	Engineering, Procurement and Construction
EPP	Emergency Power Plan
EPPs	Emergency Power Projects
ESIA	Environmental and Social Impact Assessment
EU	European Union
EWURA	Energy and Water Utilities Regulatory Authority
FDI	Foreign Direct Investment
FRP	Financial Recovery Program
FY	Fiscal Year (Financial Year)
FYDP	Five Year Development Plan
GBS	General Budget Support

GDP	Gross Domestic Product
GoT	Government of Tanzania
GSAs	Gas Sales Agreements
HBS	Household Budget Survey
HFO	Heavy Fuel Oil
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communication Technologies
IDA	International Development Association
IFMS	Integrated Financial Management System
IMF	International Monetary Fund
IPPs	Independent Power Producers
JBIC	Japan Bank for International Cooperation
KPIs	Key Performance Indicators
kWh	Kilowatt(s)-hour
LNG	Liquefied Natural Gas
LTPP	Long Term Perspective Plan
MDAs	Ministries, Departments, and Agencies
MDGs	Millennium Development Goals
MEM	Ministry of Energy and Minerals
MKUKUTA	Mkakati wa Kukuza Uchumi na Kupunguza Umaskini Tanzania
mmscfd	Million Standard Cubic Feet per Day
MW	Megawatt(s)
NAO	National Audit Office
NEMC	National Environmental Management Council
NIR	Net International Reserve
NPS	National Panel Survey
OECD	Organization of Economic Cooperation and Development
OPCS	Operational Policy and Country Services
OSHA	Occupational Safety and Health Authority
PABs	Public Authorities and Other Bodies
PAF	Performance Assessment Framework
PAT	Pan African Tanzania
PBG(s)	Policy Based Guarantee(s)
PDO(s)	Program Development Objective(s)
PEFA	Public Expenditure and Financial Accountability
PEFAR	Public Expenditure and Financial Accountability Review
PER	Public Expenditure Review
PFM	Public Financial Management
PFMRP	Public Financial Management Reform Program
PIM	Public Investment Management
PPAs	Power Purchase Agreements
PPP(s)	Public Private Partnership(s)
PPRA	Public Procurement Regulatory Authority
PRBS	Poverty Reduction Budget Support
PRS	Poverty Reduction Strategy
PRSCs	Poverty Reduction Support Credit(s)
PSA	Private Sector Assessment
PSI	Policy Support Instrument

PSMP	Power System Maser Plan
REA	Rural Energy Agency
REF	Rural Energy Fund
RRDC	Resource Rich Developing Countries
SCF	Standby Credit Facility
SEA	Strategic Environmental Assessment
SESIA	Strategic Environmental and Social Impact Assessment
SMEs	Small and Medium Enterprise(s)
TANESCO	Tanzania Electric Supply Company
TCF	Trillion Cubic Feet
TDV	Tanzania Development Vision
TPDC	Tanzania Petroleum Development Corporation
TRA	Tanzania Revenue Authority
TSh	Tanzanian Shilling
USD	United States Dollars
VAT	Value Added Tax
VETA	Vocational Education Training Authority
VPO	Vice President's Office

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TANZANIA

FIRST POWER AND GAS SECTOR DEVELOPMENT POLICY OPERATION

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CREDIT AND PROGRAM SUMMARY

UNITED REPUBLIC OF TANZANIA

FIRST POWER AND GAS SECTOR DEVELOPMENT POLICY OPERATION

Borrower	United Republic of Tanzania
Implementing Agency	Ministry of Finance
Financing Data	SDR 64.9 million (US\$ 100 million equivalent); standard IDA terms: 40-year maturity with a 10-year grace period.
Operation Type	Programmatic (1st of 3). Single Tranche
Main Policy Areas	The program is organized around three main policy areas essential to the reform of Tanzania's energy sector: (i) helping close the financial gap in the power sector; (ii) strengthening the power sector governance as well as investment planning and implementation capacities; and (iii) strengthening the policy and institutional framework for optimal use of the country's natural gas reserves in both the short- and longer term.
Key Outcome Indicators	The outcome indicators of the series are aligned with the three policy areas. They are: (i) amount of accumulated arrears to suppliers by Tanzania Electric Supply Company (TANESCO), (ii) TANESCO operating deficit; (iii) new power generation capacity added to the system, cumulative (Megawatt); (iv) average unit cost of power sales, (v) number of bids for gas power plants launched on a competitive basis; (vi) volume of gas produced; and (vii) amount of on-shore proven natural gas reserves.
Program Development Objective(s) (PDOs) and Contribution to CAS	The objective of the proposed program is to: (i) strengthen the country's ability to bridge the financial gap in its power sector; (ii) reduce the cost of power supply and promote private sector participation in the power sector; and (iii) strengthen the policy and institutional framework for the management of the country's natural gas resources. The proposed programmatic series supports the Country Assistance Strategy (CAS) objective of improving the business environment by better meeting demand for reliable and cost efficient energy. It also contributes to the social inclusion, environmental management and governance objectives of the CAS.
Risks and Risk Mitigation	The main risks faced by this operation, and the proposed series, can be classified in four categories: (i) risks embedded in the energy sector itself, such as heightened financial imbalance, the lack of capacity, inadequate governance, and technical uncertainty such as possible delays in the implementation of gas and power infrastructure; (ii) the hydrology risks since about one-third of the country's energy production capacity is still based on hydropower; (iii) risks of political interference, which is not

	<p>uncommon in this strategic and visible sector; and (iv) the economic and fiscal risks faced by the Tanzanian economy.</p> <p>The proposed operation has been designed to limit the above-mentioned risks. The energy sector-related risks will be mitigated by the implementation of a parallel capacity building project, by close monitoring of investments by external technical experts, and by the adoption of transparent and competitive procedures. The risk of inadequate gas supply for energy generation will be mitigated through strengthened government policies in the gas sector that are part of the series and by helping the Government clear the existing arrears to gas suppliers. The Bank may also offer, under a separate operation, risk guarantee instruments. The mitigation of the hydrology risk is at the center of the Government’s program and is one of the key objectives of the Development Policy Operation (DPO) series since one of its key objectives is to mitigate the risk of variability in hydropower (by diversifying energy sources to gas and other resources). The political risk will be addressed by setting rules in the early stage of the operation which encourage more rigorous independent regulation and implementation of measures aimed at broadening the consultation processes and disseminating information to a broader range of stakeholders. Lastly, the economic and fiscal risks will be monitored through a triple mechanism: the supervision of the Poverty Reduction Support Credit (PRSC) series, collaboration with the International Monetary Fund (IMF), and coordination with other donors as part of the harmonized budget support framework.</p>
Operation ID	P143645

PROGRAM DOCUMENT

TANZANIA

FIRST POWER AND GAS SECTOR DEVELOPMENT POLICY OPERATION

I. INTRODUCTION

1. **The Tanzanian power sector is in crisis and needs a sustainable solution.** Over the last several years, Tanzania has witnessed a growing power generation deficit caused by: (i) the below-average hydrology conditions that have reduced hydropower generation capacity; and (ii) insufficient development of new generation capacity relative to the growing demand for electricity. At the peak of the crisis in mid-2011 Tanzania experienced up to 18 hours of load shedding per day in certain parts of the country. In response, the state-owned power utility Tanzania Electric Supply Company (TANESCO) entered into high-cost short-term contracts on an emergency basis with privately-owned Emergency Power Projects (EPPs), totaling 317 megawatts (MW), which represents more than a third of the current total operating power generation capacity of the country. This reduced load shedding but at a significant increase in the average unit cost of sales (from US\$0.10 per kilowatt-hour (kWh) in 2010 to US\$0.20 per kWh in 2012).¹ In spite of an approximately 40 percent increase in electricity tariffs in January 2012, the sector has developed a sizable financial gap and accumulated arrears to the EPPs, independent power producers (IPPs), and fuel suppliers, in the amount of US\$276 million as of end-December 2012, threatening increased curtailment of power generation. The financial gap in TANESCO is expected to reach around US\$450 million by end June 2013, and to continue to grow up to early 2015 when sufficient new, more efficient, power generation capacity is commissioned to replace the emergency supply. By end 2014, the total cumulative financial gap is expected to be between US\$760 million and US\$1 billion (or between 2.9 and 3.8 percent of GDP), depending on hydrology, fuel prices and other factors.

2. **The Government of Tanzania (GoT) has begun to implement a strategy to place the power sector on a more sustainable path.** The strategy, articulated in the Letter of Development Policy attached to this program document, combines three complementary sets of actions. First, the authorities aim at shifting the energy mix away from the expensive emergency supply to more efficient generation with a view to reducing the cost of electricity supply and to mitigate the risks of major shocks to the power system, such as droughts or oil price increases. This requires rapidly developing and commissioning new efficient power generation using natural gas and other sources of cleaner energy, as well as increasing output from existing near-shore gas fields in order to supply the new plants. To enable gas production to be increased in a relatively short period of time and at relatively low cost, an adequate investment framework will need to be put in place to incentivize investment in gas production. In addition, additional

¹ Average unit of cost of sales is defined by total costs (including depreciation and financing costs) divided by total energy sales.

infrastructure investments in gathering and processing gas facilities and a major gas pipeline need to be put in place to bring the additional gas to the market. Second, there is a need to restructure sector institutions and strengthen investment planning, procurement and contracts management. This would include leveraging private investment through IPPs, procured through solicited and competitive bidding processes, and increasing market competition in power generation. Third, the Government has to address TANESCO's financial gap through financing arrangements (e.g., subsidies from the budget and borrowing from commercial banks) and through revenue-enhancing measures. Once the liquid fuel is substituted by natural gas as the main fuel in the sector, the cost structure of the sector is expected to be substantially lower. Implementation of this strategy has started with a notable steep increase in electricity tariffs in 2012, the reshuffle of TANESCO management, and the start of the construction of the gas pipeline.

3. The discovery of important offshore natural gas reserves presents Tanzania with a potentially transformational opportunity for the country. While existing near-shore natural gas reserves will be critical to enable the shift to more efficient power generation over the coming three years, it is the abundance of offshore natural gas reserves that offers the highest transformational opportunity for Tanzania over the long term. Beyond serving as a critical source of energy for future power generation plants in Tanzania, natural gas is also a major future source of government revenue and one driver of private sector development to support very large investments anticipated in natural gas exploitation and transformation. Huge foreign direct investment in the gas sector is expected over the next five years, with associated and subsequent large export and budget revenue flows in 7-10 years. A key challenge is to prepare the country for the natural gas economy and establish strong foundations to leverage this resource for the benefit of the Tanzanian people.

4. The Government is determined to, and has started the process of, implementing an appropriate policy framework for the optimal use of future natural gas revenues. The results of recent explorations have shown that the country's offshore natural gas reserves are significant and can be developed for export markets combined with a domestic supply obligation, so as to use the gas for enhanced and shared economic growth. A draft Natural Gas Policy has been prepared, which has gone through a broad-based participatory consultative process. This is a good start to implementing sound policies for converting rent of natural gas into investments with high economic and social returns for sustainable development. Once the discussions are finalized and the Natural Gas Policy document is adopted, the Government will prepare a Natural Gas Utilization Master Plan and pursue further development of the legal and regulatory framework for the hydrocarbon sector, aligned with the Natural Gas Policy and with the goal of creating a conducive investment environment. This step-by-step approach in consensus building is being supported by development partners (DPs), including the World Bank. The Government has sought advice from a large coalition of DPs to ensure that the preparation of key strategic documents and plans—that will set the stage for future decision-making and policies—are informed by the best possible international experience.

5. A programmatic approach is being proposed to support the Government in addressing the above challenges. This program document presents the first of a proposed programmatic series of three development policy operations (DPOs) aimed at helping address the need for a more sustainable power sector, as well as the longer-term opportunities associated

with the large reserves of natural gas. Timing, content and size of subsequent operations will track the progress of the government's reform program and availability of funding. The series is expected to be complemented by a technical assistance operation (financed by International Development Association (IDA) and the Canadian International Development Agency (CIDA)) providing critical capacity-building for the power sector and the gas agenda. In a future operation, a policy based guarantee may also be considered to enable the power sector to access commercial borrowing, at more attractive terms than are currently being offered.

6. The development objective of the proposed program is to: (i) strengthen the country's ability to bridge the financial gap in its power sector; (ii) reduce the cost of power supply and to promote private sector participation in the power sector; and (iii) to strengthen the policy and institutional framework for the management of the country's natural gas resources.

7. The operation is consistent with the objectives of the Country Assistance Strategy (CAS) for FY12-15 and the Africa Regional Strategy. As part of its second objective to build infrastructure and deliver services to the economy, the CAS aims to support the demand for reliable and cost efficient energy and specifically notes the Bank's role to facilitate the restructuring of the power sector. Improving access to electricity, at affordable costs, will enhance the living conditions of most Tanzanian households, since only 18 percent of them are connected today to the national electricity grid.² Enhanced power supply is also expected to contribute to a better business environment and competitiveness of the economy, which is the first objective of the CAS, as well as the first pillar of the Regional Strategy. About 80 percent of Tanzanian firms perceived access to electricity and the cost of supply as a severe constraint in 2009. Governance and public sector capacity is the cross-cutting foundation of both the CAS and the Africa Regional Strategy. The broadening and deepening of the dialogue between the GoT and the Bank on power sector reform merits a program that will complement the series of Poverty Reduction Support Credits (PRSCs) which is the primary vehicle for policy dialogue in Tanzania. The proposed operation seeks to promote transparency and accountability in the energy sector through a number of demand-driven initiatives and policy, as well as institutional reforms.

II. COUNTRY CONTEXT

A. RECENT ECONOMIC DEVELOPMENTS

8. Tanzania has experienced high and relatively stable growth rates over the past decade, driven to a large extent by growth in mining, telecommunication, tourism, and construction. Gross domestic product (GDP) growth has averaged around 7 percent in the 2000s and has continued to be remarkably stable over the past few years despite global economic turbulence (Table 1). The mining sector, propelled by a surge of foreign direct investment (FDI), has witnessed a boom in production and exports, particularly up to 2007. Impressive growth has been seen in gold, which has benefited from recent rapid rise in gold prices and accounts for 40

² See section VI and Annex 3 for more details on the expected impact of the proposed operation on economic growth, and poverty alleviation.

percent of total merchandise exports today. Concurrently, the services sector has grown at around 8 percent during the same period, driven by the expansion in financial services trade, telecommunications, transportation, and tourism. By contrast, labor-intensive sectors such as manufacturing and agriculture—the latter being the primary economic activity of about 80 percent of households—reported slow growth and weak productivity gains. Agricultural value-added has grown only at around 4 percent annually since 2005.

9. **The expansion of the public sector, largely financed by foreign aid, has also contributed to the country's high growth.** The public sector grew from 15 percent of GDP to over 27 percent since 1997. This is in contrast to the formal private sector, which remains small, with private investment having grown only marginally from the level of 10–12 percent of GDP in the early 2000s to 14–18 percent since 2007. The public sector expansion was initially facilitated by massive aid inflows, the debt relief initiatives, and significant gains in tax collection. More recently, it was also financed by non-concessionary domestic and foreign borrowing, leading to an increase in the public debt-to-GDP ratio from 28 to close to 40 percent between FY2008/9 and FY2011/12.

10. **Tanzania proved to be resilient to international shocks between 2008 and late 2011, with effective counter-cyclical fiscal and monetary policies and its relative isolation from financial and trade shocks.** The global financial crisis in 2009 hit the country only marginally. Helped by higher gold prices, export earnings growth remained positive both in 2009 and 2010, compensating for depressed demand for tourism and cash crops. Capital inflows—foreign aid and private investment—were also sustained in spite of the volatile global environment. The shock was also mitigated by a fiscal stimulus package adopted in early 2009. The level of public expenditures grew by more than 30 percent in real terms during this period, including a 60 percent real increase in the government wage expenditures driven by the demand for more personnel in priority social services (for example, teachers and healthcare workers), which in turn reflects the country's formidable demographic challenge.

11. **After a year of economic rebound from the global crisis, growth slightly decelerated to 6.7 and 6.5 percent in FY2010/11 and FY2011/12, respectively. Simultaneously, a series of financial indicators started to deteriorate with rising inflation, the depreciation of the local currency, and higher domestic interest rates.** The country faced a power crisis due to poor rainfalls in late 2010 and a consequent reduction in hydropower generation by as much as about 75 percent of normal capacity (equivalent to 420 MW, forcing the Government to adopt a necessary but costly emergency energy plan (EPP) in August 2011, which led to the overall capacity expansion by 317 MW.³

12. **The widening current account deficit in FY2011/12 was balanced by higher capital inflows, resulting in stable international reserves.** The current account deficit widened to almost 17.0 percent of GDP in June 2012, up from 9.5 percent in the previous fiscal year, principally as a result of the increase in the oil import bill and the lower level of official transfers. The terms of trade have been improving for Tanzania since FY2007/08 because of the favorable price movement of gold, for which the share in exports increased significantly in recent years. However, because of sizable oil imports, the total import volume grew by 28.5

³ The EPP intended to fill this short-term supply gap and enhance medium-term supply capacity.

percent for FY2011/12. At the same time, the rate of growth in the value of exports decreased in FY2011/12 due to the relative stagnation in gold prices and the decline in manufactured exports as a combined result of the weaker regional demand, productivity loss from the power shortage, and the real appreciation during the early part of FY2011/12. The weakened trade balance was, however, compensated for by higher FDI and portfolio investment inflows. Encouraged by the recent discoveries of offshore natural gas reserves, foreign investments in the mining and the gas sectors have increased to approximately US\$1.5 billion. The level of international reserves held by the Central Bank was equal to about a four-month equivalent of imports at the end of June 2012.

13. **With a surge in the inflation rate—close to 20 percent in November and December 2011—the Government has continued its prudent monetary policy.** The Bank of Tanzania (BoT), the Central Bank, adopted a less accommodating monetary policy by reducing money expansion by half. The BoT has taken proactive steps to sterilize the liquidity, with the objectives of limiting monetary expansion and reducing the core inflation rate. Annual growth of average reserve money was 14.2 percent in the year ending June 2012, compared to 20.6 percent recorded in the year ending June 2011. Growth of the money supply (M3) was at 11.8 percent in June 2012 compared to 25.1 percent in June 2011 and was much lower than the initially projected level of 20 percent. The BoT increased the discount rate from the previous level of 7.58 percent to 12 percent in November 2011. The minimum reserve requirement on government deposits was raised from 20 percent to 30 percent in November 2011. Liquidity squeeze experienced in the banking sector increased most money market interest rates, with overnight interbank cash market rate peaking at 27.7 percent in April 2012, lowering the growth rate of credit to the private sector. Tanzania maintains a market-based exchange rate regime. The nominal exchange rate has been relatively stable after a sharp appreciation from the second half of 2011 to early 2012. On the other hand, the real effective exchange rate has appreciated during 2012, driven by high inflation rate.

14. **The adjustments in monetary policies have borne fruit, leading to lower inflation, a sharp decline in the fiscal deficit, and stabilization of most financial indicators, including the exchange rate and the level of international reserves.** GDP growth rate returned to the level of 7 percent in real terms during the first half of CY 2012. As in the recent past, the main drivers were the communications, financial, and mining sectors. The surge in FDI into the mining sector has helped maintain the growth momentum, particularly for gold production and exports. However, agriculture, manufacturing, and construction all reported lower-than-average growth, suggesting that economic expansion has continued to be more the result of a few selective low-labor-intensive sectors than a broad basis phenomenon.

15. **The inflationary pressures that emerged since the last few months of 2011 are slowly diminishing, but the rate remains high.** The high inflation rate, which peaked in December 2011, was related to higher food prices and fuel prices. Core inflation (excluding food and fuel prices) also rose but remained at the single-digit level, suggesting that the second-round effects from the food and fuel price increases have been kept under control. The headline inflation gradually declined to 12.9 percent in October 2012 thanks to the combination of monetary tightening undertaken by the BoT and falling energy and food prices (Figure 1). However, the inflation rate has not dropped as quickly as anticipated and is dropping more slowly than in Kenya and Uganda, whose disinflation measures were introduced earlier.

Table 1: Key Economic Indicators: FY2006/07-FY2010/11
(in percent otherwise indicated)

Indicator	FY2007/08	FY2008/09	FY2009/10	FY2010/11	FY2011/12
Output and prices					
GDP growth	8.0	6.2	7.3	6.7	6.5
Annual inflation (CPI, period average)	8.4	11.8	10.5	7.0	17.8
Money					
M3 growth	18.1	18.5	25.1	22.0	11.8
Private sector credit growth	32.9	33.1	16.7	25.6	18.7
Balance of payments					
Current account balance to GDP (including current transfers)	-11.1	-10.1	-9.0	-9.4	-16.3
Official reserves in months of imports	4.2	4.5	5.2	3.9	3.5
Exchange and interest rates					
Exchange rate (TSh/US\$, end of period)	1180.9	1314.2	1393.6	1598.4	1573.0
Interest rate (Treasury bill, end of period)	7.8	7.0	3.3	4.8	13.8
Fiscal developments (percent to GDP)					
Domestic revenue	15.9	16.2	15.9	16.4	17.6
Expenditure	22.8	26.1	27.5	27.0	26.2
Overall balance (before grants)	-6.9	-9.9	-11.1	-10.6	-8.6
Overall balance (after grants; cash basis)	-1.7	-4.6	-6.4	-6.6	-5.0
Domestic borrowing	-1.5	0.8	1.9	3.6	0.8
Total public debt	35.2	30.8	33.8	38.7	38.5

Source: Tanzanian authorities, IMF, World Bank estimates.

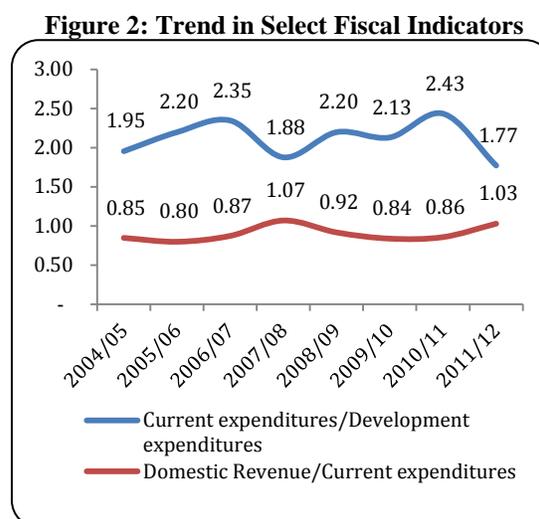
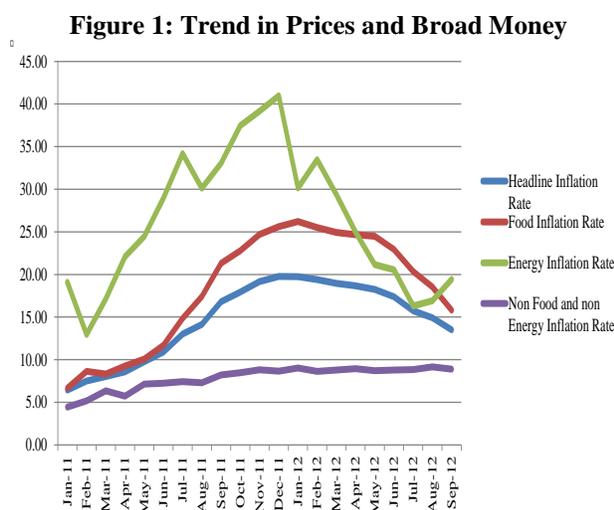
16. **The Government improved the sustainability of fiscal policy in FY2011/12, with a fiscal adjustment that came after three years of continuous fiscal expansion.** The overall fiscal deficit declined for the first time since FY2007/08, back to 5 percent of GDP in FY2011/12. This fiscal adjustment was the result of higher-than-anticipated revenues and cuts in nonwage recurrent expenditures. Intensified tax collection efforts, particularly in the mining sector, the higher value of imports, and inflation generated a 1 percent of GDP increase in tax revenues from FY2010/11 to FY2011/12. However, the level of tax exemption continues to be a source of concern, since their associated fiscal costs grew from 2 percent of GDP in FY2008/9 to almost 4 percent of GDP in FY2011/12. Concurrently, nonwage recurrent expenditures were cut by about 2 percent of GDP, including a significant decline in transfers to local governments and in goods and services (maintenance and equipment).⁴ The Government was nonetheless able to increase its level of development expenditures, up by 1.7 percent of GDP from FY2010/11, in line with its commitment to increase the stock of infrastructure in the country.⁵ This increased expenditure was principally funded by domestic financing, whose contribution to the expenditure grew by 1.8 percent of GDP compared to FY2010/11. The total value of externally financed development projects remained stable at a sum equivalent to approximately 5 percent of GDP.

⁴ These measures reflect the Government's decision to limit recurrent spending amidst the severe cash constraints encountered during the year, but if maintained they will affect the country's stock of human and physical capital and so offset the current effort to invest more in infrastructure. There are also risks associated with ongoing efforts to enhance domestic revenue mobilization and reduce fiscal deficits. It is also important to note potential gender impacts, since most of the adjustment was concentrated in a few ministries, including water, education, and health—sectors that already exhibit relatively high gender inequality in access.

⁵ It is however important to underscore that not all development spending is spent on capital projects, since "true capital expenditures" were equivalent to about three-fourths of development expenditures in the approved 2011/12 budget.

While this is slightly lower than in previous years, external financing still accounts for approximately 60 percent of total public sector development expenditures.

17. **Improved sustainability of fiscal policy has been achieved not only by reducing the overall deficit but by improving the structure of the budget.** The strength of fiscal accounts is generally measured by (i) the ratio between domestic revenues and recurrent expenditures and (ii) the ratio between recurrent expenditures and development expenditures. The first indicator captures the “golden rule” that borrowing should be used only to finance investment spending, while the second indicator measures the Government’s contribution to the accumulation of physical capital in the country. These two ratios improved in Tanzania during FY2011/12, in contrast with the trend observed between FY2008/9 and FY2010/11 (figure 2). The rate of expansion in development expenditures (56 percent in nominal terms) was three times faster than in recurrent expenditures (16.8 percent in nominal terms).



Source: Rapid Budget Analysis 2012 (November 2012) and World Bank Tanzania Economic Update (October 2012)

18. **While the level of spending has been stabilized, the declining rate of execution has continued to be a challenge, and releases of development funds have been bunched toward the end of fiscal years.** The total budget was executed at only 75 percent compared to the level initially approved by the Parliament, down from 93.5 percent and 83.5 percent in FY2009/10 and FY2010/11, respectively. The level of execution is particularly decreased for development expenditures, with the education, HIV/AIDS, judiciary, and water sectors being the worst performers. The under-execution of the development budget is partly explained by the underreporting of funds that do not go through the exchequer system. Delays in the release of development expenditures, particularly foreign-funded expenditures, as well as built-up arrears were again experienced in FY2011/12. About half of ministries’, departments’, and agencies’ (MDAs’) development funds were released during the last quarter, with more than 36 percent in the last month, of the fiscal year. The incomplete release of development funds, especially foreign-funded, may have resulted in cash flow problems and possibly in a greater accumulation of arrears, most notably in the transport and energy sectors.

19. **The level of public debt has remained under control, even though the share of non-concessional borrowing has increased over time.** The proportion of official aid declined from its peak of 45 percent of total expenditures in FY2007/08 to 28 percent in FY2011/12. This decline is principally the result of rapidly growing public expenditure rather than a lower level of inflows of aid in absolute, dollar-denominated terms. With improved access to international private capital, the Government borrowed a proportionally higher value of non-concessional funds to close its fiscal gap. The value of such non-concessional funds increased from TSh154 billion in FY2010/11 to TSh801 billion in FY2011/12. Despite this increased borrowing, the total value of loans remained under the ceiling agreed upon with the International Monetary Fund (IMF). Net borrowing on the domestic market did not exceed a value equivalent to 1 percent of GDP, even though short-term refinancing needs increased dramatically, by up to 15 percent, due to previous debt.

20. **One threat to the current state of public finance is the fragile financial situation of the energy sector.** The government-owned utility company (TANESCO) operating in the electricity sector has accumulated arrears of estimated amount of US\$276 million as of December 2012 (or 1 percent of GDP). This financial distress might require additional public resources from the budget, which has already contributed to the financing of this gap by US\$100 million since the beginning of the current fiscal year. The electricity tariff was increased by 40 percent in January 2012, which, together with measures to improve efficiency in tariff collection, led to an unprecedented revenue collection performance by TANESCO over 50 percent between January and December 2012. With the Energy and Water Utilities Regulatory Authority (EWURA)'s decision to retain current tariffs, the Government is committed to close the financial gap through a set of measures, including management efficiency improvements, subsidies and commercial loans, within the fiscal framework in line with the IMF Policy Support Instrument (PSI) program.

B. MACROECONOMIC OUTLOOK AND DEBT SUSTAINABILITY

21. **Economic growth is projected to remain stable around 7 percent in the medium term, driven by the emergence of private activities, particularly in services, boosted by better infrastructure, regional growth, and policy reforms in the business environment and investments in the natural resources sectors.** Table 2 shows the country's medium-term macroeconomic projections. The rate of inflation is expected to return to single-digit level by FY2013/14 provided that there are no shocks on energy or food prices. The current account deficit will remain high due to a significant growth in resource-related FDI and induced imports related to such investments, but the overall balance of payments should remain stable.

22. **In the medium term, Tanzania has good prospects of becoming a major producer of natural gas, although the magnitude and timing of related investments remain uncertain.** Tanzania has seen favorable natural gas exploration results. There appear to be good prospects that commercial quantities of natural gas will be confirmed, resulting in multibillion dollar FDI in Tanzania's natural gas sector over the next five years, and subsequent large export and budget revenue flows around the end of the century's second decade. The challenge is to prepare the country for the gas economy and establish strong foundations to best take advantage of this potential resource wealth.

23. **While the fiscal deficit is projected at 5.5 percent of GDP in FY2012/13, the medium-term fiscal policy framework aims at reducing it gradually to around 4.5 percent of GDP by FY2013/14 and stabilizing the country’s rising public debt to its FY2012/13 level.** Driven by projected economic growth and policy and administrative reforms, real domestic revenues should increase by approximately 16 percent in FY2012/13, and they are expected to sustain a higher level in coming years as a result of lower tax exemptions and simplified tax procedures. While the level of tax exemptions rose in the past fiscal year, the Government is currently preparing amendments to the Value-Added Tax (VAT) Act, which is expected to be submitted to the Parliament by the end of June 2013. This VAT reform is anticipated to reduce the level of exemptions substantially in coming years. On the expenditure side, the Government is committed to keeping the level of recurrent expenditures under control—notably by maintaining the government wage expenditures almost constant in real value—while development spending is expected to increase in line with the strategic objective of promoting infrastructure (transport and energy). The level of total expenditures in FY2012/13 will increase by 1.3 percent of GDP, while revenue is projected to grow by 1.2 percent of GDP. The ratio of recurrent spending to recurrent income is expected to remain below 95 percent.

Table 2: Key Economic Projections: FY2011/12-FY2015/16
(in percent otherwise indicated)

Indicator	FY2012/13	FY2013/14	FY2014/15	FY2015/16	FY2016/17
<i>Output and prices</i>					
Real GDP growth	6.7	7.0	7.1	7.1	7.0
Annual inflation (CPI, period average)	11.4	8.5	7.4	7.0	6.5
<i>Balance of payment</i>					
Current account balance to GDP (including current transfers)	-16.2	-14.1	-12.4	-11.2	-8.7
<i>Fiscal development (percent to GDP)</i>					
Domestic revenue	18.8	18.8	18.9	19.1	19.3
Expenditure	28.1	26.5	25.9	25.5	25.3
Overall balance (before grants)	-9.3	-7.7	-5.2	-4.5	-6.0
Overall balance (after grants; cash basis)	-5.5	-4.5	-4.0	-3.5	-3.0
Domestic borrowing	-1.7	-0.1	1.0	1.0	1.0
Total public debt	42.4	44.6	45.3	45.2	44.0

Source: Staff projections using macroeconomic model for Tanzania (Macmod) and IMF data.

24. **The overall fiscal stance still needs to be carefully monitored in light of the planned scaling up of public investments, partly through the use of non-concessional borrowing, as recently evidenced by the new gas pipeline project incorporated in the 2012/13 budget at US\$1.2 billion.** While concessional borrowing and grants will remain the main sources of financing for development spending, the Government is expected to use nontraditional sources, such as non-concessional external borrowing and Public Private Partnerships (PPPs). This requires a close monitoring of public debt and public debt services and of public investment. Debt-service payments are already projected to increase from less than 1 percent of GDP in FY2008/9 to almost 2 percent of GDP in FY2012/13, reducing the fiscal space. The Government needs also to strengthen its capacity to manage public investment, including planning, implementation, and controls of projects. A specific attention to debt and public investment management should be given to the transport and energy sectors, which represent the bulk of existing and future investment projects.

25. **The current state of the public pension system in Tanzania is a potential risk to the fiscal stability.** The current pension system spends more than it receives from contributions and the magnitude of contingent liabilities for the Government could be in the range of US\$9 billion to US\$14 billion. In the absence of reforms, there may be a risk to the financial stability of the system. The Government plans to adopt a new policy to regain sustainability the viability of the system. The IMF and the Bank are currently reassessing the magnitude of the problem.

26. **Monetary policy will remain prudent, with a flexible exchange rate regime maintained.** The BoT has targets on net international reserve (NIR) and reserve money under the PSI program and engages in sterilization of foreign exchange flows and domestic absorption of liquidity through issuance of domestic paper. Stability of the exchange rate in 2012 after large depreciations in 2011 may have helped mitigate inflationary pressure, and the BoT will take additional actions if the inflation rate remains above the target level. The BoT is also scaling up its inflation forecasting capacity and gradually moving to using interest rates as a key monetary policy tool. The exchange rate will remain market-determined, and the accumulation of international reserves will benefit in the coming months from new disbursements of donor funding and other credits. With continued GDP growth and FDI inflows, equilibrium real exchange rate is expected to appreciate in the medium term. Competitiveness concerns from appreciation requires further efforts to improve the business environment and remove infrastructure bottlenecks so as to secure robust productivity growth in the economy.

27. **A cautious approach to fiscal and debt policies is needed in light of continuing turbulence in the global economic context as well as domestic factors.** As Tanzania becomes increasingly integrated into the global economy, it becomes more sensitive to exogenous shocks from global downturns or increases in food and fuel prices, which will compound the challenge of sustaining high economic growth. While the local economy is relatively isolated from those shocks, second-round effects might be more difficult to manage in case of lasting and widespread recession not only in members of the Organization of Economic Cooperation and Development (OECD) but also in emerging economies. In parallel with the PSI program, which started in 2007, the IMF Executive Board approved on July 6, 2012, a precautionary 18-month arrangement under the Standby Credit Facility (SCF), which is designed to provide Tanzania a financial cushion to withstand deterioration in external demand and access to global market financing. As the country is not facing any immediate balance of payment needs, the program will form part of an overall strategy to stave off any adverse effects that Tanzania could face as a result of the uncertainties in the global economy. Tanzania continues to face potential weather-related shocks such as droughts. Fiscal risks from the unstable energy sector could be substantial and need to be better managed.

28. **Tanzania's current risk of debt distress remains low, but close monitoring is warranted.** The latest World Bank/IMF Debt Sustainability Analysis⁶ (DSA) (July 2012) shows that Tanzania's risk of debt distress remains low even when taking into account government borrowing from both domestic and external sources, including on non-concessional terms. However, the DSA raises some concern in case of persistently large primary deficits funded by non-concessionary borrowing. This risk highlights that a sound debt management strategy, a

⁶ The DSA covers only the debt by central government and does not include parastatals and local government authorities.

conservative approach to non-concessional borrowing, and commitment to fiscal discipline are important factors for keeping debt and fiscal sustainability under control. Alternative downside scenarios in the DSA also illustrate that debt indicators would be sensitive to significantly lower long-term growth, or low productivity of public investment. This highlights the importance of a sound debt management strategy and rigorous evaluation of the quality and feasibility of infrastructure projects to ensure healthy rates of return on investments. Looking forward, the prospect of significant fiscal revenues from gas might push the Government to borrow excessively from international markets. The Government is moving towards promotion of fiscal transparency by consolidating the presentation of the public sector's financial accounts, including those of the local governments and parastatal agencies.

29. While there are some risks to the short-term outlook associated with the volatile external environment and financial distress in the energy sector, the macroeconomic policy stance in Tanzania remains solid and provides an adequate basis for a DPO.

C. POVERTY, ACCESS TO ELECTRICITY, AND SOCIOECONOMIC DEVELOPMENTS

30. As observed previously, poverty continues to be a challenge in Tanzania. The 2007 Household Budget Survey (HBS) estimated that approximately one-third of the Tanzanian population lives in poverty. The result has been the quasi-absence of correlation between the rapid and sustainable GDP growth rate and poverty alleviation over the past decade, which remains at about the same level as in 2001.⁷ This low elasticity is explained by the lagging impact of improvements in the human capital stock on income generation opportunities and by the concentration of economic growth in capital intensive sectors such as mining, communication, and banking. In other words, GDP growth had not yet translated into many direct jobs, especially in rural areas, where 80 percent of poor households were observed to be located in the 2007 HBS. The new HBS, which will be completed in 2013, will provide latest estimates related to those issues.

31. Access to electricity remains a major concern for the majority of Tanzanians. Businesses require a steady supply of energy to produce goods and services. Electricity allows school children to study after sunset and hospitals need it to save lives. Insufficient or irregular energy supply is associated with significant economic cost for businesses and households. Lack of access to modern energy also creates a myriad of negative health and environmental impacts, such as indoor pollution from cooking on traditional open-fire stoves and deforestation due to unsustainable use of charcoal. Unfortunately, affordable access to cleaner modern energy sources remains an elusive dream for most Tanzanians, especially those living outside of urban centers and the poor:

- Only 18.6 percent of the Tanzanian population had access to electricity in 2010, which was better than Malawi and Uganda (nine percent) but below Kenya and Zambia (over 20 percent) and far from developing countries of East Asia (more than 90 percent coverage) and South Asia (62 percent).⁸

⁷ The quasi-absence of movement in poverty rates has been corroborated by the 2009 and 2010 National Panel Surveys results. The findings of the next HBS are expected in mid-2013.

⁸ Source: National Panel Survey, 2010/11.

- Rural areas are virtually disconnected from the national electrical grid: Only three percent of people living in rural villages use electricity, while 95 percent use firewood for cooking.
- Access to electricity (public grid) is almost zero for the two poorest quintiles of households even in urban areas.
- Annual electric power consumption stands at less than 90 kWh per capita, just enough to power one 60-W light bulb per person for four hours every day.

32. **Over the past decade, Tanzania has increased access to electricity at a rate of less than 1 percentage point per year.** When managers of firms are asked directly about the most serious problems they face in conducting business, electricity comes out as their number one concern, in particular SMEs. Almost 75 percent of Tanzanian enterprises consider routine load shedding and power outages as the most serious constraint to doing business, while another 15 percent mention it as a significant problem.

33. **Tanzania's rank in the United Nations Development Program Human Development Index has improved since 1995, but its progress toward the Millennium Development Goals (MDGs) has been uneven.** The country is expected to reach only three out of seven MDGs by 2015. Tanzania is on track to meet the MDGs related to combating HIV/AIDS and reducing infant and under-five mortality, but it lags in primary school completion, maternal health, poverty eradication, malnutrition, and environmental sustainability.

34. **While Tanzania's legal, institutional, and policy framework promotes gender equality and empowerment of women with some exceptions, sociocultural barriers still hinder women's full participation in policy making, the economy, and social development.** Gender parity is almost achieved in primary education enrollment, but there is still a persistent gender gap in secondary education. While about 41 percent of girls move to the secondary level, only 3 percent of them complete the cycle. Further challenges exist with respect to reproductive health, as only 51 percent of births are delivered by health professionals, keeping high the birth-related risks women face. One-third of 15 to 49 years old have been subjected to violence at home. Further, women are often not knowledgeable about their rights concerning domestic violence. Women play a key role in the labor force. Eighty-one percent of men and 79 percent of women participate, and women constitute a slight majority of the work force at 51 percent, according to the National Panel Survey (NPS) 2010/11, through gender disparities exist in the quality of their participation. Only 6 percent of women are engaged in formal employment versus 15 percent of men. Inequalities also endure in land tenure and property ownership, mainly due to inheritance practices.

III. THE GOVERNMENT'S PROGRAM

A. THE MACROECONOMIC AND DEVELOPMENT PROGRAM

35. **Tanzania has a medium-term national growth and poverty reduction strategy (PRS), MKUKUTA II, covering the period from 2010/11 to 2014/15.**⁹ It is a medium-term mechanism to achieve the goals of Tanzania's Development Vision 2025 (TDV 2025) and the MDGs. TDV 2025 aspires that, by year 2025, the country will become a middle income country that is characterized by high-quality livelihoods; peace, stability, and unity; good governance; a well-educated and learning society; and a strong and competitive economy. MKUKUTA II is organized into the following three clusters: (i) growth and reduction of income poverty; (ii) improvement of quality of life and social well-being; and (iii) good governance and accountability.¹⁰

36. **As a planning tool to operationalize TDV 2025 as well as MKUKUTA II, Five Year Development Plan (FYDP) I (2011/12–2015/16) presents the Government's high-level policy priorities.** FYDP I complements MKUKUTA II by prioritizing key interventions in an orderly sequence so that they complement each other to enable more efficient and effective resource utilization. The overarching goal of FYDP I is to unleash the country's growth potential in order to fast-track the provision of the basic conditions for a broad-based and pro-poor growth. FYDP I is the first in the series of three five-year plans under the recently launched Long-Term Perspective Plan (LTPP) 2011/12-2025/26 "The Roadmap to a Middle Income Country." Under the umbrella of LTPP, three strategic FYDPs are expected to be developed: the First FYDP (2011/12-2015/16) "Unleashing the Growth Potential," which is currently being implemented, to be followed by the Second FYDP (2016/17-2020/21) "Nurturing an Industrial Economy" and the Third FYDP (2021/22-2025/26) "Realizing Competitiveness-Led Export Growth."

37. **Scaling up investments in energy infrastructure and leveraging the country's natural gas reserves are centrally featured in FYDP I.** The Government's emphasis on infrastructure to support industries leads to the following five core groups of interventions in FYDP I: (i) hard infrastructure (energy, port, railways, roads, airports, and air-transport) and soft infrastructure (mainly information and communication technologies, ICT); (ii) agriculture; (iii) industries (manufacturing, mining); (iv) water and sanitation; and (v) human capital development. Listing it as one of the strategic interventions in the medium term, the plan emphasizes the need to secure reliable, affordable, and adequate energy supply. The Plan lays out a medium-term master plan of public investments, which include investments in infrastructure for additional power supply capacity and natural gas production. The Plan also recognizes a range of benefits the economy could receive by tapping into natural gas, including manufacturing development (fertilizer); skill development opportunities and revenue mobilization.

⁹ Concurrently, the Revolutionary Government of Zanzibar finalized the Zanzibar Strategy for Growth and Reduction of Poverty (Kiswahili acronym MKUZA II), covering the same period.

¹⁰ More details on national strategies can be found in the PRSC-9 Program Document.

B. THE GAS AND POWER PROGRAM

38. **Background.** Tanzania is endowed with diverse energy resources, including hydropower, natural gas, biomass, coal, geothermal, and solar and wind power, much of which remain untapped. There are no oil discoveries in the country up to date and liquid fuel is imported and used mainly in the transport and power generation sectors. Access to modern energy is gradually expanding and has reached about 18 percent of the population, while biomass-based fuels account for a significant share of energy consumption, with all the attendant economic, health, and climate-impact issues associated with such heavy reliance on this source of energy.

39. **In the power sector, Tanzania has 1,438 MW of installed generation capacity, of which about 562MW (or 39 percent) is in hydropower plants and the rest in thermal plants, a mix of gas turbines and diesel engines, owned by TANESCO and IPPs and operated on natural gas and liquid fuels.** The use of natural gas for power generation is currently limited to 76 million standard cubic feet per day (mmscfd)¹¹ due to gas processing and transmission constraints.

40. **In the gas sector, there are two producing fields, at Songo Songo and Mnazi Bay.**¹² The proven reserves in the Songo Songo field are 880 billion standard cubic feet (Bcf), proven plus probable reserves are 1047 billion Bcf, while the proven, probable and possible reserves are estimated at 1.50 trillion cubic feet (Tcf). The proven reserves in the Mnazi Bay field are 332 Bcf, proven and probable reserves stand at 962 Bcf, while the proven, probable and possible reserves are estimated at 1.50 Tcf. The Songo Songo project was developed as PPP between Tanzania Petroleum Development Corporation (TPDC) and private stakeholders. The Pan African Tanzania (PAT) is operator of the production license on behalf of Songas. Songas operates the pipelines to Dar es Salaam and a power plant. The Mnazi Bay field is operated by Maurel & Prom. The Mnazi Bay field is not yet connected by pipeline to the main market around Dar es Salaam and only serves a small local market.

41. **The Government has issued a number of licenses for gas exploration and development involving private sector developers (including some major international oil companies), who are particularly active in the deep offshore areas of the country.** The gas discoveries made by Ophir/BG and Statoil since 2010 have brought the total estimated recoverable resources in the offshore of Tanzania to in excess of 27 Tcf.

42. **The Government Program.** The Government has undertaken substantial reforms in the power sector over the last decade. In 2003, the National Energy Policy was adopted, which established affordable and reliable energy supplies in the whole country as a key objective and stressed the importance of increasing rural energy access through grid and off-grid extension. A Rural Energy Act was adopted in 2005, leading to the creation of the Rural Energy Agency (REA) and the related Rural Energy Fund (REF). Subsequently, the Government also developed a Power Sector Reform Strategy (2007) in cooperation and consultation with DPs. This Strategy presented a vision for the power industry in Tanzania over the medium to long-term, envisaging the evolution from the current market structure, with TANESCO as a single buyer procuring

¹¹ This quantity of gas can generate about 2400-2700 GWh of electricity annually with the existing fleet of TANESCO's power plants

¹² For more details on near shore and off shore natural gas reserves, see Annex 6.

electricity from IPPs through competition for long-term Power Purchase Agreements (PPAs), to a more liberalized and more competitive wholesale market structure in which the producers would be able to sell directly (or through a pool or voluntary electricity exchange) to the distribution companies over the medium to long-term. An independent EWURA in charge of technical and economic regulation of the electricity, petroleum, water sectors became operational in 2006.

43. **The new strategy was followed by the adoption of a comprehensive Electricity Act in 2008, which takes into account many of the international best practices for electricity sector reforms, tailored to the specific realities of the Tanzanian environment.** The Act also established a general framework for the powers of the Minister of Energy and Minerals, including the new mandates and requirements to prepare and publish a policy for the reorganization of the electricity market and to develop a rural electrification plan and database. The Electricity Act led to strengthening of the governance of TANESCO, reforming its top management structure and creating a Board of Directors with public and private sector stakeholder representations. Board members are appointed by the Minister of Energy and Minerals, apart from the Chairman who is appointed by the President of the United Republic of Tanzania. In terms of internal governance, TANESCO has a performance management process for all officers and employees and has been developing a Performance Development Program for its regional centers. TANESCO had also made progress on its 2007-2010 Financial Recovery Program (FRP), which was endorsed in 2007 to help the utility to reduce its financial losses with an ultimate objective to make it efficient and financially sound. TANESCO's financial net losses decreased from about US\$48 million in 2007 to US\$30 million in 2010.

44. **Most recently, the Government prepared and ratified a National PPP Law in 2010.** This law makes reference to sector level PPP Nodes, including in the national electricity sector. Accordingly, the Ministry of Energy and Minerals (MEM) and TANESCO have created PPP Nodes. In addition, as part of the overall sector expansion strategy, there have been attempts to pursue enhanced private sector participation especially on the generation side. The key parameters for such enhanced involvement have been established with a regulatory framework which is up to international standards.

45. **Despite the reform efforts, further progress is needed in optimizing the primary energy mix, power generation technologies, fuel supply options, and the institutional arrangements for investment planning, procurement and contracts management with a view to stabilize the cost of electricity supply and to mitigate the risks of major shocks to the power system, such as droughts or oil price increases.** The most recent power supply crisis occurred in 2011, caused by a drought and intensive use of hydropower stations in late 2010. At the peak of the crisis in mid-2011 Tanzania experienced up to 18 hours of load shedding per day in certain parts of the country. In response, TANESCO entered into high-cost short-term contracts on an emergency basis with privately-owned EPPs, totaling 317MW. The resulting significant increase in the average unit cost of sales cost (from US\$0.10 per kWh in 2010 to US\$0.20 per kWh in 2012) has led to a sizable financial gap in the sector and arrears to the IPPs, EPPs, and fuel suppliers, in the amount of US\$276 million as of end-December 2012,

threatening increased curtailment of power generation. A 40.29 percent increase in the average electricity tariff in January 2012 has helped limit but not eliminate the gap.¹³

46. **The Government has been working on an action plan that aims to resolve the current crisis and achieve sustainable development of Tanzania's energy sector.** The program, which is the backbone of the program supported by the DPO series, is focused particularly on ensuring that the electricity sector and the upstream, midstream and downstream gas sector, are developed in a manner that serves Tanzania's overall economic and social development objectives and are operated in an efficient, transparent and financially sustainable way with adequate governance and financial arrangements. This will require policy measures across a spectrum of areas in the power sector itself, ranging from improved governance of the sector, including corporate governance of TANESCO to a reduction of commercial and technical losses; improved efficiency in investments, especially in generation, whether through public or private investments; improved technology and primary energy mix of the power plants fleet; development of the fuel sector (including natural gas and coal); improved investment planning and implementation of investment projects; and improved financial management, operational planning, and operational control of the power system.

47. **The balanced and sustainable development of the power system will also require a judicious mix of technologies, such as renewables (hydropower, solar, geothermal, biomass, and wind), and conventional technologies, as well as development of electricity transmission and distribution.** The Government considers the development of the gas sector to be particularly important at this stage, as one of the most economically efficient power generation technologies. Tanzania already has sizable near-shore gas fields in operation where production can be increased in a relatively short period of time and at relatively low cost, provided that an adequate investment framework is in place to incentivize investments in gas production. In addition, additional infrastructure investments in gathering and processing facilities and gas pipelines need to be put in place to bring the additional gas to the market. The recent large offshore gas discoveries will require even larger investments for their optimal development and marketing.

48. **With regards to the formulation of the appropriate framework for the optimal use of natural gas reserves, the Government has started to prepare key strategic documents that will set the stage for future decision-making and policies.** The results of recent explorations have shown that the country's offshore gas reserves are significant and can be developed for exports but combined with a domestic supply obligation, so as to use them for enhanced and shared economic growth. A draft Natural Gas Policy has been prepared, which has gone through a broad-based participatory consultative process, as the starting policy document on how to convert the captured rent of natural gas into investments with high social returns for sustainable development. Once the discussions are finalized and the Natural Gas Policy document adopted, the Government will prepare and implement a Natural Gas Utilization Master Plan and pursue further development of the legal and regulatory framework for the hydrocarbon sector, aligned with the Natural Gas Policy with the goal of creating a conducive investment environment.

¹³ See Annex 4 for more details.

49. **The Government has been collaborating closely with DPs, through the Tanzania Energy Development Partner Group (EDPG) co-chaired by the World Bank.**¹⁴ Such collaboration has focused on the production of strategies, such as the Power System Master Plan Update (December 2012). The energy sector is also embedded in the general budget support framework, as annual key policy actions and outcome indicators have been jointly designed over the past few years. Lastly, close collaboration was achieved on the gas agenda through a multi-partners task force (including seven development partners) that helped to identify key challenges and opportunities and how these can be addressed in a timely manner. This plan has been an input to the Government’s strategy and the subsequent design of this proposed operation (see Annex 5 for details).

IV. BANK SUPPORT TO THE GOVERNMENT’S STRATEGY

A. LINK TO CAS AND OTHER BANK OPERATIONS

50. **The proposed operation is well aligned with the current CAS for FY12-15 and the Bank’s Africa Strategy.** As part of its second objective to build infrastructure and deliver services to the economy, the CAS adopts the broad aim of better meeting the demand for reliable and cost efficient energy and specifically notes the Bank's support to facilitate the restructuring of the power sector.¹⁵ Enhanced power supply also contributes to a better business environment and competitiveness of the economy, which are key objectives of the CAS as well as of the first pillar of the Regional Strategy. Improving access to reliable and affordable electricity is also a key factor in reducing household’s vulnerability and improving their living conditions, which is the second pillar of the Regional Strategy. Lastly, the transparent and efficient management of the energy sector will reduce pressure on the budget and thus provide fiscal space for additional spending on other priorities such as education and health as well as infrastructure.

51. **The proposed DPO series will be the primary vehicle used by the World Bank to promote policy dialogue in the Tanzanian power and gas sector.** The proposed operation will complement: (i) the current and future investment projects that promote access (Energy Development and Access Expansion Project, US\$157.9 million) and the development of the Transmission Backbone Project (US\$150 million in FY11) as well as the use of renewable energy resources (partial risk guarantees under preparation for Ruhudji 358MW HPP and Singida Wind 100MW IPP Projects) through private sector participation; (ii) the Energy Sector Capacity Building Project (ESCBP, US\$21.4 million, see Box 1); (iii) non-lending analytical

¹⁴ The EDPG has significantly harmonized its activities and the membership of this group has now increased from 7 active donors in 2009 (World Bank, AFDB, MCC (US), JICA, Norway, Korea EDCF and Sida (Sweden)), to 13 active donors. Recent members include Finland, AFD (France), KfW/GIZ (Germany) as well as UNDP and EU. Potential new donors considering entry into the sector include CIDA (Canada), DfID (UK) and the Netherlands.

¹⁵ “Increased access, quality, and sustainability of electricity” is one of the CAS outcomes (Outcome 2.1). The CAS recognizes that major constraints in the energy sector are: (i) unreliable power among top constraints for doing business in Tanzania; (ii) low power generation capacity; (iii) limited use of renewable energy potential; (iv) high connection charges; (v) low access to electricity, particularly in rural areas; (vi) weak planning, monitoring, and reporting, despite institutional framework; and (vii) and limited participation of the private sector. In addition, through its support to the Government’s Natural Gas Policy, this DPO series will also contribute to the CAS outcome of “enhanced sustainability and improved management of natural resources” (Outcome 1.3).

work and technical assistance on the multi-sector gas agenda; (iv) a potential policy-based guarantee operation to increase the capacity of TANESCO to borrow commercially at attractive terms; and (iv) current and future general budget support (the PRSC series, which aims at improving effectiveness and transparency in public finance areas including revenue mobilization, public investment management including PPP, public financial management including debt management and strengthening of internal control).

Box 1: Energy Sector Capacity Building Project (ESCBP)

Background/Scope: Recent discoveries of massive natural reserves (currently estimated between 33 and 38 Tcf and continuing exploration activities) require a further strengthening of Tanzania's strategic, legal and institutional framework around the gas sector. The ESCBP project will assist the government to strengthen its capacity to develop (i) its natural gas sector and (ii) PPPs for the power generation sector. The project scope has been closely aligned with the Power and Gas Sector DPO to maximize the World Bank's assistance program to the energy sector in Tanzania.

The proposed project has four components, each with multiple sub-components, which are briefly summarized below:

Component A focuses on the Government's priority of implementing a comprehensive, clear and workable policy and regulatory framework to maximize value arising from natural gas development (financial, social, and environmental) in Tanzania. The proposed component supports the following specific activities: (1) update of the Petroleum Policy and Strategy to maximize value arising from natural gas development (financial, social, and environmental); and (2) the development of a legal and regulatory framework for the Gas sector to reflect the Government's policies and strategies for the sector and attracts foreign and local investments to the sector.

Component B aims at strengthening the capacity of the major institutions ((MEM, EWURA, TPDC, the National Environmental Management Council (NEMC), the Occupational Safety and Health Authority (OSHA) and the Extractive Industries Transparency Initiative (EITI)) that deal with the oil and gas sector as well as the power generation sector to allow them to execute their mandates in a way that is conducive to investments and ensures that all safeguards and safety standards are met to international standards. The proposed support is grouped into four sub-components: (1) Strengthening Sector Coordination and Governance; (2) Enhancing Organizational Capacity; (3) Environmental and Social Management; and (4) Health and Safety Management. The support includes preparation of a Strategic Environmental and Social Impact Assessment (SESIA) that will provide guidance to NEMC, the Vice-President's Office (VPO), and MEM on systematically integrating environmental and socio-economic concerns in project development, operations and maintenance of future oil and gas sector activities.

Component C focuses on enhancing technical skills in the sector through support to the Vocational Education Training Authority (VETA). Activities being financed include (1) support to VETA to develop and implement an Educational Development Plan; (2) the purchase of equipment, tools and consumables necessary for executing the Educational Development Plan; and (3) administrative and logistics support for the Training Center including coordination and supervision missions from a Training Advisor until the end of the project, as well as additional training of new instructors.

Component D will increase the capacity of the Government and its institutions to attract and develop power generation projects with private sector sponsors/financing. The proposed support under this component of the project is grouped into two sub-components: (1) MEM PPP Node Support; (2) TANESCO PPP Node Support.

B. COLLABORATION WITH THE IMF AND OTHER DEVELOPMENT PARTNERS

52. **The collaboration between DPs and the World Bank has been at the center of the aid delivery framework in Tanzania over the past decade.** The energy sector has been a priority area and so has benefited from intense monitoring by DPs using a collaborative approach. A specific group (the EDPG) of partners, co-chaired by the World Bank, leads the

sectoral policy dialogue with the authorities, harmonizes views amongst donors, and prioritizes technical and financial assistance. The sector-level coordinated dialogue with other DPs contributes to the multi-donor harmonized framework of budget support, or general budget support (GBS) in Tanzania. The Performance Action Framework (PAF), which identifies a number of key actions and results to be achieved by the Government, has been used to promote policy dialogue as part of GBS.

53. **Many DPs are either planning to be or are already actively involved in the energy sector.** The most important are the United States (Millennium Challenge Corporation), the European Union (EU), the African Development Bank, Finland, Norway, Japan, and Sweden. So far the emphasis given by donors has been on transmission rather than generation capacities. Other partners, such as Germany and UK, propose to be associated in renewable energy. With respect to the gas/oil agenda, Norway, Netherlands, EU, Brazil, and China have been providing capacity building support in the design of the legal framework, while the IMF has recently conducted a mission on fiscal regimes and production sharing agreements to be used in this sector. Canada is a co-sponsor of the forthcoming World Bank technical assistance operation in the energy sector. On the policy front, the African Development Bank as well as DfID (UK) may join the World Bank in the proposed DPO series in the next fiscal year.

54. **The proposed DPO is being developed in close collaboration with the IMF.** The IMF currently has the second three-year PSI program in Tanzania since June 2010; and its fifth review was successfully completed on January 9, 2013 (Annex 7). The deterioration of the financial situation in the energy sector has been a key concern of the PSI program over the past year due to its potential implication on the budget. As a result, the World Bank and IMF teams have been collaborating closely in pursuing a dialogue with the authorities on the financial gap in TANESCO and the set of actions required to restore the sector's sustainability in both the short and longer terms. There has been intense collaboration between the two institutions in preparing this operation, including the IMF's participation in the preparation missions of this operation and the Bank providing technical inputs to the IMF's PSI review. The World Bank and IMF teams have also been part of the scoping mission on gas and have worked together in developing the action plan that should help the Government to address forthcoming challenges.

C. ANALYTICAL UNDERPINNINGS

55. **A number of analytical studies have helped shape the proposed operation.** Those can be classified into three broad categories (see Table 3 for a summary). The first one captures the studies that have been conducted with the objective of analyzing specific issues in the energy sector. The Power System Master Plan (2009, 2012) provides detailed analysis on the demand for energy as well as the review of existing and future investment plans. The Government, in close collaboration with partners, has also recently produced a draft diagnostic study on the amount and the nature of subsidies currently used in the energy sector (December 2012). EWURA has engaged a consultant to carry out a Cost of Service Study (COSS), which was completed in late October 2012, as a background study for determination of a 3-year tariff methodology for TANESCO (2013-2015). The World Bank financed a recent financial assessment of TANESCO (June 2012) and has subsequently carried out further analysis as identification and preparation work for this operation. The recent scoping gas mission, co-led by

the World Bank, also provided analytical insights on the main challenges that the gas sector is expected to face in the years to come.

56. **The second category of studies seeks to inform on the challenge of good governance and efficient public sector management, including in public enterprises.** The Bank has been leading the PER process over the past decade, which is viewed as the main channel to provide technical advice on fiscal policy and management. The energy sector is covered in the Rapid Budgetary Analysis that is presented every year at the Annual GBS Review. Public investment management was one of the topics included in the 2010 PER and is now one of the focus areas selected by the PER Champion Group. The public financial management (PFM) agenda has been supported by a number of studies, notably the Public Expenditure and Financial Accountability (PEFA) exercise, as presented in the Public Financial Management Performance Report published in 2010. The Controller and Auditor General (CAG) publishes the audit report for public authorities and other bodies (PABs), which include TANESCO, on annual basis. Both 2010 PEFA report and the Bank's 2009 Public Expenditure and Financial Accountability Review (PEFAR) discussed the key findings from the CAG reports, in particular the weakness in the internal control system including internal audit departments within PABs. The latest CAG report on PABs (March 2012) provides recommendations on wide-ranging issues on corporate governance of public enterprises including inefficiency in boards' performance and weak compliance with the Government directives to cooperate with the Treasury Registrar. The report recommends that the Government should wholly own some strategic public enterprises including TANESCO to closely monitor and regulate the performance of the managements of such enterprises for sustainability and constant delivery of services. The new PEFA report is expected to be produced in 2013, providing updated diagnostics on the PFM system in the country, including PABs. The preparation and the dissemination of the two EITI payments reconciliation reports (for FY2008/09 and FY2009/10) have also contributed to the transparency agenda in the extractive sector, based on which Tanzania was declared EITI-compliant by the EITI Board in December 2012.

Table 3: A Summary of Main Analytical Work

Products	Key findings
Energy Specific Issues	
Power System Master Plan (2009, 2012) Diagnostic Study on subsidies in the energy sector (2012) TANESCO Financial Assessment (2012) Tariff Methodology Assessment (2012) Multi-donor Gas scoping Report (2012)	The energy sector has been suffering from serious underinvestment in power generation, inadequate mitigation of hydrological risks, sub-optimal fuel mix in generation plants with excessive reliance on liquid fossil fuels, weak procurement capacity and practices, and serious deficiencies in sector management, policies, and public reporting. Current revenues in the electricity sector remain significantly below the supply cost.
Governance and Financial Management Issues	
PEFA (2009) PEFAR (2009) PER (2010) EITI Annual Reports (2011, 2012) Annual Rapid Budgetary Analysis (every year) Multi-donor Gas scoping Report (2012)	While significant progress has been achieved in fiscal management over time, the fiscal challenges in the energy sector remains large, justifying the effort to enhance further transparency in the performance of TANESCO and to strengthen procurement practices.
Impact of Energy on Poverty and Growth	
Poverty Assessment (2008) National Panel Survey (2010, 2011)	The low access to electricity at costs which are commercially sustainable has a significant negative impact

Investment Climate Assessment (2009) Light Manufacturing Study (2012) Country Economic Memorandum (forthcoming) Multi-donor Gas Scoping Report (2012)	on households' living conditions and contribute to the slow expansion of existing firms and new investments by potential investors
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57. **The third category of analytical work consists of studies that have examined the impact of energy availability on households' living conditions and on the competitiveness of firms.** The 2008 Poverty Assessment, using the 2007 HBS, provided the access rates to electricity for households depending on their income and location (urban/rural). This diagnostic was completed by the more recent Panel Household Survey in 2009 and 2010 (the results are reported in section VI). Concurrently, the Bank has carried out a number of studies, notably by using the enterprise survey, to assess the impact of electricity access and costs on private sector development. Using 2006 enterprise survey data, the Investment Climate Assessment prepared in 2009 reported that the poor electricity supply was unarguably the most binding constraint as perceived by enterprises with about 90 percent of respondents identifying it as a constraint to their business. The new World Bank Enterprise Survey conducted in 2012, is expected to make more updated data available in 2013. The recent study on light manufacturing (November 2012) also emphasized the importance of this constraint on the development of a competitive local industrial sector. Background studies to the forthcoming Country Economic Memorandum are investigating how the variations in the access to energy have contributed to the allocation of firms by sectors and locations over time. Altogether, these findings will contribute input to the national reform program for enhancing private sector development.

D. LESSONS LEARNED

58. **The design of the proposed DPO series has incorporated lessons from: (i) previous operations in the energy sector in Tanzania; (ii) previous and ongoing budget support operations in Tanzania and elsewhere; and (iii) previous and existing DPOs in the energy sector that have been implemented in other countries.**

59. **The first lesson is that budget support operations in the energy sector have rarely been fully successful in securing the Government's long-term commitment to reforms.** A recent review by Operational Policy and Country Service (OPCS) indicates that most of these operations were prepared at times of severe financial crisis in the energy sector, creating a tension between the immediate requirement to close the financial gap and the need to implement sustainable reforms over time. It appears the momentum for reforms vanished, or at least diminished, once the sector was no longer in financial distress, as evidenced in the mid-2000 in Tanzania or in Senegal over the past decade.¹⁶ One reason is that efficiency-enhancing reforms are not easy to implement. They require significant political commitment to address vested interest, modify the status quo, and promote behavioral change within the sector and in the existing enterprises. To manage this risk, the recommendation is to provide financial assistance

¹⁶ During the period between the two past power crises (2005 and 2011), the previous series of PRSC in Tanzania supported the implementation of TANESCO's financial recovery plan (PRSC-6, PRSC-7) and submission of a revised tariff application to EWURA to fully recover its operational cost (PRSC-8). However, even before sufficient reform momentum could be built to tackle the issue of operational cost recovery the new power crisis hit the country.

through a series of programmatic rather than one-time operations, so that the Bank's support can be adjusted according to progress achieved over time.

60. **The second lesson, which is linked to the first one, is that there is a need to secure Government's commitment at the highest level to reform at the initial stage of the series.** This can be done by front loading the set of reforms that would be relatively difficult to reverse in the future. One additional channel is to secure the participation of a wide range of stakeholders, including from outside the Government, so that the accountability of policymakers for implementing reforms is sustained by external pressure. This can be achieved by encouraging demand-side governance initiatives (participative consultation processes, dissemination of performance targets, external and independent evaluation) and by promoting transparent and competitive procurement and contract management.

61. **The third lesson is that good governance and transparency should be the foundation of the policy reform agenda.** The energy sector attracts the attention of governance activists primarily on account of the volume of public resources associated with it, the involvement of large multi-national corporations in resource use and the potential for diversion or misappropriation of the public revenue from this sector. Initiatives such as EITI and 'Publish What You Pay' are illustrations of international efforts to build commitment across stakeholders to safeguard the revenues from natural resource use. The development of systems based on transparency; efficiency and access to information for stakeholders, a fair and forward looking regulatory system for the electricity sector; investment planning and procurement of the power and gas infrastructure and the management of gas revenues should be the backbone of any reform agenda and must underlay options for the efficient management of the power utility.

62. **The fourth lesson is that the Bank's support should aim at facilitating reform developed from within Tanzania rather than imposing reforms from above.** Many reforms fail to be implemented not because they are inappropriate but because they are not adapted to the context. For example, in 2002 the Government entered into a management contract for TANESCO with a foreign contractor (NetGroup of South Africa), which was a genuine attempt to improve TANESCO's technical and financial capacities and operational performance. However, the contract was not renewed after 2006. Clearly, a full ownership of this initiative and commitment to its objectives were lacking. Reforms need to be designed taking into account the context, the prevailing political economy factors and the stakeholders to ensure that a sufficient number of stakeholders are visibly benefited by the reform so as sustain the reform process.

V. THE PROPOSED OPERATION

A. OPERATION DESCRIPTION

63. **The proposed DPO series aims at supporting the Government in its effort to increase access to reliable and affordable electricity.** This is expected to be achieved by: (i) strengthening the country's ability to bridge the financial gap in its power sector; (ii) reducing the cost of power supply and promoting private sector participation in the power sector; and (iii) strengthening the policy and institutional framework for the management of the country's natural gas resources. Progress in these three areas is fundamental to addressing the current financial

crisis in the electricity sector together with restructuring the primary energy mix away from expensive liquid fuels and towards the efficient use of natural gas.

64. **The program has been designed as a series of three operations, each supporting the framework incrementally.** Such a sequential approach is justified on four counts. Firstly, it allows for managing the different time horizons associated with key reforms. Secondly, the incremental approach provides space and time to design the reforms as well as to discuss them in a participatory manner, which is vital for their successful implementation. Thirdly, it takes into account the limited financial capacity of the Government to implement a multitude of key reforms simultaneously. Lastly, it offers the opportunity for dynamic fine tuning of the reform agenda as well as options for hedging the risk of reversal of reforms. This is an important consideration in this highly sensitive sector, subject to multiple economic factors and exogenous shocks such as climatic catastrophes and variations in the international fuel prices.

65. **In designing this program, several options for the lending instrument were considered.** The option of providing support through the current PRSC series was rejected because the sector specific nature of the dialogue in the energy sector does not fit with the more macro cross-sectoral nature of the PRSCs.¹⁷ Another choice was between continuing the approach of investment lending backed by an AAA program to promote reform. The main reason for using a DPO is because the reform and restructuring process are now at the point where Tanzania will incur significant costs but these are not related to easily identified investments suitable for support through either a Specific Investment Loan or an Adaptable Program Loan series.

66. **In addition to IDA lending, the Government is, as part of this DPO program, exploring the option of using the World Bank's Policy Based Guarantee (PBG) instrument, as a future operation to complement or be an integral part of the DPO series, to support the reform program in the energy sector.** Financing from commercial sources, but on reasonable terms (i.e., repayment periods that are sufficiently long to enable the sector to recover from its current situation, and with pricing that is sustainable) can help close the financial gap in TANESCO. Using IDA in the form of a PBG¹⁸ would enable IDA to enhance the creditworthiness of public sector borrowing and therefore attract commercial financing on more attractive terms. It would also maximize the impact of Tanzania's IDA envelope.¹⁹

¹⁷ The previous PRSC series in fact supported the implementation of TANESCO's financial recovery plan (PRSC-6, PRSC-7) and submission of a revised tariff application to EWURA to fully recover its operational cost (PRSC-8). However, being a part of broad-based multi-thematic agenda covered by the PRSC operations, there was a limitation to the extent the operations could address complex sectoral issues related to TANESCO and the energy sector.

¹⁸ Currently, PBGs are only available for IBRD countries. OPCS, in consultation with CFP/SDN and other corporate and regional units is developing a revised policy package which will introduce the PBGs in IDA countries. Initial market soundings have confirmed that the market would be attracted by such an instrument and would be willing to offer lower cost and longer tenor financing if covered by a World Bank partial guarantee. On the basis of further market sounding work, the government will decide to what extent it wishes to avail itself of the PBG as part of a future operation in this DPO series in order to efficiently close the financing gap.

¹⁹ It should be noted that only 25 percent of guarantee exposure would be counted against the country exposure limit - such leverage for IDA guarantees was approved in 2004. Therefore, for example, for an IDA PBG operation of US\$100 million, only US\$25 million would be counted against the IDA country limit.

67. **The DPO-1 will cover all three key strategic pillars mentioned above but with an emphasis on the first two.** The current financial distress faced by TANESCO requires immediate attention because it puts at risk both electricity supply and fiscal sustainability. Close and urgent attention has to be given to investment plans and governance arrangements in the energy sector. The last pillar (on natural gas) will also need to be addressed as a number of initiatives have to be started at an early stage to support the implementation of power and gas infrastructure in the next few years. Setting the stage for the optimal use of natural gas reserves also needs to be supported by the first operation, notably by encouraging the adoption of the legal and institutional framework for the development of the gas sector that will ensure a multi-sectoral and participative approach. The second and third operation will broaden the agenda and increasingly give more attention to the third pillar.

68. **The list of prior action identified for the first operation and triggers under the second and third operations are summarized in Table 4.** The complete policy matrix for the series, including outcome indicators, can be found in Annex 2.

Table 4: Prior Actions and Status and Indicative Triggers for DPO- II and III

Prior Actions under DPO I	Triggers for DPO-II	Triggers for DPO-III
I: Strengthen the country's ability to bridge the financial gap in its power sector		
<p>1. TANESCO has increased its collection of revenues by 30% between CY2011 and CY2012, through tariff increase and improved collections of bills.</p> <p>2. To improve the financial conditions of TANESCO in FY 2013, (a) EWURA, reviewed the current electricity tariffs; (b) the Government has identified the amount of subsidies to be transferred from the Government budget to TANESCO based on, among others, the above-mentioned tariff review; and (c) the Government has paid Tsh 67 billion by June 2012 to clear its arrears to TANESCO for electricity consumed by governmental entities.</p>	<p>1. TANESCO to increase revenues through a combination of better bills collection, reduction in losses, and, if necessary, requesting EWURA to adjust tariffs.</p> <p>2. To improve fiscal transparency the Government has provisioned in the FY2014 budget contingency funds that can be used to address the financing gap in TANESCO.</p> <p>3. In FY2014, Government shall use a combination of tariff increases, commercial borrowing, and government subsidies to cover the financing gap in TANESCO. Government subsidies shall not exceed 2.5 percent of total expenditures (excluding consolidated funds services, wages, and development foreign).</p>	<p>1. National subsidy policy submitted to Parliament by November 2014.</p> <p>2. TANESCO to take steps to improve efficiency (better bills collection, reduction in losses, and, if necessary, requesting EWURA to adjust tariffs) to reduce/eliminate financial gap.</p> <p>3. In FY2015, Government shall use a combination of tariff increases, commercial borrowing, and government subsidies to cover the financing gap in TANESCO. Government subsidies shall not exceed 2.0 percent of total expenditures (excluding consolidated funds services, wages, and development foreign).</p>
II: To reduce the cost of power supply and to promote private sector participation in the power sector		
<p>3. The Government has adopted, through a letter signed by the Minister or the Permanent Secretary of the MEM, a policy aiming to reduce the cost of power supply, improve the operational efficiency of</p>	<p>4. Government, and TANESCO as appropriate, have adopted concrete measures (including training, hiring transaction advisors if necessary, and completing necessary studies) to improve its technical and commercial</p>	<p>4. Government has initiated a process of competitive bidding for IPPs/PPPs in the power sector, as evidenced by the launching of one bid on competitive basis for a natural gas power fired plant in</p>

Prior Actions under DPO I	Triggers for DPO-II	Triggers for DPO-III
<p>the power sector, and promote the participation of the private sector in power generation through a competitive and transparent process that respects the national laws and the best practice of international environmental and social standards.</p> <p>4. TANESCO and MEM have signed a performance contract which includes measurable key performance indicators for TANESCO to enhance its efficiency in CY 2013.</p> <p>5. TANESCO has published (on its website and in print): (i) periodic performance reports prepared by TANESCO against the key performance indicators set out in the above-mentioned performance contract between TANESCO and MEM; (ii) its latest annual audit report issued by NAO; (iii) its latest annual performance report issued by PPRA.</p>	<p>capacity to develop PPP projects in the energy sector through transparent and competitive process, as well as to evaluate unsolicited proposals (where they have merits), including subjecting them to a competitive process.</p> <p>5. Government has completed an Energy Sector Review whose objective is to recommend structural reforms aimed at improving power sector performance (including efficiency and accountability), to comply with the Electricity Act (2008, including part viii), and has approved its recommendations.</p>	<p>line with acceptable international standards, including environmental and social standards.</p> <p>5. Government has implemented the reforms recommended by the Energy Sector Review.</p>
<p>III: Strengthen the policy and institutional framework for the management of the country's natural gas resources</p>		
<p>6. The Government has completed a nation-wide public consultation process for adopting its Natural Gas Policy.</p> <p>7. The Government has adopted measures, including, clearing arrears with gas developers by paying them US\$106.9 million by December 2012, and verifying the amount of natural gas reserves in the United Republic of Tanzania's territory, which will enable higher production of natural gas and its use in power generation after CY2014.</p>	<p>6. Government approves the Natural Gas Policy.</p> <p>7. Government establishes a top-level institutional mechanism to enhance inter-sectoral cooperation on the gas policy agenda.</p> <p>8. Gas Act to be submitted to Parliament after participative public consultations, including (i) transparent and participative regulatory practices; and (ii) access to information and participative monitoring by stakeholders.</p> <p>9. TPDC publishes (on its website and in print) its internal periodic performance reports, latest Audit Annual Report of the NAO and latest Annual Performance Report of the PPRA.</p>	<p>6. Government implements Natural Gas Policy, Gas Act, and Natural Gas Utilization Master Plan in line with good international practices.</p> <p>7. Government prepares Regulatory Act to establish an independent regulator for the gas upstream, midstream, and downstream subsectors.</p>

69. Good Practice Principles for Conditionality as applied in this operation are summarized in Box 2.

Box 2: Good Practice Principles for Conditionality

Principle 1 — Reinforce ownership. As the country's PRS, MKUKUTA II was developed through extensive national consultations, and is a broadly shared platform for government action. Tanzania has been at the forefront of aid coordination through strong alignment of the budget support instrument to the implementation of PRS since the previous PRS. The country's harmonized GBS framework is a dialogue process that consists of multiple forums, at the sector cluster and macro levels, headed by the Government. The focuses of this DPO series are also drawn from the recently launched FYDP I as an operational tool to prioritize policy interventions, complementing broad-based MKUKUTA II. FYDP is a tool to implement Tanzania Development Vision 2025, a longer term development strategy based on extensive national consultation in 1997, and is the basis of MKUKUTA II. Despite its nature as an operational tool, FYDP I had gone through Parliamentary consultation and was discussed at the National Policy Dialogue in which was various stakeholders, including civil society organizations, participated.

Principle 2 — Agree in advance with the Government and other financial partners on a coordinated accountability framework. Donor harmonization and alignment with government priorities is well advanced in Tanzania. The Government and some DPs have subscribed to the GBS Partnership Framework Memorandum, which sets the rules for the joint process underlying budget support operations. Under the Partnership Framework Memorandum the Government and DPs organize budget support around a joint annual implementation plan for the MKUKUTA, summarized in a common PAF. The energy sector is part of the PAF and this operation and the series have been designed based on a series of upstream consultations with the Government to ensure alignment with the Government's priorities and ownership of the agenda, which then fed into the preparation of the PAF in the context of GBS. The dialogue was also carried out through the Energy group, co-chaired by the World Bank, and comprised of seven development partners involved in the energy sector.

Principle 3 — Customize the accountability framework and modalities of Bank support to country circumstances. Policies supported by the DPO represent actions included as key policy interventions in FYDP I and actions included in the PAF that the Government believes will lead to the desired MKUKUTA outcomes. The policy reforms supported by the proposed operation are also closely aligned with the recent Power Master Plan update and the draft Natural Gas Policy currently under consultations throughout the country.

Principle 4 — Choose only actions critical to achieving results as conditions for disbursement. The DPO triggers represent actions and outputs the Government considered critical to the success of its reforms. Several of the DPO prior actions are based on satisfactory completion of undertakings agreed to in existing GBS PAF review and IMF program, thus avoiding new and overlapping review structures and indicators. The total number of proposed prior actions for DPO-1 is seven. There will be nine triggers for DPO-2 and six outcome indicators have been selected. Prior actions and triggers have been carefully selected from upstream dialogue with the authorities.

Principle 5 — Conduct transparent progress reviews conducive to predictable and performance-based financial support. The GBS annual review is a public event held in October or November each year and chaired by the Government. There is an established preparation process, and the PFM envisages that within six weeks of the annual review's conclusion DPs will make financial commitments under GBS, based on their evaluation of the outcomes of the annual review.

B. DESCRIPTION OF POLICY AREAS

70. **Tanzania potentially has access to a variety of energy resources: water, wind, solar, geo-thermal, and gas, but its power sector is currently in severe financial distress.** The objective of the proposed operation is to assist the Government in its effort to ensure the financial sustainability of the energy sector by using the country's different sources of energy, notably gas, through the adoption and implementation of cost-effective investment plans as well as greater transparency in decision-making and in performance monitoring of the sector over time.

71. **Despite significant reforms, particularly in the regulatory arrangements since 2006, low access to electricity for citizens and continuing demand-supply imbalance have been persistent problems.** Whilst tariff reforms have made significant headway since 2008 (the average tariff doubled over the period 2008-2012) TANESCO continues to be in loss. The positive trend, however is that the pipeline capacity to transport natural gas is being enhanced thereby enabling additional power supply, at lower costs, through the construction of new gas-based generation power plants. This would provide a hedge against hydrological uncertainties which since 2011 have shifted the primary energy mix unfavorably away from cheap hydro power and towards high cost liquid fuel based generation to make up the energy shortfall. The immediate priority is to bridge the financing gap faced by TANESCO as a result of the steep increase in the cost of supply. Financial stability is expected to enable TANESCO to clear its arrears to suppliers and initiate productive investments to reduce system losses and improve revenue collection. Financial projections (presented in Annex 4) indicate that the financial gap will narrow in 2015-16 if the liquid fuel emergency power is substituted by gas based generation. The financial imbalance is a product of the hydrology crisis and the increased use of fuel-based power supply, which is expected to be mitigated in the next three years. In the medium-term, the power sector is expected to become financially sustainable as its production costs comes closer to the existing electricity tariffs at around US\$0.12 per kWh.²⁰

72. **Improving the financial situation of the electricity sub sector while simultaneously supporting policy and institutional reforms for sustainable future investments are consequently appropriate components (or pillars) to be supported by the proposed series of three DPOs.** In parallel, the foundational policy and legislation related initiatives of the Government in the natural gas sector are so important for Tanzania's future prospects that this pillar is also gradually introduced in the proposed series of operations. The proposed assistance program is designed around three key pillars that are described below.

Pillar 1: Strengthening the country's ability to bridge the financial gap in its power sector

73. **Background/Issues:** In 2011, Tanzania suffered severe power shortages when droughts in late 2010 undercut hydropower capacity. In response, the Government implemented an EPP, procuring temporary power generating capacity from the private sector. With expensive liquid-fuel generated thermal energy substituting for reduced (and inexpensive) hydropower, the financial situation of TANESCO deteriorated. Accordingly, EWURA approved an increase in electricity tariffs of 40.29 percent in January 2012. The Government also provided TSh 100 billion to TANESCO to clear its arrears towards suppliers and IPPs in FY2010/11 and in early FY2012/13. However, these measures were not enough to close the financial gap of TANESCO that reported outstanding arrears in the amount of US\$276 million (1.1 percent of GDP) at end-December 2012 (see Annex 4). The financing needs of TANESCO are estimated in the range of US\$ 440 million during FY2012/13.

²⁰ The speed and the level of convergence between production costs and existing tariffs is largely influenced by hydrology conditions, the implementation of the new investment program and its cost (see sensitivity analysis presented in Annex 4), the cost of the new quantities of natural gas (assumed in this analysis to be US\$5 per mmbtu for the base case), the cost of liquid fuels (driven by international market for petroleum products), the level of electricity demand, and the improvement in the efficiency of the power sector.

74. **Expected Results of DPO Program.** The Government is putting together a financing plan to address the financing gap, with the DPO series expected to play a key role. At the end of the DPO series, the financial sustainability of the power sector should be considerably improved and the policy on subsidies approved. Concretely, TANESCO will have improved its internal efficiency to reduce its system losses, collect revenues and broaden its customer base. Consistent and sustained measures to generate cost-savings in operations, higher revenue collection by TANESCO, and prudent but proactive financial strategy are also expected to enhance the financial viability of TANESCO.

75. **Progress and prior actions toward DPO-I.** The Government projections forecast the accumulated deficit of TANESCO, without government subsidies, to be at around US\$1 billion between 2012 and 2014 (base case scenario in Table 5). This figure is based on the assumptions that (i) electricity tariffs will remain at their 2012 level; and (ii) hydrology conditions would be equivalent to the ones observed in 2011 and 2012. The magnitude of the deficit is quite sensitive to these assumptions since a 10 percent increase in average tariff would reduce TANESCO losses by approximately US\$60 million per year, while better rains (at the level observed over the past 10 years) would cut the accumulated TANESCO deficit by US\$180 million between 2013 and 2014 (upside scenario). Starting in early 2015, TANESCO financial losses are projected to be reduced significantly when the new gas-powered plants and the gas pipeline will become gradually operational. As a result, it is expected that the power generation cost would go down significantly, closer to existing electricity tariffs. However, any major delays in investment plans would contribute to maintaining a large deficit in TANESCO in 2015 and 2016 (downside scenario).

Table 5: Projected Financial Gap in TANESCO (per CY, US\$ Million)

	2013	2014	2015	2016
Base scenario (poor hydrology, constant tariff, investment plans on time)	324	341	79	32
Downside scenario (poor hydrology, constant tariff, delayed investment plans)	328	391	326	279
Upside scenario (average hydrology, constant tariff, investment plans on time)	235	250	14	18

Note: details can be found in Annex 4.

76. **As described in the Letter of Development Policy (Annex 1), the Government is committed to closing the temporary financing gap in TANESCO through the implementation of three sets of complementary measures: (i) reducing generation, transmission and distribution costs; (ii) increasing revenues also through efficiency improvement of TANESCO; and (iii) using alternative source of financing.** The first action is the backbone of the second pillar supported by the proposed DPO series and is, therefore, described later in the text. On the two other sets of actions, the Government has started to take decisive measures to close the projected gap in TANESCO.

77. **TANESCO has increased its annual revenue collections by over 30 percent between 2011 and 2012.** This effort accelerated during the course of 2012 since revenues collected per month grew by over 50 percent from January to December 2012. This increase reflects in large part the steep increase in electricity tariffs granted by the regulatory agency (EWURA) in January 2012. TANESCO is also taking other measures to strengthen revenue collections,

including better cash management; enhanced recovery of receivables from customers (including public entities); performance incentives in regional collection centers such as setting clear targets and close monitoring of performance for the staff. The authorities are projecting to continue these efforts, notably with the objective of achieving collection rates of 96 percent and cutting system losses from their current level of 20 percent by one percent annually. They will also explore the possibility of renegotiating some of the short-term emergency contracts signed with private operators that will expire in 2013 and 2014.

78. EWURA commissioned a comprehensive review of electricity tariffs as a background study for its 3-year tariff setting (2013-2015), following an application from TANESCO for a tariff review. An external consultant was retained to conduct a COSS for TANESCO and design a multi-year tariff structure. The public consultations were held in December 2012. In January 2013, TANESCO withdrew its application for tariff review. Subsequently, EWURA issued a tariff order that maintains electricity tariffs at the same level as previously determined in January 2012.

79. In parallel to revenue-enhancing measures, TANESCO made an effort to finance the financial deficit in part through commercial borrowing guaranteed by the Government. Such action has led to a bridge loan from a syndicate of three commercial banks for an amount of US\$ 65 million. Further loans, part of which would re-finance the bridge financing, are currently being worked on. Looking ahead, and as mentioned above, the Bank will consider, if approved, backing some of the necessary commercial borrowing through a PBG.

80. Further, the Government has committed to closing the residual financial deficit in the sector through budget subsidies during the transition period. The authorities have engaged to do so within the limit of the macroeconomic and fiscal framework agreed upon with the IMF. Both debt and public expenditures levels are expected to remain within the limits defined under the IMF's PSI. Concretely for FY2012/13, as described in Annex 1, the TANESCO deficit is projected to be US\$438 million (the Government reports a deficit of US\$ 276 million at the end of 2012 and Table 8 projects the second half of FY2012/13 being US\$162 million). The authorities have planned to finance this deficit through a combination of US\$65 million in commercial bridge financing for TANESCO (which is guaranteed by the Government), further commercial borrowing to follow and US\$300 million in government subsidies. To accommodate this level of subsidies in the budget, they will reallocate the existing public expenditures in the magnitude of US\$200 million, while some fiscal space should be granted by additional concessional borrowing by the Government (US\$100 million). Budgetary reallocations of US\$200 million, estimated around 0.6 percent of GDP or less than 2 percent of total public expenditures, have been conducted with the aim to limit their possible negative implications on pro-poor spending by focusing on three areas: (i) reallocations of existing expenditures within MEM; (ii) cuts to non-wage recurrent expenditures across Ministries (including allowances); and (iii) use of emergency contingency funds.

81. In following the strategy to partially finance TANESCO's financial gap by transferring government subsidies, the Government expects to: (i) closely monitor TANESCO performance; (ii) reduce the costs associated with short-term borrowing by this company; and (iii) limit the negative effects that would have been associated with two large successive increases in electricity tariff on economic activity and poverty. The Ministry of

Finance has been monitoring the evolution of TANESCO performance, which is dependent – inter alia -- on external factors such as fuel prices and hydrology conditions. For this reason, subsidies have been released to TANESCO on a quarterly rather than annual basis.²¹ The terms of these subsidies (conditionality and monitoring measures), are not yet defined, and the terms will take into account the fact that TANESCO will be not financially sound before 3-4 years. Finally, the authorities opted in early 2013 to maintain electricity tariffs at their January 2012 level. Their main reason has been to limit the negative impact associated with a new increase on households and local firms. To illustrate, a tariff increase equivalent to 50 percent (leading to an increase in revenues of about US\$300 million), on top of the 40 percent implemented a year ago, would have been necessary to close TANESCO's financial gap in FY2012/13 (after accounting for TANESCO commercial borrowing of US\$100 million). Two large successive increases in about 12 months would have unambiguously affected many households, arguably the upper quintiles, but also large and small firms with concomitant negative effects on employment and the retail price of basic goods such as cement that would have in turn impacted on the purchasing power of poor households (more details in Section 6 and Annex 3).

82. **In 2013/14 and 2014/15, the Government is expected to follow the same strategy, which is to close TANESCO financial gap by a combination of revenue-enhancing measures (which includes possible tariff adjustments), commercial borrowing, and government subsidies.** It is worth underscoring that a close monitoring of TANESCO's situation is warranted as it may affect the mix of instruments to be used by the Government to close the financial gap in the power sector. For example, an unexpected increase in the financial gap due to poor hydrology conditions may force the authorities to modify their strategy as the burden would become excessive on the budget. As explained below, an agreed trigger under DPO-II is to cap the level of subsidies to reduce eventual pressures on the budget. If necessary, the Government will consider tariff increases in the future.

83. The following prior actions have been met under DPO-I:

- TANESCO has increased its collection of revenues by 30percent between CY2011 and CY2012, (through tariff increase and improved collections of bills).
- To improve the financial conditions of TANESCO in FY2013, (a) EWURA, reviewed the current electricity tariffs; (b) the Government has identified the amount of subsidies to be transferred from the Government budget to TANESCO based on, among others, the above-mentioned tariff review; and (c) the Government has paid TSh 67 billion by June 2012 to clear its arrears to TANESCO for electricity consumed by governmental entities.²²

84. **Possible triggers under DPO-II and DPO-III.** The Government will continue to prioritize TANESCO's financial viability as its prime objective, notably by properly managing the balance between commercial borrowing and government subsidies (partly funded by donors). The use of guarantees, including from the Bank, could help reduce the costs and reduce the

²¹ Another reason for prudence in releasing government subsidies is to increase TANESCO's incentives to strengthen its internal efforts to become more efficient.

²² The "arrears" are defined as electricity bills to budgetary entities outstanding for more than 90 days.

repayment burden of non-concessional borrowing. Further efficiency gains will be achieved by improving demand-side management measures and by reducing technical and commercial losses within TANESCO.

85. **Concurrently, the Government has agreed to consider tariff increases in case of an unexpected increase in TANESCO's financial gap or a sudden surge in the cost of commercial borrowing or budget reallocation.** In that context, the authorities are committed to pursuing tariff review conducted by EWURA, if needed.

86. The following measures have been identified as triggers for DPO-II:

- TANESCO to increase revenues through a combination of better bills collection, reduction in losses, and, if necessary, requesting EWURA to adjust tariffs.
- To improve fiscal transparency the Government has provisioned in the FY2014 budget contingency funds that can be used to address the financing gap in TANESCO.
- In FY2014, Government shall use a combination of tariff increases, commercial borrowing, and government subsidies to cover the financing gap in TANESCO. Government subsidies shall not exceed 2.5 percent of total expenditures (excluding consolidated funds services, wages and development foreign).

87. **Monitoring indicators.** The implementation of the actions supported by the DPO series will be monitored by the use of a series of indicators, including: (i) amount of accumulated arrears to suppliers by TANESCO; and (ii) TANESCO operating deficit.

Pillar 2: Reducing the cost of power supply and promoting private sector participation in the power sector

88. **Background/Issues:** The Government's medium-term objective is to enhance access to electricity and ensure a reliable supply of electricity at efficient cost to customers. To this end, the power sector is actively pursuing options to further diversify electricity generation. To reduce the cost and mitigate hydrology and fuel price risks, the primary (but not exclusive) focus is on increasing use of domestic gas for power generation. This requires construction of new gas-fired power plants; construction of new gas pipelines; and drilling of new gas wells, as well as adequate financing, contractual and commercial arrangements to ensure that these investments happen and that additional quantities of gas become available.

89. **Over the past few years, the Government's efforts to implement power infrastructure have been inhibited by a number of constraints or deficiencies that need to be addressed.** There have been problems in timely implementation of power infrastructure projects due to financing constraints over time. Planning and development of primary energy resources especially gas and coal, have also been inadequate. The investment plans were mostly based on public and donor financing. TANESCO has not been able to source investment financing credit from commercial banks due to a weak balance sheet and significant perceived risk for investors. Additionally, signing agreements with private sector investors on non-competitive terms and delays in procuring concessional funds can explain slowed progress in

developing adequate electricity generation over the past decade and the inability of the system to meet growing demand at reasonable prices. The national utility has recently started borrowing commercially in domestic and external markets with Government guarantees.

90. **The inadequate provision of energy at reasonable cost is also a consequence of sub-optimal fuel mix, especially the use of liquid fuel power generation options which are relatively expensive.** Following natural gas discoveries and installation of natural gas power fired plants, generation cost is expected to decline significantly. Further strengthening of governance and accountability now underway in the sector are also expected to lead to more reasonable costs.

91. **TANESCO's corporate governance is relatively complex and is currently undergoing improvements.** The improvements include aspects such as reporting and information sharing with the general public. TANESCO has published on its website the pre agreed key performance indicators, annual audited accounts, National Audit Office (NAO) and the Public Procurement Regulatory Authority (PPRA) reports. Staff morale may have been affected by successive policy changes that led to several reorganisations and management changes. To address these deficiencies, the Government is considering a review of TANESCO's structure, with a view of improving its governance, internal management, and reporting.

92. ***Expected Results of DPO Program.*** At the end of the DPO series, significant substitution from liquid fuelled plants to natural gas-based generation capacity as well as incremental generation fuelled by natural gas should lead to declines in power supply costs (generation and operational costs) and better service delivery. The structure of the sector should be reviewed with the aim to enhance governance and sector performance. The performance of the energy sector will be strengthened by closer monitoring of sector performance, a possible new organizational structure, improved system-wide efficiency, enhanced access to information for all stakeholders and the adoption of a participative and consultative approach to problem solving and policy formulation.

93. ***Progress and prior actions toward DPO-I.*** The Government is in the process of completing its Power System Master Plan (PSMP) 2012 Update, which includes priority investment projects for electricity generation. Timely implementation of the investment plans under the PSMP is critical to replacing costly liquid fuel based projects with economically efficient natural gas fueled generation.

94. **The Government will also initiate a competitive, transparent process for tendering and construction of a natural gas based IPP/PPP power generation project which will meet the national standards as well as the best practice international environmental and social standards.** Private sector participation is rightly viewed as necessary to complement public funding to meet the country's needs in infrastructure, including in the energy sector, over the years to come. The authorities will strengthen the internal capacity process with the objective to launch an internationally and transparent bid for a new power project, by 2015. An open, transparent, and truly competitive process for selecting developers (for privately-financed projects) or contractors (for TANESCO-owned projects) seems to be slow paced. The new act updates the previous Public Procurement Act 2004 to make the law compatible with emerging contemporary needs in the public sector, such as PPP, e-procurement, and procurement under

emergency situations, while strengthening some public procurement systems, such as regulatory functions of PPRA. However, the Act is yet to become effective as the finalization of the regulations is an effectiveness condition imposed by the Parliament. The authorities anticipate the regulations will be finalized by June 2013.

95. **TANESCO has initiated transmission and distribution investment projects to reduce technical losses** (e.g. Tanzania Energy Development and Access Expansion Project). There is an active electrification program aimed at connecting 250,000 households per year.

96. **With respect to corporate governance, the Government has entered into a new strategy based on the need to increase transparency and accountability in the energy sector.** The first series of initiatives seeks to monitor the performance of TANESCO over time, through a performance contract that includes Key Performance Indicators (KPIs). The performance contract includes measures to improve and periodically assess TANESCO's operational efficiency, management efficiency, robustness of its internal controls system and the responsiveness of its accountability framework. The performance contract also includes financial and technical operational indicators that will be publicly disclosed on a periodical/annual basis. In the same vein of promoting demand-side governance, TANESCO has published (including on its website) its annual financial and operational reports as well as the audits conducted by external oversight entities.

97. **The Government has initiated the review of the institutional structure of the energy sector to address current challenges and improve power sector performance.** The Government is also working on the National Energy policy, 2003 with the aim of improving the energy sector in terms of improving transparency in financing the sector.

98. The following prior actions have been met under DPO-I:

- The Government has adopted, through a letter signed by the Minister or the Permanent Secretary of the MEM, a policy aiming to reduce the cost of power supply, improve the operational efficiency of the power sector, and promote the participation of the private sector in power generation through a competitive and transparent bidding process that respects the national laws and the best practice of international environmental and social standards.
- TANESCO and MEM have signed a performance contract which includes measurable key performance indicators for TANESCO to enhance its efficiency in CY2013.
- TANESCO has published (on its website and in print): (i) periodic performance reports prepared by TANESCO against the key performance indicators set out in the above-mentioned performance contract between TANESCO and MEM; (ii) its latest annual audit report issued by NAO; and (iii) its latest annual performance report issued by PPRA.

99. **Possible triggers under DPO-II and DPO-III.** Consolidating the reforms initiated by the Government will be the main objective of the second and third operations. Proper implementation will require strengthening the Government's planning capacities as well as

enacting detailed guidelines to ensure timely construction of power plants, transmission and distribution lines, to meet electricity demand reliably and efficiently. The Government should also ensure that investment projects, including those with PPP arrangements, are planned in line with FYDP and the annual plans of the MEM. These projects should be based on proper ex-ante economic and financial assessments, and contracted and implemented at least cost, in line with international standards.

100. **Before the end of 2013, the Government anticipates implementing the recommendations derived from the ongoing Energy Sector Review.** These recommendations should help promote the medium-term vision embedded in the Power Sector Program (2007). A review of TANESCO efficiency and internal structure will also be included.

101. **Concurrently, the Government will strengthen its capacity to develop PPPs in the MEM for the power generation sector through capacity building programs.** Looking forward, future power projects will be implemented by inviting competitive investor proposals whenever possible. The exceptions are expected to be rare and limited to particularly risky or complex projects. As a rule, natural gas-based projects are procured most efficiently through a competitive, transparent open bidding process, and will be procured this way.

102. **The close monitoring of TANESCO performance will continue to receive attention through the implementation of the performance contract signed with the MEM.** The public disclosure of periodic performance indicators and annual audit reports should not only help stakeholders to track the evolution of the TANESCO's financial situation but also increase the accountability of its top management and Board over time.

103. The list of DPO-2 triggers includes:

- Government, and TANESCO as appropriate, have adopted concrete measures (including training, hiring transaction advisors if necessary, and necessary studies) to improve its technical and commercial capacity to develop PPP projects in the energy sector through transparent and competitive process, as well as to evaluate unsolicited proposals (where they have merits), including subjecting them to a competitive process.
- Government has completed an Energy Sector Review whose objective is to recommend structural reforms aimed at improving power sector performance (including efficiency and accountability), to comply with the Electricity Act (2008, including part viii), and has approved its recommendations.

104. **Monitoring indicators:** The implementation of the actions supported by the DPO series will be monitored by the use of a series of indicators, including: (i) MW commissioned, (ii) average per unit cost of power sales; (iii) number of bids for gas IPP power plants launched on a competitive basis.

Pillar 3: Strengthening the policy and institutional framework for the management of the country's natural gas resources.

105. **Background/Issues:** Tanzania has seen favorable natural gas exploration results. There appear to be good prospects that commercial quantities of natural gas will be confirmed, potentially resulting in multi-billion dollar FDI in Tanzania's natural gas sector over the next 5 years, and subsequent large export and budget revenue flows around the end of the decade. The natural gas resources are estimated at between 33-38 Tcf. Further work is ongoing to establish the size of the proven reserves (see Annex 6 for natural gas supply-demand scenarios). The challenge is to prepare the country for the gas economy and establish strong foundations to best take advantage of this potential resource wealth.

106. **The Government has already developed a Natural Gas Policy and prepared a timeline for adopting the Natural Gas Policy document, for preparing a Natural Gas Utilization Master Plan and for adopting a Natural Gas Act and other elements of the updated legislative framework for the gas sector.** The draft Natural Gas Policy has been discussed through a participative, public consultation process including major stakeholders in the country such as private companies, donors, and civil society.

107. **The Natural Gas Policy is expected to promote the following principles:** (i) expansion of gas production and supply infrastructure, by balancing the interests of the public and private stakeholders in the sector; (ii) balance supply for the domestic market with gas export opportunities so as to attract the pre-requisite investments for gas field development and optimize the creation of wealth for Tanzania; (iii) continue to promote and support strategic investors in the electricity and gas downstream sector to take advantage of the expanded gas infrastructure; (iv) put in place a framework for accountability and transparency related to investments in and revenues derived from the power and gas sub-sectors; (v) ensure a strong coordination mechanism across government agencies to ensure policy coherence for gas development that drives diversification of the economy; and (vi) develop a local content policy that fosters economic diversification and develops human capital.

108. **With a view to developing a comprehensive strategy for the gas sector, the Government welcomed the opinion of a multi-donor mission on developing a comprehensive policy and legal framework and assessing technical assistance needs** (see Annex 5). The Government is preparing its strategy outlining steps to be taken to prepare the country for a new gas economy. Among other things, this will comprise design of a gas revenue management framework integrated with the budget and possibly underpinned by a sovereign wealth fund; review of Tanzania's fiscal regime (including tax, production-sharing, and other non-tax instruments) to ensure its adequate coverage of the gas sector; and development of staff expertise in the Tanzania Revenue Authority (TRA) on tax issues associated with gas exploitation. The strategy will also identify the nature of any technical assistance needs.

109. **The Government is undertaking actions to strengthen the capacity for developing its natural gas sector** and for developing and implementing PPPs for the power generation sector, including through the ESCBP, co-financed by the World Bank and CIDA.

110. **The Government has now entered into a US\$1.2 billion credit agreement with Exim Bank of China and a construction contract with China Petroleum Technology and Development Corporation (CPTDC) for the construction of a 532-kilometers natural gas pipeline, which will connect both the Songo Songo and the Mnazi Bay gas fields to Dar es Salaam.** The Government is in the process of establishing clear institutional arrangements and firm milestones for active supervision and monitoring to ensure timely construction and commissioning of the pipeline and two associated gas processing facilities (Songo Songo and Mnazi Bay).

111. *Expected Results of DPO Program.* At the end of the DPO series, Tanzania will have established the basic elements of its legal and institutional framework for the proper development of its gas industry, paving the way for future decision-making. A sufficient quantity of near-shore and, at a later stage, offshore gas will be supplied to existing and planned power plants through the pipeline, leading to a significant decline in power production costs in the country.

112. *Progress and prior actions toward DPO-I.* The proposed support is organized through a sequencing approach, with an initial emphasis on the actions necessary to ensure that sufficient gas will be available for the power infrastructure to be built between 2013 and 2016. Concurrently, the first DPO will also support the authorities in their efforts to set up the institutional and legal framework for the proper development of the gas industry. International experience has revealed that early actions are required to manage expectations and address the set of emerging complex issues, ranging from contract negotiating to fiscal management, local development, linkages with national industries, and human capital development.

113. **The proposed operation will support the Government in its effort to define the basic principle of its Natural Gas Policy through a participative process.** It will also help the creation of a multi-sectoral platform, led by a champion and including the relevant ministries and agencies related to the gas agenda. The completed consultative processes adopted for the gas policy as well as the country's recent EITI compliance (December 2012) are encouraging first steps toward improved transparency in the management of natural resources.²³

114. **To promote the development of existing near-shore gas supply, MEM and TPDC will clear the existing arrears with gas suppliers and conclude Gas Sales Agreements (GSAs).** These steps are required to ensure that sufficient gas will be available for use by the existing generation plants (to increase their usage and the cost of generation) and by new generation plants. The GSAs will offer credible payment terms (price and off-take volumes) and payment certainty (including on any existing arrears), as well as the obligations of the producers/suppliers, and will include milestones by which the obligations of each party will be measured.

115. The following prior actions have been met under DPO-I:

- The Government has completed a nation-wide public consultation process for adopting its Natural Gas Policy.

²³ As agreed by the Government, one of the PRSC-11 triggers will be: (i) Domestic legislation institutionalizing EITI and establishing an enabling framework for EITI's operation is drafted and completes stakeholder consultation;

- The Government has adopted measures, including, clearing arrears with gas developers by paying them US\$106.9 million by December 2012, and verifying the amount of natural gas reserves in the United Republic of Tanzania’s territory, which will enable higher production of natural gas and its use in power generation after CY2014.

116. **Possible triggers under DPO-II and III.** The two next proposed operations will continue to support the implementation of the policy gas agenda. The adoption of key legal texts will be encouraged as well as the implementation of strategic measures aimed at promoting transparency along the production chain. TPDC is expected to disclose information.

117. The following measures are considered as triggers for DPO-2:

- Government approves the Natural Gas Policy.
- Government establishes a top-level institutional mechanism to enhance inter-sectoral cooperation on the gas policy agenda.
- Government to submit the Gas Act to Parliament after participative public consultations, including: (i) transparent and participative regulatory practices; and (ii) access to information and participative monitoring by stakeholders.
- TPDC publishes (on its website and in print) its internal periodic performance reports, latest Annual Audit Report of the NAO and latest Annual Performance Report of the PPRA.

118. **The third and final operation of the proposed DPO series is expected to cover a broader range of issues related to the gas agenda.** However, it remains difficult to define a detailed set of actions, and their timetable, when the Government is still at an early stage of designing its strategy. The emphasis on the need to upgrade skills and promote linkages between gas investments and local activities is expected to be at the center of the government program.

119. **Monitoring indicators:** The implementation of the actions supported by the DPO series will be monitored by the use of a series of indicators, including: (i) volume of gas produced; and (ii) amount of on-shore proven natural gas reserves.

VI. OPERATION IMPLEMENTATION

A. POVERTY AND SOCIAL IMPACT

120. **Overall, the proposed operation is expected to contribute to poverty reduction in Tanzania through three complementary channels.** First, the implementation of better governance and efficient investment policies in the energy sector will improve access to energy over time at affordable costs, thereby contributing to improved living conditions and the ease of doing business. Second, by providing budget support, the proposed DPOs will ease the transition path of the power sector to self-standing financial sustainability, releasing the pressure from public expenditures and allowing the Government to sustain social expenditures that impact the poor the most. Third, in the longer term, with implementation of the policy framework under

discussion with the Government, improved governance and strategic use of natural gas, notably offshore reserves, present Tanzania with the unique opportunity to accelerate growth, reach middle-income country status and reduce poverty. These three channels are briefly described below and in greater details in Annex 3.

121. **The first channel is through the implementation of the new investment program, which, together with improved governance, will increase power supply, reliability and access to electricity by firms and households over time.**²⁴ Because electricity is perceived as the most binding constraint by around 80 percent of SMEs operating in Tanzania,²⁵ improved supply of electricity will help promote economic growth. To the extent that most operating firms are small and informal, such development will help to reduce poverty. While removing this constraint is vital for reducing production costs, it has to be accompanied by other measures on the investment climate such as improved skilled labor and transport infrastructure.

122. **Improved access to electricity at competitive costs will increase the welfare of Tanzanian households.** While the quantitative impact is difficult to estimate, the reform program, by boosting the generation capacity and increasing the number of connections, will help increase the current low access rate to electricity, which is only 18 percent (see Table in Annex 3). Higher electricity access has direct benefits on social indicators as it facilitates the provision of education and health. The increase in electricity supply will be aimed at both urban and rural areas. The needs are growing by the day as Dar es Salaam is the ninth fastest growing city in the world. In parallel, the Government, with the support of donors, has launched a rural electrification program to address the lack of access in rural areas.

123. **One of the expected outcomes of the DPO series is the diversification of the sources of power supply, away from hydrology (subject to climatic conditions) and fuel (very costly).** The increasing reliance on natural gas, together with further investment in renewable energy (supported by parallel World Bank's project) will reduce the sector's vulnerability to climatic shocks and variations in fuel prices on the international market (the fuel import bill was equivalent to one-third of total imports in 2011/12). A more stable power system will reduce risks for investors as well as mitigate the negative impact of power outages on households and firms during crisis times.

124. **The second channel, the proposed DPOs will ease the transition to a more sustainable cost structure in the energy sector, releasing the pressure on public expenditures and protecting expenditures on social sectors.** The financial support that the DPOs provides will reduce the transition costs until the new power plans become fully operational and will help better align the average production cost with electricity tariffs. The Government is committed to closing the temporary financial gap in TANESCO through the combination of: (i) higher revenues; (ii) commercial borrowing; and (iii) government subsidies. As detailed in Annex 3, each of these instruments has potentially negative impacts on economic growth and poverty and should therefore be used with caution. For example, the recent tariff increase of 40 percent has increased the cost of living of the population. While one could argue

²⁴ Improving access to electricity requires an increase in power supply but also improvements in transmission and distribution. While the DPO does not directly support measures on these two aspects, those benefit from parallel support from the World Bank and other partners.

²⁵ Source: World Bank's enterprise survey.

that the pain from sharp tariff increase was endured mostly by rich and urban households, higher electricity tariffs also contributed to increasing the cost of production of local firms, notably in highly energy-intensive sectors such as mining, glass, and cement, raising construction costs. This has a direct impact on formal and informal employment and therefore on poor households' budgets. Similarly, heavy reliance on commercial borrowing might further mortgage the future and affect the fiscal stance when payments are due to banks. In the same vein, if the government subsidies are too large, there will be a trade-off within the existing budgetary allocations at the potential expense of pro-poor expenditures. While the Government has been able in the recent past as part of their fiscal consolidation efforts to protect social spending, the risks remain real. The DPO will reduce, though not eliminate, the need for the Government to use these different instruments, thereby mitigating their negative economic and social impact.

125. **The third channel will occur through the sound development of the natural gas sector.** While the first operation of the proposed series does not focus on the actions to be undertaken by the Government to ensure the optimal use of offshore natural gas reserves, the development of the natural gas industry is expected to produce significant economic and social impact in the years to come. In the first few years, massive FDI inflows, in the magnitude of US\$30 billion, will be necessary to finance the necessary infrastructure on the grounds. While a large fraction of those capital inflows will be used to finance imports (and not directly impact the Tanzanian financial system), construction projects will create additional jobs and opportunities for local suppliers in the south of the country where gas reserves are located. Yet, inflationary pressure may emerge such as the price of housing and food that may require targeted actions for vulnerable groups in these local communities.

126. **The Government is currently taking the necessary steps to create a sound institutional environment that would ensure an optimal use of natural gas reserves.** Lessons from international experience indicate that a critical success factor in turning natural resources into prosperity is to effectively use the small window of opportunity that exists between discovery and the revenues to create the institutional settings for success. This includes, coordination across ministries to ensure the natural resource is an integral part of the medium to long term planning process for the country (including focusing on building human capital and creating jobs), managing expectations of the populations, enshrining transparency at all stages of the process, building/strengthening the capacity of various institutions along the value chain of the natural resource to negotiate, select, implement and assess projects, manage revenues, and to supply the skills needed to grow. The recent gas scoping mission, co-led by the World Bank and including six other development partners, has proposed a number of concrete actions in this direction that could be undertaken by the authorities, possibly in close coordination with development partners (see Annex 5 for details). The parallel World Bank capacity-strengthening project should help the authorities to build technical expertise at the various stages of the process.

127. **In the longer term, the transparent management of fiscal revenues derived from gas production as well as the linkages opportunities with the local economy will produce potential significant effects, on economic growth and poverty levels.** The Government will need to manage the macroeconomic impact of the projected increase in exports on the balance of payments as well as on the exchange rate to avoid the Dutch disease syndrome, which reduces the competitiveness of the non-gas sector. Managing properly the fiscal revenues received from

gas producers will also be a priority to optimize their use both in the short and longer terms. This supposes strengthening capacity to manage public debt (so to avoid excessive advance borrowing) and public investment in terms of sectors and geographical allocation. Lastly, the authorities will need to maximize the synergies between the gas operators and the local economy through the development of joint infrastructure projects and backward as well as forward linkages, including through training programs and technology transfers. The magnitude of these effects will greatly depend on the Government's capacity to manage them along with the production and commercialization of gas.

B. ENVIRONMENTAL ASPECTS

128. **The policy actions supported by the first proposed operation are not expected to generate significantly negative environmental impacts overall.** Strengthening the power sector overall will bring positive environmental impacts to the economy in the long term. Improved availability of electricity will alleviate some of the pressure on Tanzanian forest resources by reducing demand for fuel, wood, and charcoal as the primary energy sources. Also, the proposed operation supports the Government's effort to increase the use of natural gas in place of liquid fossil fuels, which would help reduce the country's carbon footprint.²⁶ While natural gas discoveries also pose important environmental management challenges for Tanzania, the Government is focused on ensuring that environmental issues are mainstreamed into all operations in the natural gas industry and that all activities in the industry comply with environmental best practices. These objectives have been set forth in the recent draft Natural Gas Policy, which is currently under discussion throughout the country.

129. **In general, the existing regulatory and institutional framework encourages sound environmental management of investments financed through the Government budget.** Projects financed through the Government budget are required to follow national rules and regulations pertaining to environmental assessment in a participatory process. The Environmental Management Act of 2004 (EMA) and associated regulations require due diligence in managing environmental impacts emanating from government operations and investments, including investments by TANESCO to expand its power generation capacity. The EMA gives mandate to the NEMC, under the VPO, to oversee enforcement, compliance, review and monitoring of, and compliance with, environmental impact assessments; conduct research; facilitate public participation in environmental decision-making; raise environmental awareness; and collect and disseminate environmental information. The EMA also requires each sector to establish an environmental section to ensure that sectoral operations are conducted in accordance with the law's provisions, to coordinate aspects related to the environment, and to ensure that environmental considerations are integrated into sectoral planning and project implementation (such as power generation plants). These environmental units have been created in most sectoral ministries. Five ministries (Agriculture, Health, Infrastructure, Water, and Energy and Minerals) had developed their sector Environmental Action Plans for implementation by October 2011. However, their environmental management capacity could be significantly strengthened,

²⁶ The recent increase in electricity tariff did not impact significantly on the environment because the vast majority of poor households do not have access to electricity. Only those who are at the margin—poor and having to electricity—may opt for additional charcoal consumption. For greater details on substitutability between charcoal and LPG among households, see World Bank 2007 "Environmental Crisis or Sustainable Development Opportunity? Transforming the Charcoal Sector in Tanzania."

particularly regarding the incorporation of environmental considerations in their programming and planning.

130. **Notably, a Strategic Environmental Assessment (SEA) is a legal requirement for any law, regulation, policy, program, or development plan.** The EMA calls for an SEA to be undertaken on all laws, policies, programs or plans to assess the likely effects of those efforts on the natural environment. The Government, with World Bank support, has recently launched preparation of an SEA to support development of the natural gas sector. This SEA is being financed through the World Bank's gas technical assistance project (ESCBP), which has been finalized, and will provide guidance to NEMC, VPO and MEM on systematically integrating environmental and socio-economic concerns in project development, operations and maintenance of oil and gas sector activities. This SEA would represent one of the first examples of an SEA in Tanzania.

131. **Sound environmental management of newly discovered natural resources represents an emerging challenge, and requires significant additional capacity.** The discovery of potentially large natural gas deposits represents an important environmental management challenge for Tanzania. Initial results suggest that natural gas deposits may be found in offshore marine and coastal waters, including areas in and around some of Tanzania's marine protected areas (e.g. Mnazi Bay, Mafia Island Marine Park). These areas include some of Tanzania's most important and productive reefs and mangroves, which support the livelihoods and serve as a significant source of animal protein to coastal communities, support high levels of biodiversity, and are an important draw for tourism. Management of gas exploration and development in these areas will require significant expertise and strong systems to ensure adequate response to spills and leaks, and to compensate for the sector's long-term environmental impacts. Given the novelty of the sector, such expertise must be developed at the local level. To help confront these new challenges, the ESCBP includes a package of capacity-building activities that has been agreed to by NEMC and is expected to help NEMC to provide effective and efficient oversight of the oil and gas sector in accordance with environmental regulations and in line with international best practices; provide guidance to NEMC on systematically integrating environmental and socio-economic concerns in project development, operations and maintenance of oil and gas sector activities; and prepare NEMC staff to execute their responsibilities under the environmental laws and regulations in the oil and gas sector effectively and efficiently. Specifically, the ESCBP will finance, among others, (1) the provision of advisory services and training for NEMC staff on effective oversight of the environmental aspects of the oil and gas sector in line with international standards; (2) the development of procedures, standards and processes related to hazardous waste management and gas venting and flaring; (3) the ongoing development of an Oil Spill Contingency Plan by the Surface and Marine Transport Regulatory Authority; (4) the development of a community-based early warning/response system; (5) workshops to disseminate information on the implementation of the Hazardous Waste Management Plan, the Oil Spill Contingency Plan and the Early Warning/Response system both within NEMC and in communities; and (6) the purchase of measuring equipment for NEMC to allow the organization to make independent measurements and compare them to threshold values and national or international standards to assess environmental impact.

132. **Because of the forthcoming development of near-shore and offshore natural gas fields, Tanzania will have to upgrade its legal and institutional framework to ensure the**

proper environmental safeguards around the development of its gas sector. The magnitude of recent discoveries of natural gas deposits has called for stronger involvement from the Government on managing environmental standards and contingency planning. The Government has fully recognized the need for Government involvement in managing the environmental aspects of the development of the gas sector and has placed environmental protection as one of the Government's objectives in the draft natural gas policy. And the forthcoming ESCBP will not only support capacity-building activities to improve the Government's ability to manage the potential environmental impacts generated from future activities in the oil and gas sector, but will also support the strengthening of the legal and regulatory framework for the gas sector to ensure that relevant legislation reflects the Government's desired natural gas policies and strategies.

C. IMPLEMENTATION, MONITORING, AND EVALUATION

133. **The implementation of the DPO series will be monitored by the World Bank and through the Bank's participation in the preparation and the assessment of the annual PAF.** As part of an overall framework, supervision and preparation of the operations in the series take place in collaboration with other donors and in consistency with the MKUKUTA review mechanism. For most of the program areas, including energy, supervision and dialogue will be carried out on a continuous basis in the context of sector or thematic programs. The GBS review will be conducted annually for an overall assessment of progress made in each of the program areas. The Partnership Framework Memorandum of GBS sets the framework for M&E under GBS. The Government and GBS partners will keep track of their performance relative to jointly agreed indicators, targets, and actions listed in the PAF. The PAF has incorporated some of the prior actions and triggers proposed in the DPO I and II. Monitoring and dialogue processes will follow an annual review process aligned with the Government's planning, budgeting, and MKUKUTA II review cycles. All formal performance assessments will be undertaken jointly by the Government and GBS partners.

D. FIDUCIARY ASPECTS

134. **While Tanzania's PFM system was considered among the best in Africa, there is a sign of weakening in the PFM system in recent years.** The latest PEFA score from the 2009 assessment reflects the gradual deterioration of the PFM systems since 2005.²⁷ The latest PEFA highlighted a set of shortcomings in the current PFM system such as: weak controls for payroll and salary and access to integrated financial management system (IFMS); low compliance with procurement laws and regulations; weak contract management; weak internal audit function for central government; and poor management and record keeping. Tanzania lowered its rating in the area of PFM in 2011 Country Policy and Institutional Assessment (CPIA) by the World Bank.

135. **The Bank and other DPs continue to support the Government's effort to address challenges in the deficiencies in the PFM system through the Public Financial Management Reform Program (PFMRP).** Challenges stressed in PEFA 2009 and more recent diagnostics include macro and fiscal forecasting, predictability of budget execution, harmonization of debt

²⁷ The PEFA score declined mainly due to reduced ratings for the following indicators: PI 1—variance in expenditure composition; PI 3—revenue outturn compared to original approved budget; PI 4—arrears; PI 11—orderliness and participation in the annual budget process; and PI 28—legislative scrutiny of external audit reports.

systems, and timely implementation of audit recommendations. The Government has recently launched the new phase IV of PFMRP (FY2012/13-2016/17). The new strategy, with implementation beginning July 2012, will respond to the areas of weakness identified, through PEFA, CAG, and other reports and reviews.²⁸ The new PEFA exercise is scheduled for 2013, from which more updated assessments on the PFM system in Tanzania will become available.

136. The status of budget publication in the country: The Government budget for the financial year beginning July 1, 2012 (FY2012/13) was presented to the Parliament on June 14, 2012 (before commencement of the new financial year). The budget presented to the Parliament in the form of the budget speech by the Minister of Finance was immediately made available on the MoF website.²⁹ The approved budget books are also available in hard copies and are posted on the ministry's website starting last year.

137. There is continued monitoring of the External Payment Arrears (EPA) account of the Bank of Tanzania. A special audit of the EPA account for FY2005/06 identified serious occurrences of fraud, which affected the integrity of the BoT's control and audit systems and resulted in illicit payments. Since then, the authorities have taken a number of actions to strengthen the fiduciary environment at the BoT.³⁰

138. To strengthen DPs' confidence in the fiduciary management of budget support funds, the Government undertakes an external audit of GBS funding annually. An external review of the mode of operation of the GBS accounts at the BoT (called Poverty Reduction Budget Support or PRBS)—where all funds of GBS partners are disbursed—is carried out on an annual basis. The latest CAG report for FY2011/12, issued in December 2012, provided an unqualified opinion, stating that “the financial statements present fairly, in all material respects, the statement of cash receipts and transfers for the year ended 30th June 2012, in accordance with the International Public Accounting Standards-cash basis of accounting and the Memorandum of Understanding.” This confirmed the integrity of PRBS funds and made recommendations on a number of improvements to the mode of operations, which have resulted in new technical improvements to the related financial operations. In light of the above, the fiduciary risk to Bank funds being disbursed to BoT for onward credit to the exchequer account is considered to be low.

²⁸ Specifically, the strategy will focus on five Key Results Areas: (i) revenue management (tax administration, nontax revenue collection and external resource management and donor coordination); (ii) planning and budgeting (macro-fiscal policy and planning and budget formulation and preparation); (iii) budget execution, transparency, and accountability; (iv) budget control and oversight (internal controls and internal audit, external audit, and parliamentary oversight); and (v) change management and program management (capacity building and training, IFMS and electronic service delivery, PFM institutional and legal framework, program coordination, monitoring, and communication).

²⁹ See http://www.mof.go.tz/index.php?option=com_content&task=view&id=22&Itemid=36.

³⁰ These actions are (i) continuing to implement the recommendations of the special audit, as summarized in the Government's action plan shared with the DPs; (ii) including many of the recommendations of the Voluntary Safeguard Assessment in the upcoming corporate plan of BoT, with ongoing monitoring from the IMF; (iii) starting prosecution against individuals involved in the fraud; and (iv) refocusing the BoT on its core activities and preparing a new memorandum of understanding with MoF. The 2010 GBS review noted that many recommendations from the EPA action plan still remain to be implemented, including: (i) a BoT corporate plan that supports the refocusing of BoT on its core activities; (ii) agreement between MoF and BoT on the management of any remaining EPA claims; and (iii) completion of the ongoing investigations/audits involving BoT.

139. **An updated IMF safeguards assessment of the BoT was finalized in November 2012.** It found a strengthened governance and safeguards framework at the BoT, including its audit committee and establishment of a risk-management function. The assessment noted the importance of continued strong oversight by the BoT's Board over remaining non-core functions and over compliance with statutory limits on credit to government. The audited accounts for 2011/12 were published on the BoT's web site.

E. DISBURSEMENT AND AUDITING

140. **Borrower and credit amount:** The borrower is the United Republic of Tanzania. A single tranche credit of SDR64.9 million (US\$100 million equivalent) would be made available upon credit effectiveness, anticipated for April 2013. The closing date of the operation would be June 30, 2014. The operation is expected to be followed by two subsequent operations of the same series, for disbursements during FY2013/14 and FY2014/15 upon meeting necessary tranche conditions to be agreed for the operation. One or more of future operations may include a Policy Based Guarantee to support improved terms from commercial banks.

141. **Disbursement, reporting, and auditing arrangements:** The proposed credit will follow the Bank's disbursement procedures for development policy loans/credits. The untied finances will be disbursed against satisfactory implementation of the development policy program and not tied to any specific purchases. Once the credit is approved by the Board and becomes effective, and at the request of the Borrower, the proceeds of the credit will be deposited by IDA in an account designated by the Borrower and acceptable to the Bank at the BoT, and forming part of the country's foreign exchanges reserves. The Borrower shall ensure that upon the deposit of the loan into said account, an equivalent amount is credited in the Borrower's budget management system, in a manner acceptable to the Bank. The Borrower will report to the Bank on the amounts deposited in the foreign currency account and credited to the budget management system within 30 days after the disbursement is made. If the proceeds of the credit are used for ineligible purposes as defined in the Financing Agreement, IDA will require the Borrower to, promptly upon notice from IDA, refund an amount equal to the amount of said payment to IDA. Amounts refunded to the Bank upon such request shall be cancelled. The administration of this credit will be the responsibility of the Ministry of Finance.

142. The following arrangements also support the requirements related to fiduciary assurance:

- **Foreign reserve account:** The Government will acknowledge to IDA receipt of the money into the foreign reserve account and the crediting of this amount in local currency to the Tanzanian Government's Consolidated Fund Account. While no external audit will be required, it is expected that the confirmation of receipt will be countersigned by the Accountant General and the CAG. IDA reserves the right to request an audit of the both accounts as provided for in the Financing Agreement.
- **Public (government) accounts:** The CAG is required by law to produce his annual report to the Parliament on the public accounts within nine months of the financial year-end. IDA will have access to those reports.

- **Bank of Tanzania:** The annual entity financial statements of the BoT, audited in accordance with international auditing standards as promulgated by the International Accounting Standard Board, are publicly available.

F. PARTICIPATORY ASPECTS

143. **The reform agenda supported by the DPO series derives from Tanzania’s MKUKUTA II and FYDP I, as well as consultations process in the power and gas sectors.** Tanzania’s national strategies have been traditionally developed through intensive consultative processes with a wide array of stakeholders. Both TDV 2025, which FYDP implements, and MKUKUTA II have been prepared with significant stakeholder consultations. While FYDP is an operational tool and essentially a public investment plan of the Government, it has also involved stakeholder consultations, having been discussed at the Parliament as well as at the National Policy Dialogue, which was participated in by civil society organizations (CSOs). In the energy sector, the Government has also followed wide-ranging consultations on most policy reforms, and many of the policy areas covered by the DPO are underpinned by sector or thematic processes that are open to stakeholders from civil society, non-governmental organizations (NGOs), academic and research institutes, the private sector, and the donor community. The draft natural Gas Policy has gone through a wide-consultation process, including all major stakeholders, and is debated openly in public media. The recent COSS on electricity tariff methodology carried out by EWURA was discussed in various public forums, including the participation of development partners. Finally, the GBS annual review addresses sector-specific issues, including energy, in a participatory format with the private sector and CSOs participating in the discussion together with the Government and DPs.

G. RISKS AND RISK MITIGATION

144. **There are a set of interrelated and compounded risks for successful implementation of the series.** Some of those risks are embedded in the energy sector itself, while others are rooted in the global economic conditions faced by the country. Similarly, some risks are under the control of the authorities but others are determined by exogenous factors. For presentation purposes, those risks, and their associated mitigation strategies, are classified under four categories even though they are connected in numerous ways. Furthermore, if each risk is important individually, it is their combination that would present the major danger to the proper implementation of the DPO series.

145. **Energy sector related risks.** The implementation of the program supported by the proposed DPO series may face several internal risks to the energy sector. Those include: (i) insufficient technical capacity; (ii) the emergence of possible delays in the implementation of gas and power infrastructure (including for additional gas production); (iii) the risk of insufficient near-shore and offshore discovered gas reserves to supply existing and future power plants as well as gas prices variations; (iv) deviations in term of governance, notably in the areas of contract and procurement; and (v) environmental damage because future natural gas activities are likely to be located close to marine protected areas.

146. **Those risks will be mitigated by the implementation of the parallel capacity building project funded by the Bank.** The complementarities between policy reforms and

capacity building are a common feature of successful programs. The expected restructuring of the sector, including of TANESCO, should also help define better priorities and responsibilities. At the outset, the DPO series is giving careful attention (through two prior actions) to the policy and institutional mechanisms to ensure efficient investments in the power and gas sectors. To reduce the risk of insufficient gas supplies, the Government has agreed to conclude GSAs with key operators. On the front of good governance, the combination of (i) improved reporting by TANESCO and TPDC (i.e., publication of KPIs and audit reports); (ii) restructuring of the regulatory framework (i.e., new methodology for electricity tariffs and a new independent regulator for the upstream gas industry) and (iii) competition through PPPs and transparent procurement procedures should lead to better accountability and controls in the sector. The option of using risk mitigation instruments to attract investments in power and gas infrastructure (including for additional gas production) and commercial financing of the existing arrears could help mitigate the risks to the outcomes of the proposed DPO series. Lastly, the Government has fully recognized in its draft natural gas policy the potential environmental issues that can emerge from the exploitation of this natural resource. The parallel World Bank's capacity strengthening assistance project contains a window for helping the authorities to upgrade its environmental legal and regulatory framework.

147. **Hydrology risks.** The Tanzanian power system is highly dependent on hydropower. The current financial and supply crisis in the power sector is partly explained by recent poor rainfalls that have forced the authorities to rely on fuel operated power plants on an emergency basis.

148. **The Government program supported by the DPOs aims at reducing the hydrological risk by diversifying the source of energy toward gas** (biomass, wind, and solar technologies, and better designed hydropower plants). At the end of the DPO series, the share of hydro in the total production of energy would be approximately equal to 30 percent, down from 60 percent in 2005 and 40 percent in 2011. However, this risk will remain during the transition since the new gas power plants will only become operational in 2014 and 2015. Sensitivity analysis showed that TANESCO's annual financial results can vary by approximately US\$100 million in 2013 and 2014 (before the new gas supply becomes operational) depending on the hydro conditions.

149. **Political economy risks.** The energy sector is prone to political economic factors given its impact on people's life and firms, and the magnitude of financial commitments, which may impact some decisions, such as those on tariff increases or gas contracts.

150. **The proposed DPO series has been designed with the objective of limiting the risk of political interference.** First, it aims at achieving major reforms, including the possible tariff adjustments and submission of key legal texts as well as the creation of stronger institutions, in the first and second operations, while the third operation will mostly consolidate those efforts. Second, the series is expected to be achieved at the end of 2014 or before the intensification of the political campaign. Lastly, the emphasis given to greater transparency through the involvement of a variety of stakeholders in decision-making should help enhance accountability and commitment to results.

151. ***Economic/Fiscal risks.*** Although Tanzania's economy has been remarkably stable over the past decade, including during these last few years of financial and fiscal turmoil in the global economy, it remains vulnerable to a number of exogenous and endogenous risks.

- **Among the exogenous risks, the economy remains exposed to variations in prices on international market, notably of food, fuel, and gold.** Approximately one third of exports and imports are constituted by gold and fuel, making the trade balance highly sensitive to any variations in those prices. Food counts for about half of the average consumer basket so that any change in its prices will greatly impact households' welfare and the overall inflation rate (like during the first part of 2012). Similarly, the national economy can be influenced by potential regional instability, in particular in Uganda and Kenya, since those neighboring countries have become more important trading partners for Tanzania over the past few years.
- **On the domestic front, the most important risk arises from fiscal policy.** While the current fiscal framework appears appropriate thanks to prudent management, there are a number of challenges that will need to be addressed in both the short and medium terms.³¹ These challenges include: (i) the management of trade-off between infrastructure spending and social expenditures in education and health as well as social protection; (ii) the proper coverage of public enterprises and agencies in the budget monitoring and reporting; (iii) strengthening debt and public investment management given the increasing share of development expenditures funded by non-concessional borrowing and domestic resources; (iv) the sustainability of the public pension system that will start to lose money by FY2015/16; and (v) the need to address the growing fiscal losses generated by generous tax exemptions from 2 percent of GDP in FY2009/10 to almost 4 percent of GDP in FY2011/12. The Government has recognized those challenges and is ready to address them, partly through the coordination framework supported by the PER process. The proposed operation on the energy sector, with the objective of closing the financial gap in TANESCO and replacing liquid fossil fuels with less expensive domestic natural gas, is also part of this effort as it will contribute to the reduction of the fiscal and quasi-fiscal risks.

152. **More generally, the Government will need to address the relatively poor elasticity between rapid economic growth and poverty alleviation, which is much lower than the one observed in other developing, including neighboring, countries.**³² As a result, the level of poverty has remained quasi-stagnant since 2001, principally in rural areas, with increasing inequalities. This lack of progress is explained by the lag between improvements in the stock of human and infrastructure capital and income-generation opportunities. It is also rooted in the concentration of economic growth in capital-intensive activities such as banking, telecommunication, and mining that failed to translate to the creation of direct jobs (those sectors account for less than 2 percent of total employment in the country). The recent initiatives to

³¹ For fuller details, see Rapid Budgetary Analysis Report, produced by the World Bank in close collaboration with GBS partners in November 2012.

³² For a discussion on this topic, see World Bank, Second Tanzania Economic Update: Spreading the Wings, November 2012.

develop commercial agriculture, regional corridors, and special economic zones are aimed at encouraging productivity gains and employment in both agriculture and manufacturing sectors.

153. **To manage the economic and fiscal risks faced by Tanzania, the proposed DPO series will benefit from three complementary monitoring mechanisms.** First, it will be included in the budget support framework developed by the Government and DPs over the past decade in Tanzania. This framework monitors progress as measured by jointly agreed actions and outcome indicators, including on the energy sector. Second, it will continue to be supported by the IMF's PSI program that has put the resolution of the energy crisis at the center of its agenda given its potential risks on the fiscal stability of the country. Third, the PER process (led by the World Bank) offers the platform to monitor recent fiscal development and inform policymakers as part of the budget cycle.

Annex 1: Letter of Development Policy

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF FINANCE

Telegrams: "TREASURY", Dar es Salaam,
Tel: 2111174/6, Fax 2110326.
Telex: 41329.

(All Official communications should be
addressed to the Permanent Secretary to
the Treasury and NOT to individuals).



P. O. Box 9111,
DAR ES SALAAM,
TANZANIA.

In reply please quote:

CDB. 441/545/01/2

February 15, 2013

Mr. Phillippe Dongier,
Country Director for Tanzania, Uganda and Burundi,
World Bank Country Office,
50 Mirambo Street,
DAR ES SALAAM

**RE: LETTER OF SECTOR DEVELOPMENT POLICY FOR THE PROPOSED
FIRST POWER AND GAS DEVELOPMENT POLICY OPERATION**

On behalf of the Government of the United Republic of Tanzania, I hereby write to request approval of the First Power and Gas Development Policy Operation (DPO I) in the amount USD 100 million. This credit, the first operation of the series of three operations (DPO I, DPO II and DPO III), will assist in the implementation of the Government program in energy sector aimed at making the sector financially sustainable in the near future. More specifically, the credit will complement the Government efforts in closing the financial gap in TANESCO which is estimated at USD 276 million by end December 2012.

BACKGROUND AND RECENT DEVELOPMENTS

A. MACROECONOMIC PERFORMANCE

1. Tanzania's economic growth performance remained buoyant in 2011 despite power rationing that affected manufacturing and trade activities. Real GDP grew slightly above the projected growth level partly due to continued strengthening activities in trade and repairs, transport and communication, agriculture, and manufacturing.

2. Real GDP growth for 2011 was 6.4 percent, slightly above the estimate of 6.0 percent. The recent GDP data shows that real GDP growth was 6.8 percent in the third quarter of 2012, compared to 6.3 percent in the corresponding period in 2011. Growth in the third quarter was particularly strong in electricity (15.3 percent), manufacturing (11.6 percent), financial

intermediation (11.4 percent), transport and communication (10.3 percent), wholesale and retail trade (7.0 percent) and education (6.8 percent).

3. The overall annual inflation rate for 2012 increased to 16.1 percent from 12.7 percent in 2011. However, on monthly basis, inflation showed a downward trend in the year to December 2012, reaching 12.1 percent from 19.8 percent in December 2011, mainly due to availability of food in the eastern zone of Africa, stable supply of electricity and stability in the external value of a Tanzanian shilling.

4. The annual inflation rate which excludes food and energy for the year ended December 2012 increased slightly to 8.9 percent from 8.7 percent in December 2011. On the other hand, annual inflation rate for food decreased to 13.3 percent in the year ended December 2012 as compared to 25.6 percent in December 2011. Similarly, the annual inflation rate for energy decreased to 17.8 percent in December 2012 from 41.0 percent registered in year ended December 2011.

5. The overall growth of total receipts from goods and services exports slowed down to 15.1 percent in the year ending November 2012 compared to 18.5 percent in the year ended November 2011, with most of the slowdown coming from decline in receipts from gold exports. Similarly, the value of imports of goods and services slowed down by 12.3 percent in the year ending November 2012, compared to 31.8 percent recorded in the similar period of preceding year. The slowdown in the growth of imports was mostly noted in consumer goods, machinery and intermediate goods. Although imports increased at a lower rate than exports, the current account deficit widened because the total value of imports exceeds the total value of exports by nearly 70 percent. In the year ending November 2012, the current account deficit increased to USD 3,761.1 million from a current deficit of USD 3,602.2 million in November 2011, equivalent to 4.4 percent of current account worsening.

6. As a result of above developments, **overall balance of payments** recorded a surplus of USD 402.0 million, compared with a deficit of USD 281.1 million recorded in the year ending November 2011, reflecting a net increase in inflows in the form of capital grants, foreign direct investments and foreign borrowing. In line with that, **gross official reserves** increased to USD 3,883.6 million at the end of November 2012, the stock being sufficient to cover about 4 months of import of goods and services.

7. The National Debt Stock which comprises public and private debt as at end June 2012 stood at USD 12,686.8 million compared to USD 11,510.3 million as at end June 2011, equivalent to an increase of 10 percent. Out of which, USD 10,805 million was public debt and USD 1,881.8 million was private debt. External debt was USD 10,101.4 million equivalent to 79.6 percent of total debt stock while domestic debt was USD 2,586.19 million. The increase was mainly on account of new disbursements from concessional and

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non concessional sources and accumulation of interest arrears for some bilateral creditors whose rescheduling agreements have not been concluded.

8. External debt stock as at end June 2012 stood at USD 10,101.4 million compared to USD 8,848.5 million recorded in June 2011 equivalent to 12 percent increase. Out of total external debt stock, public debt was USD 8,219.56 million, equivalent to 81.4 percent and the balance was private debt. On the other hand, Public domestic debt stock as at end June 2012 stood at Tshs 4,076.4 billion (equivalent to USD 2.6 billion) compared to Tshs 3,707.3 billion (equivalent to USD 2.4 billion) recorded in June 2011, indicating an increase of 10 percent. The increase is largely contributed by new borrowing to finance development projects

9. During the year ending June 2012, total debt service amounted to Tshs 516.8 billion (equivalent to USD 327 million) as compared to Tshs 396.3 billion (equivalent to USD 251 million) in June 2011, indicating an increase of 30.4 percent. External debt service was Tshs 171.7 billion (equivalent to USD 108 million), while domestic debt service was Tshs 345.1 billion (equivalent to USD 218 million). Out of external debt service, principal amortization was Tshs 80.5 billion (equivalent USD 51million) and Tshs 91.2 billion (equivalent USD 57 million) was interest payments, being 20 percent and 4 percent higher than budget estimates respectively. This performance was on account of the maturity of the some concessional and non-concessional loans.

10. In implementing the National Debt Strategy, the Government continued to closely monitor its debt by contracting loans mainly through concessional sources. However, considering the current infrastructure challenges especially with respect to energy, roads, railways and ports during 2010/11 the Government started to contract loans from non-concessional sources. In February, 2012 the Government carried out a Debt Sustainability Analysis (DSA) in order to assess the debt status given the inclusion of the new borrowing arrangement and its implication on the debt portfolio. The results from DSA indicate that, the country's debt continued to be sustainable in shorter, medium and long term. However, compared to the 2010 Debt Sustainable Analysis results the debt sustainability indicators portray a worsening trend; suggesting the importance of using non-concessional borrowing strategically and with caution.

B. MACROECONOMIC PROJECTIONS

11. The review of leading indicators of growth such as electricity generation, production and consumption-based tax revenues, importation of industrial raw materials, and exports of manufactured goods, mineral and agricultural commodities have exhibited an increasing trend during the first three quarters of 2012. Given such performance of those leading indicators, coupled with

continued efforts to stabilize power supply and implementation of the FYDP I and other economic policies, the actual GDP performance in the first three quarters of 2012 has remained 6.8 and the overall performance of the economy in 2012 and beyond is expected to remain buoyant. Accordingly, the initial projected growth of GDP in 2012 has been maintained at 6.8 percent with prospects of being surpassed. In the medium-term, growth is expected to pick up further to an average of 8.0 percent supported by prospects of increase in FDI particularly in oil and gas explorations, continued implementation of infrastructure projects, favourable weather conditions, and stability in power supply among others.

C. SECTOR DEVELOPMENTS

• Background

12. The Government of the United Republic of Tanzania has a long history of cooperation with the World Bank in the energy sector, including in operations that are currently under implementation or advanced preparation, such as Energy Development and Access Expansion Project, the Backbone Transmission Investment Project, and Energy Sector Capacity Building Project (ESCBP).

13. The Government of the United Republic of Tanzania sets a high priority on the development of the energy sector in the country. In the current National Growth and Poverty Reduction Strategy, MKUKUTA II, reliable supply of energy is recognized as a critical driver for growth and income poverty reduction with operational targets set for increases in generation of electricity, utilization of capacity and coverage by 2015. Similarly, the first Five Year Development Plan (FYDP I) (2011/12-2015/16) presents the Government's high-level policy priorities on infrastructure, including energy. FYDP I sees that large investments in energy are considered as a critical element for generating growth momentum and has adopted expansion of electricity generation capacity to 2,780 MW by 2015/16 as one of the 10 core investments in the country.

14. Tanzania's current electricity generation mix includes a significant share of hydropower. For the last few years, the country has been experiencing below-average hydrology conditions. In the face of growing demand of about 10 percent annually, in 2011 TANESCO – the country's power utility, had to procure emergency power supply from the private sector to avoid load shedding that would have devastating effects economically. This has resulted into a significant financial gap in TANESCO operations estimated at USD 276 million by end December 2012, as the sudden large increase in the cost of generation could not be fully accommodated in the tariff in such a short period of time due

to adverse social and economic impact that such a price shock would have had.

- **Recent developments**

15. Tanzania is endowed with diverse energy resources, including hydropower, natural gas, biomass, coal, geothermal, and solar and wind power, much of which remains untapped. There are no oil discoveries in the country up to date and liquid fuel is imported and used mainly in the transport and power generation sectors. Access to modern energy is gradually expanding and has reached about 18 percent of the population, while biomass-based fuels account for more than 80 percent of energy consumption, with all the attendant economic, health, and climate-impact issues associated with such heavy reliance on this source of energy.

16. In the power sector, Tanzania has 1,438 MW of installed generation capacity, of which about 562 MW (or 39 percent) is in hydropower plants and the rest in thermal plants, a mix of gas turbines and diesel engines, owned by TANESCO and independent power producers (IPPs) and operated on natural gas and liquid fuels. The use of natural gas for power generation is currently limited up to 78 million standard cubic feet per day (mmscfd) due to gas processing and transportation constraints.

17. In the gas sector, Tanzania is currently estimated to host about 35 trillion standard cubic feet (Tcf) of the natural gas. However, there are two producing gas fields, at Songo Songo and Mnazi Bay. The proven reserves in the Songo Songo field are 880 billion standard cubic feet (Bcf) whilst those of Mnazi Bay are 262 billion standard cubic feet (Bcf). The Songo Songo project was developed as a Joint Venture between Tanzania Petroleum Development Corporation (TPDC) and private companies. The Pan African Energy Ltd. ((PAT), wholly owned subsidiary of Orca Exploration Group Inc.), operates the Songo Songo gas wells and gas processing plant on behalf of Songas Ltd.

18. Songas operates the 25-kilometers 12" offshore pipeline and a 207-kilometers 16" onshore pipeline from Songo Songo Island to Dar es Salaam. The Mnazi Bay field is operated by Maurel et Prom company. The Mnazi Bay field is not yet connected by pipeline to the main market around Dar es Salaam and only serves a small local market. The government has issued a number of licenses for gas exploration and development to private sector developers (including some major international oil companies), who are particularly active in the deep offshore areas of the country. The gas discoveries made by Ophir/BG and Statoil since 2010 have brought the total estimated recoverable resources in the offshore of Tanzania to in excess of 27 Tcf.

19. The Government has undertaken substantial reforms in the power sector over the last decade. In 2003, the National Energy Policy was adopted, which

established affordable and reliable energy supplies in the whole country as a key objective and stressed the importance of increasing rural energy access through grid and off-grid extension. A Rural Energy Act was enacted in 2005, leading to the creation of the Rural Energy Agency (REA) and the related Rural Energy Fund (REF). Subsequently, we have also developed a Power Sector Reform Strategy (2007) in cooperation and consultation with development partners. This Strategy presents a vision for the power industry in Tanzania over the medium- to long-term, envisaging the evolution from the current market structure, with TANESCO as the single buyer procuring electricity from IPPs through competition for long-term Power Purchase Agreements (PPAs), to a more liberalized and more competitive wholesale market structure in which the producers can sell directly (or through a pool or voluntary electricity exchange) to the distribution companies over the medium to long-term. An independent Energy and Water Utilities Regulatory Agency – EWURA – in charge of technical and economic regulation of the electricity, petroleum, natural gas and water sectors became operational in 2006.

20. The new strategy was followed by the adoption of a comprehensive Electricity Act in 2008, which takes into account many of the international best practices for electricity sector reforms, tailored to the specific realities of the Tanzanian environment. The Act also established a general framework for the powers of the Minister of Energy and Minerals, including the new mandates and requirements to prepare and publish a policy for the reorganization of the electricity market and to develop a rural electrification plan and database. The Electricity Act led to strengthened governance of TANESCO, which has a functional Board of Directors composed of members from both private and public sectors. The chair of the Board is appointed by the President of the United Republic of Tanzania and other members are appointed by the MEM.

21. The MEM has a performance contract with the Board, including clear key performance indicators (KPIs). Moreover, the Board of Directors has performance contract with management of TANESCO, including clear KPIs. In terms of internal governance, TANESCO has a performance management process for all officers and employees and has been developing a Performance Development Program for its regional centers. TANESCO has also made progress on its Financial Recovery Program (FRP) which was endorsed in 2007 to help the utility to reduce its financial losses with an ultimate objective to make it efficiently performing and financially sound. TANESCO's financial net losses decreased from about US\$ 48 million in 2007 to US\$ 30 million in 2010.

22. Most recently, we enacted a National PPP Law in 2010. This law makes reference to sector level Public-Private Partnership (PPP) Nodes, including in the national electricity sector. Accordingly, the MEM and TANESCO have created PPP Nodes. In addition, we are, in our overall sector expansion strategy, pursuing enhanced private sector participation especially in power generation. The key parameters for such enhanced involvement have been

established with a regulatory framework which is up to international standards.

D. THE GOVERNMENT PROGRAM

23. Despite the reform efforts and progress in optimizing the mix of power generation technologies, Tanzania's power system is still vulnerable to major shocks such as droughts or oil price increases. The most recent crisis occurred in mid-2011, caused by a drought and intensive use of hydropower stations in late 2010. In response, TANESCO implemented Emergency Power Projects (EPPs), totaling 317MW which was provided by the private sector. The resulting significant increase in the average generation cost has led to a sizable financial gap in the sector and arrears to the IPPs, EPPs, and fuel suppliers, estimated at USD 276 million by the end of December 2012, threatening curtailment of power generation.

24. To manage the situation in the sector and particularly in TANESCO, the Government has adopted two policy responses: (a) help TANESCO finance the resulting financial deficit and give additional time for electricity tariffs to catch up with the sudden input price shock, smoothing out the economic and social impact by aligning tariff with long-term costs; and (b) take measures in the electricity and gas sub-sectors to substitute emergency power supply with more efficient power generation capacity thereby reducing operating costs and mitigating the hydrology risks in a sustainable manner, as further described in this letter.

• Policy Objectives

25. The main objectives of the Government program are to: (a) improve TANESCO's financial condition to ensure that it becomes financially sound and sustainable by end CY2016; (b) reduce the vulnerability of the power sector to the risk of hydrological variations and other external shocks; (c) ensure sustainable development of the power and energy sector in a transparent manner that would allow increasing access to electricity and other forms of modern energy at least cost and with requisite reliability and quality of supply; and (d) develop the gas sector in a manner that maximizes its benefits to Tanzania's social and economic development.

26. The achievement of these objectives requires policy measures across a spectrum of areas in the power sector itself, ranging from improved structure, governance, and transparency of the sector, including corporate governance of TANESCO; reduction of commercial and technical losses; improved efficiency in investments, especially in generation, whether through public or private investments; improved technology and primary energy mix of the power plants fleet; improved investment planning and implementation of investment

projects; and improved financial management, operational planning, and operational conduct of the power system.

27. A balanced and sustainable development of the power system will require a judicious mix of technologies, including renewables (hydropower, solar, geothermal, biomass, and wind), as well as conventional technologies. The Government considers the development of the gas sector as particularly important at this stage, both as a complement to electricity and as one of the economically most efficient power generation technologies. Tanzania already has sizable gas fields in operation where production can be increased in a relatively short period of time and at relatively low cost.

28. Concurrently, the results of recent explorations has shown that the country's offshore gas reserves are significant and can be exploited for export markets combined with a domestic supply obligation to use it for enhanced and shared economic growth. The Government has produced a draft Gas Policy, which has been gone through broad-based participatory consultations, as the starting policy document on how to convert the captured rent of natural gas into investments with high social returns for sustainable development. Once the discussions are finalized and Gas Policy document adopted, the Government will follow up with a Natural Gas Utilisation Master Plan and development of the legal and regulatory framework for the hydrocarbon sector, aligned with the Gas Policy and with the goal of creating conducive environment for investment.

29. Thus, the policy measures in the Government program are designed to help achieve a sustainable development of Tanzania's energy sector, both in the short and longer terms. The program is focused particularly at ensuring that the electricity sector and the upstream, midstream and downstream gas sector, are developed in a manner that serves Tanzania's overall economic and social development objectives and are operated in an efficient, transparent and financially sustainable way with adequate governance and financial arrangements.

30. The Government's objectives will be achieved through the combination of a set of immediate, short-term and longer-term actions that will aim at (i) enhancing revenue collection by TANESCO; (ii) ensuring the availability of natural gas for power generation supply; (iii) improving TANESCO management performance; and (iv) ensuring implementation of Government's investment plans in the power sector. The Government has already implemented a number of actions that will be consolidated over time as described in three pillars below.

E. DESCRIPTION OF POLICY AREAS

31. The financial loss of TANESCO at the current level of electricity tariffs is projected to be in the range of about USD 250-300 million per year for the period 2012-2014, assuming that hydropower generation remains at the 2012 level (about 1,880 GWh per year). The projected loss will be around USD230-250 million if the hydropower generation will be equal to the most recent 10-year average level (about 2,260 GWh/year). The losses will continue to increase in the absence of corrective actions. Restoration of TANESCO's financial equilibrium, as measured by its key financial ratios, has been a key priority of the Government and it has taken a series of actions towards improving revenue collection by TANESCO.

• Enhancing revenue collection by TANESCO

32. The EWURA reviewed tariffs in January 2012 by increasing on average by 40.29% which has led to a significant increase in revenues. In addition, TANESCO has also taken measures to improve revenue collection, notably: (i) installation of 15,938 Automatic Meter Reading (AMR) for high value customer; (ii) curbing power ghost vendor machines and change of prepayment meters coding; (iii) enforcing disconnection for non-paying customers; and (iv) intensifying collection efficiency by instituting bonus schemes as well as other financial incentives to members of staff. These non-financial performance incentives include enrolment into Performance Development Programme and recognition certificate.

33. All these measures have resulted into increased revenue collection by TANESCO of 34 percent between 2011 and 2012. During the same period billing efficiency increased to 95 percent while revenue collection efficiency increased to 96 percent.

34. The Government is committed to continue taking measures to further increase revenue collection by TANESCO by installing Automated Meter Reading (AMR) to high value customers, reducing commercial losses, and upgrading overloaded substations. Additionally, will intensify efforts to implement the Demand Side Management and Energy Efficiency programs in the sector, including enrolment of new consumers.

35. The government will finalize the policy for subsidy reform by September 2014, consistent with recommendations from ongoing review of energy sector subsidies.

• **Government subsidies**

36. The Government has made efforts to close the TANESCO financial gap, estimated to be USD 440 million by June 2013, by providing subsidies from the Government budget and loan guarantees to facilitate commercial borrowing by TANESCO from local banks as well as clearing its arrears with TANESCO. Such financial support is however subject to the close monitoring of TANESCO performance.

37. After carrying out a Cost of Service Study in 2012, EWURA has established tariff setting methodologies that will include formulas for automatic periodic adjustments for fuel costs, domestic inflation, and currency exchange rate fluctuations pursuant to the Electricity Act. The automatic tariff adjustments for the cost of fuel, inflation and exchange fluctuation will be applied as part of future tariff reviews.

38. More specifically, the Government has taken and continues to take the following measures to close the financial gap in TANESCO during financial years 2012/13 and 2013/14:

- i. The Government is continuing to reallocate funds from non-priority current spending items in the 2012/13 budget in order to raise funds for assisting TANESCO. The Government expects to raise US\$ 80 million (equivalent to Tsh 130 billion) which will be transferred to TANESCO before end June 2013. About US\$ 40 million (equivalent to Tsh 60 billion) has already been transferred to TANESCO;
- ii. The Government has guaranteed a syndicated bridge credit facility in favor of TANESCO amounting to US\$ 65 million from commercial banks which have been disbursed to TANESCO. The said bridge facility is part of the onshore and offshore syndicated loan amounting to TZS 408 billion earmarked for TANESCO under Government guarantee arrangement. The increase of the syndicated loan amount is however subject for completion of the onshore and offshore syndication arrangements.
- iii. The Government has also finalized negotiations with Stanbic Bank on a new commercial loan (part of non-concessional borrowing) amounting to US\$ 550 million. This loan was initially intended to fund development projects. However, due to the current financial distress in TANESCO part of this loan will be used to close the financial gap. The funds will be transferred to TANESCO, as on-lending on conditions and terms that will be agreed later.
- iv. The Government is continuing to clear its arrears with TANESCO and provides for payment of electricity bills in the budget of its Ministries,

Departments and Agencies (MDAs). TANESCO through the Ministry of Energy and Minerals is enforcing disconnection policy for none-paying MDAs.

- v. The Government is in the process of preparing the 2013/14 budget in which a significant amount of funds will be set aside to assist to close the financial gap in TANESCO in 2013/14. However, it is too early in the budget cycle to be able to provide you with accurate figures since the budget proposal will have to go through the Parliamentary discussions and approval, the process which will be completed by end June 2013.
- vi. Government to close the financial gap in TANESCO by other means than subsidies, including through tariff increase, operational efficiency gains, borrowing from commercial banks if the requested amount of subsidies to close the gap is higher than 2.5 percent of total public expenditures (less Consolidated Fund Services, wages, and foreign funded development expenditure) approved in the FY14 budget.

39. The power sector is actively pursuing options to further diversify electricity generation. To reduce the cost and mitigate hydrology and fuel price risks, the primary focus is on increasing use of domestic gas for power generation. This requires construction of new gas-fired power plants; construction of new gas pipelines; and drilling of new gas wells, as well as adequate financing, contractual and commercial arrangements to ensure that these investments happen and those additional quantities of gas become available.

40. The Government has finalized selection of the priority investment projects for electricity generation and associated infrastructure projects for 2013-2016. The Government has also identified sources of financing and implementation schedule of these projects consistent with public debt management and ceilings agreed as part of the IMF program. As a result, the construction of the following power plants is envisaged over the 2013-15 period:

- i. Mwanza power plant: a 60-MW HFO-fueled power plant, under construction, scheduled to be in operation no later than June 2013.
- ii. Kinyerezi I: a 150-MW dual-fueled gas-turbine power plant, with natural gas as the primary fuel and capable of working on jet A1 fuel, with a total investment cost estimated at USD 183 million, to be owned and operated by TANESCO. The project will be financed through commercial loans under the guarantees from the Norwegian Export Guarantees Agency and US Exim (85 percent) and Government/TANESCO contribution (15 percent). Construction period is 12 months and EPC contractor is Jacobsen.

- iii. Kinyerezi II: a 240-MW combined cycle gas turbine (CCGT) plant, financed by non-concessional loans from JBIC (51 percent); Mitsui-Sumitomo bank (34 percent), and DBSA (15 percent), with total cost estimated at USD432 million and construction period of 31 months (first turbines installed after 21 months) and EPC contractor is Sumitomo.
- iv. Kinyerezi III: a 300-MW CCGT plant, with combined cycle gas turbine technology, total investments cost of USD390 million, and construction period of 36 months. Financing is being discussed with the Government of China. EPC contractor is China Machinery Engineering
- v. Lindi: a 320 MW gas fired plant is an IPP developed by Kilwa Energy Company Ltd. The Company has concluded discussions on PPA with TANESCO and now awaits approval by the regulator.

In addition, committed projects that are planned to be implemented beyond 2016 under IPP arrangements include Power Pool East Africa - wind (100 MW), Wind East Africa Ltd- wind (100 MW), Ruhudji - Hydro power project (480 MW) and Symbion PLC gas project- Mtwara (400 MW).

41. The Government will also initiate a competitive, transparent process for tendering and construction of an IPP/PPP power generation projects potentially to be located in Mtwara/Lindi. The plant will have the capacity of 200 MW open cycle, with natural gas as the primary fuel and diesel oil as a back-up. The initial stage of the project implementation expected end Of 2015.

42. TANESCO has initiated transmission and distribution investment projects to reduce technical losses (e.g. TEDAP). It is an active electrification program aimed at connecting 250,000 customers per year while also ensuring 95 percent of new customers are connected within 30 days after paying connection fees. Moreover, there is an active Rural Electrification Program which aims at improving rural areas access to electricity from 6.6 percent in 2011 to 16 percent by 2015.

43. The Government through the MEM has a performance contract with the Board of Directors of TANESCO with clear Key Performance Indicators (KPIs) consistent with those stipulated by EWURA's tariff decision. Similarly, the TANESCO's Board has a performance contract with the management of TANESCO with clear KPIs that are consistent with those stipulated by EWURA's tariff decision.

44. The performance contracts indicate TANESCO's strategy to improve its operational efficiency, effective management, internal control system and accountability framework, and reflects TANESCO's action plan to respond to EWURA tariff review. To improve transparency and accountability by TANESCO's Board and management, the monitoring of a selected set of KPIs

will be published annually on TANESCO website, starting from February 2013. By February 2013, TANESCO has published on its website the 2011 Annual Audit report of NAO and 2011 Annual Performance report of the PPRA.

45. The Government will undertake a review of sectoral structure and TANESCO corporate capacity (in financial management, investment planning, project development, procurement, project management, public relations), and adopt and implement appropriate measures to improve the sector structural set-up and TANESCO's corporate capacity.

46. In addition, the Government is committed to take the following further measures in the near to medium term in order to improve the sector performance:

- i. The Government will undertake a review of the investment planning process, methodology, tools, and capacities, and adopt and implement revisions, as recommended by the review.
- ii. The Government will also ensure that investment projects, including those with PPP arrangements, are planned in line with FYDP and the annual plans of the MEM, based on economic merits assessment, and contracted and implemented at least cost.
- iii. With the exception of those that are already committed or in advanced stages of development where alternative options would cause significant delay, all future power projects will be implemented by inviting competitive investor proposals whenever possible. The exceptions are expected to be rare and limited to particularly risky or complex projects. As a rule, natural gas-based projects are procured most efficiently through a competitive, transparent open bidding process, and will be procured this way.
- iv. The Government will strengthen its capacity to develop its natural gas sector and Public Private Partnerships/IPP for the power generation sector through capacity building programs.
- v. Government adopts structural reforms aimed at clarifying the separation of TANESCO production and distribution responsibilities and improving its internal structure.

47. Tanzania has seen favorable natural gas exploration results. There appear to be good prospects that commercial quantities of natural gas will be confirmed. Tanzania has established basic elements of its legal and institutional framework for the proper development of its gas industry, paving the way for future decision-making. A sufficient quantity of gas will be supplied

to existing and planned power plants through the pipeline, leading to a significant decline in power production costs in the country.

48. Establishing the basic elements of its legal and institutional framework for the proper development of its gas industry is one of the priorities for the Government in the gas sector. The Government drafted the Natural Gas Policy in October 2012. The Natural Gas Policy is expected to promote the following principles: (i) expansion of gas production and supply infrastructure, by balancing the interests of the public and private stakeholders in the sector; (ii) balance supply for the domestic market with gas export opportunities so as to attract the pre-requisite investments for gas field development and optimizes the creation of wealth for Tanzania; (iii) continue to promote and support strategic investors in the electricity and gas downstream sector to take advantage of the expanded gas infrastructure; (iv) put in place a framework for accountability and transparency related to investments in and revenues derived from the power and gas sub-sectors; (v) ensure a strong coordination mechanism across government agencies to ensure policy coherence for gas development that drives diversification of the economy; and (vi) develop a local content policy that fosters economic diversification and develops human capital.

49. The Government views it important that those principles of the Natural Gas Policy are defined through a participatory process. The draft gas policy has been under the nationwide consultation process, involving major stakeholders in the country such as private companies, donors, and the civil society and development partners. It will also help the creation of a multi-sectoral platform, involving relevant ministries and agencies related to the gas agenda. The ongoing consultative processes adopted for the gas policy as well as the country's recent EITI compliance (December 2012) are essential first steps toward improved transparency in the management of natural resources. The draft has been discussed through a participatory public consultation process, involving major stakeholders in the country such as.

50. The next stage of building institutional framework for natural gas is adoption of the National Gas Policy, preparation of Gas Act, and Government will work to develop a governance framework for the gas sector through development of a Gas Act that regulates gas transportation, LNG, storage and distribution and which includes aspects such as tariffs, certification of operators, non-discriminatory access, balancing rules, network development and investment rules and the role of the regulator. The Government has already prepared a timeline for adopting the Natural Gas Policy.

51. Development of the Natural Gas Utilization Master Plan (NGUMP) is also an important part of institutional building. The NGUMP will provide a decision framework for the development and utilization of natural gas resources. The

development of NGUMP will also be aligned with the Power System Master Plan.

52. Establishing a solid information base on the availability of gas is critical for sound policy making. The Government policy and regulatory measures support the adoption of steps to ensure that gas demand, including the gas needs for power plants already in operation and planned for commissioning during CY2014-17, is consistent with projected supply and available reserves. At the moment, the natural gas resources are estimated at 35 TCF. Further work is ongoing to establish the size of the proven reserves. A sufficient quantity of near-shore and, at a later stage, off-shore gas will be supplied to existing and planned power plants through the pipeline, leading to a significant decline in power production costs in the country.

53. Government has taken steps to promote the development of natural gas reserves by (i) ensuring that available reserves are consistent with existing and future needs over the period 2014-17; and (ii) securing the legal framework for existing and new gas suppliers/producers.

54. The Government has entered into a 1.2 billion US dollars credit agreement with Exim Bank of China and a construction contract with China Petroleum Technology and Development Corporation (CPTDC) for the construction of a 532-kilometers natural gas pipeline, which will connect both the Songo Songo and the Mnazi Bay gas fields to Dar es Salaam. The Government has established clear institutional arrangements and firm milestones for active supervision and monitoring to ensure timely construction and commissioning of the pipeline and two associated gas processing facilities (Songo Songo and Mnazi Bay).

55. To promote the development of natural gas supply, MEM and TPDC will clear the existing arrears with gas suppliers and conclude Gas Sales Agreements (GSAs). These steps are required to ensure that sufficient gas will be available for use by the existing generation plants (to increase their usage and the cost of generation) and by new generation plants. The GSAs will offer credible payment terms (price and off-take volumes) and payment certainty (including on any existing arrears), as well as the obligations of the producers/suppliers, and will include milestones by which the obligations of each party will be measured. The Government will examine the needs and options to use third-party risk mitigation instruments to mitigate the risks perceived by the gas producers and suppliers.

56. The Government through the Natural Gas Policy intends to establish sound principles for pricing gas for power generation use to ensure that there is transparency and sustainability in gas supply.

57. TPDC will publish (on its website and in print) its internal periodic performance reports, latest audit report of the NAO and Latest Annual Performance Report of the 'PPRA.

F. CONCLUSION

58. The Government remains committed to focusing on sustaining macroeconomic stability, promoting pro poor economic growth, and increased investment in core social services such as education, health and water. The Government recognizes the key role played by accessibility and reliability of electricity in achieving many of the MKUKUTA objectives and it is therefore committed to ensure financial sustainability of the energy sector. The Government is confident that various reforms pursued under the Power and Energy DPOs and others will put the sector in equilibrium in the near future.

59. Further, the Government recognizes that the support by the Bank and other development partners will complement government's efforts to ensuring adequate funding to the sector in order to ensure sustainable growth and poverty reduction. Thus, the Government requests the World Bank to approve the provision of USD 100 million to complement the Government's efforts on closing the financial gap in TANESCO, thereby fostering and sustaining macroeconomic stability.

Thank you very much for your continued cooperation and support.

Yours Sincerely,



Ramadhani M. Khijjah
**PERMANENT SECRETARY
AND PAYMASTER GENERAL**

Annex 2: Results Framework

Prior Actions under DPO I	Triggers for DPO-II	Triggers for DPO-III	Outcome Indicators/Results		
				Baseline (2012)	Targets (2015)
Pillar I: The program objective is to strengthen the country's ability to bridge the financial gap in its power sector					
<p>1. TANESCO has increased its collection of revenues by 30% between CY2011 and CY2012, through tariff increase and improved collections of bills.</p> <p>2. To improve the financial conditions of TANESCO in FY 2013, (a) EWURA reviewed the current electricity tariffs; (b) the Government has identified the amount of subsidies to be transferred from the Government budget to TANESCO based on, among others, the above-mentioned tariff review; and (c) the Government has paid Tsh 67 billion by June 2012 to clear its arrears to TANESCO for electricity consumed by governmental entities.</p>	<p>1. TANESCO to increase revenues through a combination of better bills collection, reduction in losses, and, if necessary, requesting EWURA to adjust tariffs.</p> <p>2. To improve fiscal transparency the Government has provisioned in the FY2014 budget contingency funds that can be used to address the financing gap in TANESCO.</p> <p>3. In FY2014, Government shall use a combination of tariff increases, commercial borrowing, and government subsidies to cover the financing gap in TANESCO. Government subsidies shall not exceed 2.5 percent of total expenditures (excluding consolidated funds services, wages, and development foreign).</p>	<p>1. National subsidy policy submitted to Parliament by November 2014.</p> <p>2. TANESCO to take steps to improve efficiency (better bills collection, reduction in losses, and requesting EWURA to adjust tariffs) to reduce/eliminate financial gap.</p> <p>3. In FY2015, Government shall use a combination of tariff increases, commercial borrowing, and government subsidies to cover the financing gap in TANESCO. Government subsidies shall not exceed 2.0 percent of total expenditures (excluding consolidated funds services, wages, and debt-development foreign).</p>	<ul style="list-style-type: none"> • Amount (USD) of accumulated arrears to suppliers by TANESCO. • TANESCO operating deficit (USD) 	<p>276 m.</p> <p>244 m</p>	<p>50 m.</p> <p>50 m.</p>

Pillar II: The program objective is to reduce the cost of power supply and to promote private sector participation in the power sector					
<p>3. The Government has adopted, through a letter signed by the Minister or the Permanent Secretary of the MEM, a policy aiming to reduce the cost of power supply, improve the operational efficiency of the power sector, and promote the participation of the private sector in power generation through a competitive and transparent process that respects the national laws and the best practice of international environmental and social standards.</p> <p>4. TANESCO and MEM have signed a performance contract which includes measurable key performance indicators for TANESCO to enhance its efficiency in CY 2013.</p> <p>5. TANESCO has published (on its website and in print): (i) periodic performance reports prepared by TANESCO against the key performance indicators set out in the above-mentioned performance contract between TANESCO and MEM; (ii) its latest annual audit report issued by NAO; (iii) its latest annual performance report issued by PPRA.</p>	<p>4. Government, and TANESCO as appropriate, have adopted concrete measures (including training, hiring transaction advisors if necessary, and completing necessary studies) to improve its technical and commercial capacity to develop PPP projects in the energy sector through transparent and competitive process, as well as to evaluate unsolicited proposals (where they have merits), including subjecting them to a competitive process.</p> <p>5. Government has completed an Energy Sector Review whose objective is to recommend structural reforms aimed at improving power sector performance (including efficiency and accountability), to comply with the Electricity Act (2008, including part viii), and has approved its recommendations.</p>	<p>4. Government has initiated a process of competitive bidding for IPPs/PPPs in the power sector, as evidenced by the launching of one bid on competitive basis for a natural gas power fired plant in line with acceptable international standards, including environmental and social standards.</p> <p>5. Government has implemented the reforms recommended by the Energy Sector Review.</p>	<ul style="list-style-type: none"> • New generation capacity added to the system, cumulative (MW). • Average unit cost of power sales (USD/MWh) • Number of bids for gas power plant launched on a competitive basis 	<p>105</p> <p>0.20</p> <p>0</p>	<p>>600</p> <p>0.13</p> <p>1</p>
PILLAR III: The Program objective is to strengthen the policy and institutional framework for the management of the country's natural gas resources.					
<p>6. The Government has completed a nation-wide public consultation process for adopting its Natural</p>	<p>6. Government approves the Natural Gas Policy.</p>	<p>6. Government implements Natural Gas Policy, Gas Act, and</p>	<ul style="list-style-type: none"> • Volume of gas produced (mscf/d) • Amount of on-shore 	<p>78</p> <p>1.0</p>	<p>>290</p> <p>3.5</p>

<p>Gas Policy.</p> <p>7. The Government has adopted measures, including, clearing arrears with gas developers by paying them US\$106.9 million by December 2012, and verifying the amount of natural gas reserves in the United Republic of Tanzania's territory, which will enable higher production of natural gas and its use in power generation after CY2014.</p>	<p>7. Government establishes a top-level institutional mechanism to enhance inter-sectoral cooperation on the gas policy agenda.</p> <p>8. Gas Act to be submitted to Parliament after participative public consultations, including (i) transparent and participative regulatory practices; and (ii) access to information and participative monitoring by stakeholders.</p> <p>9. TPDC publishes (on its website and in print) its internal periodic performance reports, latest Annual Audit Report of the NAO and latest Annual Performance Report of the PPRA.</p>	<p>Natural Gas Utilization Master Plan in line with good international practices.</p> <p>7. Government prepares Regulatory Act to establish an independent regulator for the gas upstream, midstream, and downstream subsectors.</p>	<p>proven natural gas reserves (Tcf)</p>		
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Annex 3: Expected impact of the DPO series on economic growth and poverty

Background

Tanzania is power starved. With an installed generation capacity of only 1,438 MW, annual electric power consumption stands at less than 90 kilowatt-hours per capita, just enough to power one 60W light bulb per person for four hours every day. Access to modern energy has still only reached 18.6 percent of the population (2010).

Tanzania has higher access rates than Malawi and Uganda (9 percent) but below Kenya and Zambia (over 20 percent) and far from developing countries of East Asia (more than 90 percent coverage) and South Asia (62 percent). Rural areas are virtually disconnected from the national electrical grid. Access to on-grid electricity is almost zero for the two poorest quintiles of households in rural areas. Only 1.5 percent of the poorest quintile have access to electricity (National Panel Survey 2010/11).

The Government's objective is to increase access to electricity to affordable costs by implementing an ambitious investment program that will increase energy supply in the next few years. During the period 2013-16, the Government's strategy is to use existing near shore gas reserves to supply new gas power plants through the construction of a new pipeline. In the longer term, the authorities also plan to invest in renewable resources and possibly coal and hydro-energy. The development of offshore massive gas reserves is on top of the Government's agenda, but the expected impact on economic growth and poverty will occur when production will start in about 7-10 years. Such a strategy will not only increase power capacity but it will also reduce significant current production costs by lowering the reliance of the energy network on very expensive fuel power plants. It will also help diversify the risks associate to climatic shocks and to variations in fuel prices on international markets. The proposed DPO series is supporting this medium term vision.

This Annex sets out the channels through which the proposed DPO series will deliver results for the poorest. It also discuss the impact associated to the means used by the Government to close the financial gap in TANESCO in the next few years –before the new power plants will become operational. Ensuring the financial viability of TANESCO is urgent as it is a precondition to the financing of future investments and the well-functioning of the energy sector. The impact on economic growth and poverty is however influenced by the choice of means to close the gap. The budget support provided by the Bank will help reduce the use of these poverty-reducing instruments and their negative impact on economic growth.

Poverty Channels

There are four potential channels through which the DPO will support poverty reduction:

1. Accelerate growth by removing energy constraints;
2. Diversify the power supply mix to strengthen the resilience of Tanzania's power supply;
3. Provide increased generation to put in place the first step towards an improvement in energy access and ensuring lower costs in the medium term.
4. Facilitate the good management of natural gas revenues potentially increasing development spending.

- 1) Accelerate growth by removing energy constraints

At a theoretical level, the relationship between electricity, economic growth and the elimination of deep poverty is obvious – no country has achieved a high level of per capita income and welfare without a functioning electricity system.³³ However, an increase in electricity supply, access and

³³ There is a strong log-linear aggregate cross-sectional relationship between per capita commercial energy consumption and per capita GDP. Modi et al 2005: '*Energy Services for the Millennium Development Goal*'.

reliability will lead to economic growth only if other factors, including policies, are supportive of such growth – i.e. only if electricity is one of the key binding constraints on growth.

The growth diagnostic case study completed in 2005 by the World Bank (and confirmed in 2011 by the USAID study)³⁴ suggests that poor infrastructure; especially power and transport are a key constraint to growth in Tanzania.³⁵

Evidence from the World Bank’s Enterprise Survey also supports this.³⁶ When managers of firms in Tanzania are asked directly about the most serious problems they face in conducting business, electricity comes out as their number one concern. Almost 75 percent of Tanzanian enterprises consider routine load shedding and power outages as the most serious constraint to doing business, while another 15 percent mention it as a significant problem. According to the Investment Climate Assessments power has become less reliable over time and the number of outages per month has grown from 2.5 in 2002, to 8 in 2005 to 25 in 2006. The lack of access to cheap and reliable energy is viewed as a major constraint by firms operating in Tanzania, costing them as much as 5 percent of sales, and as much as 18 percent for manufacturing firms.³⁷ This scale is consistent with other reports in Africa which suggest that power outages result in significant losses equivalent to 6-16 percent of turnover.³⁸ Overall the poor state of power infrastructure is estimated to reduce growth rates in Africa by an average of 2.1 percent per year.

Improving the reliability of on-grid electricity supports increased economic growth in the local, regional or national economy through increasing the productivity of both labor and capital by allowing the use of electricity-using technologies, enabling working hours to extend beyond dark, and reducing the costs of production. The results of unreliable power supply is that production volumes, manufacturing costs and output quality are all adversely affected; firms invest less or in less efficient technologies and have lower productivity growth (Alby, Dethier, & Straub, 2010).³⁹ Unreliable power supply can “drive up firms’ direct and indirect costs and bias their technological choices away from energy intensive ones, which in turn increases the overall costs relative to competitors in other regions” (Alby, Dethier, & Straub, 2010). Where electricity grids are unreliable, firms often have to resort to diesel generators, which are both costly and polluting. This reduces their overall investment capacity and drives up costs – in Africa, own generated electricity is on average 313% more expensive than electricity from the grid (Foster & Steinbuks, 2009).⁴⁰ This may lead firms to prefer higher tariffs with reliable supply.

All these factors point to the need for significant additional investment in the power sector in Tanzania. The expected increase in power supply, as supported by this proposed operation, should in

Energy Sector Management Assistance Programme, United Nations Development Programme, UN Millennium Project, and World Bank.

³⁴ USAID, Tanzania Growth Diagnostic, Partnership for Growth, 2011.

³⁵ http://siteresources.worldbank.org/INTPREMNET/Resources/489836-1123682017954/Tanzania_UtzPresentation.pdf

³⁶ World Bank. Investment Climate Assessment, 2009.

³⁷ Source: Tanzania Manufacturing Association, 2011

³⁸ At the macro level, Morimoto & Hope, (The impact of electricity supply on economic growth in Sri Lanka, 2004) demonstrate that increased energy generation is associated with increased future economic output and estimate, for the example of Sri Lanka, that a 1 MWh increase in electricity supply is associated with extra economic output of 88000 to 137000 Rupees (approximately US\$1120–1740). Research on Bangladesh over the period 1973-2006 also found similar evidence that increased energy generation is associated with increased economic output (Sarker, A., & Alam, K. (2010). *Nexus between Electricity Generation and Economic Growth in Bangladesh* (Asian Social Science, 6(12), 16-22)).

³⁹ Alby, P., Dethier, J.-J., & Straub, S. (2010). *Firms Operating under Infrastructure and Credit Constraints in Developing Countries*. World Bank.

⁴⁰ Foster, V., and J. Steinbuks. 2008. *Paying the Price for Unreliable Power Supplies: In-House Generation of Electricity by Firms in Africa*. AICD, World Bank, Washington, DC.

the medium term reduce operating costs of firms, leading to accelerated growth and job creation, especially in urban areas.

2) Diversify the power supply mix to strengthen the resilience of Tanzania

At present, 39 percent of Tanzania’s installed capacity is in hydropower plants. The DPO aims to diversify the power supply mix in Tanzania by facilitating the development of natural gas. This in turn will reduce the power supply’s vulnerability to climatic conditions and make Tanzania more resilient to hydro shocks and variations in fuel prices on international market. The fuel import bill has been growing very fast over the past few years, accounting for approximately one-third of total exports in 2011/12. Less vulnerability to exogenous will help improve the management of the sector, including tariff setting and investment programs.

The power supply will become more reliable and spending on expensive emergency power will decrease. However, it should be noted that clean energy solutions are also key to improving resilience through reducing emissions and long-term climate change.

3) Increase Energy Access

The reforms supported by the proposed DPO will support energy access by:

- Increasing generation capacity that is necessary (but not sufficient) to improve access since progress has also to be achieved in transmission and distribution.
- The DPO aims to promote an affordable cost-reflective electricity tariff for households and firms –once the new power plants become fully operational.

The current access to electricity is low (as indicated earlier). There are however significant variations depending on the level of income and location of households (Table 7). Poor households have quasi-no access to electricity, while the wealthiest quintile report an access rate equal to almost 50 percent. Significant differences also exist between rural (7.1 percent) and urban areas (44.6 percent).

The current level of electricity tariff is on average US\$0.12 per Kwh. This rate is lower than in Uganda and Kenya, but relatively high by international standards. Contrary to these two countries, the current tariff structure appears to advantage large customers at the expense of small ones.⁴¹

Table 6: Access to Electricity for Households and Population by Location

	Households			Population		
	Rural	Urban	Tanzania	Rural	Urban	Tanzania
Poorest	0.4%	7.1%	1.1%	0.6%	11.0%	1.5%
Q2	1.2%	12.6%	2.6%	1.3%	12.9%	2.6%
Middle	2.4%	20.5%	6.6%	2.8%	22.1%	7.0%
Q4	9.7%	33.7%	17.3%	9.9%	41.7%	19.7%
Least Poor	26.0%	62.9%	47.7%	27.7%	65.9%	49.7%
Tanzania	7.1%	44.6%	18.6%	6.1%	44.7%	16.1%

Source: National Panel Survey 2010/11

Improved energy access is key to meet development objectives and the World Bank’s DPO provides a necessary first step towards this goal. The Commission for Sustainable Development (2001) said that “access to affordable energy services is a prerequisite” for achieving the first Millennium

⁴¹ Elite domestic consumers (consumption of more than 7500 kwh per month currently pay less per kwh (TZS 152) as compared to middle class domestic consumers (TZS 249 per kwh).

Development Goal of halving the number of people living on less than US\$1.25 a day. Limited access to energy has a direct impact on achievement of the MDGs by limiting the provision of basic services, by directly affecting health and the time available for education, and by constraining the potential for economic development and improved livelihoods. Public services as fundamental as birthing rooms cannot operate safely at night without electric lights and many medicines cannot be stored without refrigeration. Within enterprises, including farms, lack of energy services such as pumped irrigation, milling or refrigeration of food products critically constrains efficiency and returns, locking poor people into a cycle of poverty and vulnerability (UNDP/PAC, forthcoming).

Women and children are particularly affected by the absence of modern energy services. They can gain significant benefits from improved household lighting (creating opportunities for productive activities and education) and new economic opportunities.

4) Facilitate the good management of natural gas resources

The DPO aims to support the implementation of a gas sector strategy to ensure sound governance, policies and investment planning. Tax revenues from the gas sector need to be maximized to ensure higher development spending that optimizes results for the poorest. The DPO policy dialogue will support this process and complements the Government's action plan that is under preparation. The World Bank, in close coordination with partners, is ready to assist the authorities in their effort through detailed analytical work and the forthcoming capacity building project. The recent multi-donor scoping mission has been a step forwards the definition of a joint action plan between the Government and development partners.

In the short-term, FDI inflows, in the magnitude of US\$30 billion, will be necessary to finance infrastructure. While a large fraction of this will be used to finance imports, the construction work will create additional jobs and opportunities for local suppliers. Inflationary pressure may emerge such as the price of housing and food that may require targeted actions for vulnerable groups in these local communities. This will need to be carefully managed.

In the longer term, the management of fiscal revenues derived from gas production as well as the linkage opportunities with the local economy will produce potential significant effects, on economic growth and poverty levels. The Government will need to manage the macroeconomic impact of the projected increase in exports on the balance of payments as well as on the exchange rate to avoid the Dutch disease syndrome, which reduce the competitiveness of the non-gas sector. Managing properly the fiscal revenues received from gas producers will also be a priority to optimize their use both in the short and longer terms. This supposes strengthening capacity to manage public debt (so to avoid excessive advance borrowing) and public investment in terms of sectors and geographical allocation. Lastly, the authorities will have to maximize the synergies between the gas operators and the local economy through the development of joint infrastructure projects and backward as well as forward linkages, including through training programs and technology transfers. The magnitude of these effects will greatly depend on the Government's capacity to manage them along the production and commercialization of gas as detailed in Annex 5. Not only are these series of operations aimed at supporting these efforts, but also the parallel World Bank's capacity strengthening project should help the authorities to build technical expertise at the various stage of the process.

Poverty Impact of Transition Financing Mechanisms

The Government's program should increase power supply at affordable costs in 2015-16 through its investment strategy. During the transition, it is vital that the financial situation of the energy sector remains under control by eliminating current arrears that were reported in the magnitude of US\$280 million at end-December 2012. The Government has three instruments at its disposal to raise the funds required.

This section looks briefly at how the choice of instrument might affect the poorest in the transition phase:

- 1) **Commercial Borrowing:** With increased commercial borrowing and the existing scale up of public investments, the fiscal stance needs to be carefully monitored and consistent with debt and fiscal sustainability. Debt service payments are already projected to increase from less than one percent of GDP in FY2008/9 to almost two percent of GDP in FY2012/13, reducing the fiscal space. Although non-concessional borrowing provides additional resources upfront, the cost associated with borrowing reduces potential development spending in the future, thereby affecting the poorest. This should be actively considered when striking the right balance between available instruments. A conservative approach to non-concessional borrowing should be encouraged.
- 2) **Government Subsidies:** The use of government's subsidies requires careful consideration of the trade-off between infrastructure spending and social expenditures in education and health as well as social protection. Analysis at the global level by the IEA suggests that only eight percent of energy subsidies in 2010 were distributed to the poorest 20 percent of the population.⁴² In absolute terms, it is estimated that the top 20 percent richest people in all countries captured six times more in energy subsidies than the bottom 20 percent.⁴³ This suggests that without precise targeting energy subsidies are unlikely to be an effective direct development instrument as there is a too important emphasis on high income groups. Other forms of targeted basic services provision would likely be better value for money for developmental spending. The Tanzanian authorities are aware of the regressive nature of government subsidies in the energy sector and have therefore committed to; (i) limit the use of government subsidies necessary to address the gap in TANESCO by the maximum amount of 2.5 percent of total public expenditures⁴⁴ in FY14; (ii) consider the use of this instrument only on a temporary basis until the generation power costs will be reduced thanks to new investments; and (iii) to issue and implement the National Subsidy Policy by FY2015. They have also committed to find the fiscal space for those subsidies in the existing fiscal framework by reallocating non-priority social expenditures, including allowance and non-priority expenses in the energy sector.
- 3) **Increase Revenues:** This can be achieved by improved collection mechanism and efficiency gains. Increasing electricity tariff is however the most straightforward instrument. To illustrate, the recent 40 % average increase is estimated to have increased the annual spending on electricity by US\$0.052 for the poorest household (those having access to the national grid) and US\$14.0 for the wealthiest household (Table 8). Concurrently, higher electricity tariffs also contributed to increase the costs of production of local firms, notably of highly energy intensive sectors such as mining, glass, and cement. It has been estimated by the Tanzanian Association of Manufacturing industries, that electricity charges count for 18.6 percent of these firms average production costs. These impacts have therefore not only the level of activity of these sectors, with negative implications on employment, but also on prices of basic commodities consumed by local households, including the poorest. For example, higher electricity costs lead to higher production costs for cement factories which are (partially) transferred to retail prices, which in turn increase the production costs of construction companies. Those sequencing effects contribute to reduce employment further and/or reduce the purchasing power of local households.⁴⁵

⁴² IEA (2011): World Energy Outlook

⁴³ IMF (2010) 'The unequal benefits of fuel subsidies: A review of evidence for developing countries'.

⁴⁴ Adjusted for cfs, wages, and development foreign.

⁴⁵ For a review of the direct and indirect effects of an increase in electricity tariff on economic activity and poverty, see D. Boccanfuso, A. Estache, and L. Savard, A Macro-Micro Analysis of the Effects of Electricity Reforms in Senegal on Poverty and Distribution, Journal of Development Studies, Vol. 45, N.3, March 2009.

Table 7: Annual Expenditure on Electricity by Location

	Annual Spending on Electricity (Ths)			As % of Total Expenditure		
	Rural	Urban	Tanzania	Rural	Urban	Tanzania
Poorest	9.4	2,236.6	223.3	0.0%	0.3%	0.0%
Q2	916.2	6,380.6	1,600.4	0.0%	0.4%	0.1%
Middle	1,304.1	14,757.2	4,414.3	0.0%	0.7%	0.2%
Q4	6,234.1	31,067.6	14,112.1	0.2%	0.8%	0.4%
Least Poor	28,441.3	82,371.4	60,091.7	0.5%	1.5%	1.1%
Tanzania	6,430.3	52,864.3	20,687.2	0.2%	1.1%	0.5%

Source: National Panel Survey 2010/11

All these instruments have arguably significant (albeit different) impacts on economic and social conditions. The budget support provided by the World Bank will reduce the pressure on the Government to use those instruments to fill the estimated gap in the range of US\$ 1 billion over the next few years (see Annex 4 for details).

Annex 4: Tanzania Power Sector Financial Forecast

The main source of energy in Tanzania has been traditionally hydro power, which accounted close to 60 percent of total power generation in 2008. The recent drought and depletion of the hydro reservoirs caused significant load shedding starting from the second half of 2011. The introduction of Emergency Power Plants (EPPs) as a temporary measure alleviated the power shortage but built up an excessive financial burden to the power sector and to the government budget, despite a 40.3 percent tariff increase taking effect in January 2012. It is estimated that the government provided US\$100-150 million subsidy per annum in 2011-2012 to partially meet the financial obligation.

In 2011, TANESCO reported an annual operational deficit of US\$200 million (before Government's subsidies). The average unit cost of sales rose from US\$0.10 per KWh in 2010 to US\$0.20 per KWh in 2012, much higher than the average prevailing tariffs of US\$0.12 per KWh. As a result, TANESCO's deficit is estimated to have reached around US\$ 276 million by end of 2012.⁴⁶

Without further increase in tariffs and efficiency gains, TANESCO is projected to run large deficits in 2013 and 2014, before the new gas fired plants will become gradually operational. The annual operational loss can be reduced if not fully eliminated when the more affordable gas fired power plants reach commercial operation in 2015-2016. The investments in the gas-to-power chain will enable TANESCO to retire EPPs and realize significant savings by avoiding the high capacity charges and liquid fuels payment.

This financial forecast is based on a number of assumptions on annual peak demand growth (10 percent per year), loss reduction (0.33 percent per year), and flat operating costs (excluding fuel charges) in real terms. Below are presented three alternative scenarios that illustrate the sensitivity of the financial projections to (i) hydrology conditions; and (ii) the implementation pace of the new investment program.

Base Case (see Table 8)

Description: *the poor recent rains continue and hydropower availability in 2011-2012 continues in the coming years, which forces TANESCO to maintain EPP capacity in 2013-2014. Meanwhile the delivery of new gas fired plants is reasonably on track. Kinyerezi Gas I will achieve commercial production in Q3 2014 and Kinyerezi Gas II and Kilwa (Somanga Fungu) Gas will reach the first commercial production in Q3 2015. Due to this additional capacity, TANESCO can afford to stop purchasing power from EPPs and retire expensive supply contracts where applicable by the end of 2014.*

Under this scenario, the weighted average costs (US\$0.19c/kWh) of power generation remain at the same level in 2012-2014, which is higher than existing tariff (US\$0.12c/kWh). During this period, TANESCO is therefore expected to lose US\$300-350 million per annum (see Table 8). A much lower generation cost will become possible when gas fired power plants Kinyerezi I and II come on stream to replace the liquid base power plants in the second half of 2014 and 2015, thus reducing the annual deficit by US\$200-250 million. The sector deficit will reduce to US\$50-100 million in 2015-2016 under this scenario. Cumulatively, the financial loss will be approximately US\$1 billion during 2012-2016.

Downside Case (see Table 9)

Description: *the poor hydropower availability in 2011-2012 continues in the following years, which forces TANESCO to keep EPP capacity in 2013-2014. TANESCO is not able to implement its new*

⁴⁶ The estimation is based on the pro forma financial statement of TANESCO received by the core team in November 2012. The final audited report will only be available in the second quarter of 2013.

investment program on time. The commercial production starts of Kinyerezi I will be delayed to Q4 2014, three-months later than the original plan. Kinyerezi II and Kilwa (Somanga Funga) will not be operational until Q3 2016, one year later than the base case.

Under this scenario, the large funding gap remains throughout the forecasting period (2012-2016), average about US\$300 million per annum. Cumulatively the financial loss will be US\$1.5 billion during 2012-2016 (see Table 9).

Upside Case (see Table 10)

Description: *The availability of hydro power is equal to the 10-year historical average. Consequently EPPs are only required during peak hours, contributing to hundreds of millions of cost reduction. Meanwhile the delivery of new gas fired power plants is well on track. Kinyerezi Gas I will achieve commercial production in Q2 2014 and Kinyerezi Gas II and Kilwa (Somanga Funga) Gas will reach the first commercial production day in Q3 2015. Thanks to the additional capacity, TANESCO can afford to stop purchasing power from EPPs and retire expensive supply contracts where applicable by the end of 2014.*

Under this scenario, the annual operational loss can be reduced if not fully eliminated when the more affordable gas fired power plants reach commercial operation in 2015-2016. Before that, the annual loss is limited to about US\$250 million per year compared to the US\$300-350 million in the Base Case. Cumulatively the financial loss will be US\$0.8 billion during 2012-2016 (see Table 10).

Tables below summarize the preliminary financial forecast for Base Case, Downside Case and Upside Case.

Table 8: TANESCO Financial projections (US\$ Million, Base Case)

	Actual		Forecast				
	2010	2011	2012	2013	2014	2015	2016
Peak Demand	833	828	851	936	1028	1136	1249
		-1%	3%	10%	10%	10%	10%
Power Supplied - GWh	5,322	5,200	5,555	6,225	6,837	7,555	8,310
Demand Incremental -GWh		-122	355	670	612	717	756
Energy Output - GWh							
Hydropower - GWh	2,672	1,993	1,845	1,884	1,884	1,884	1,906
				30%	28%	25%	23%
Hydro Incremental		-679		39	0	0	22
Tanesco thermal - GWh	998	1,042	1,348	1,909	2,711	3,681	4,638
Ubungo I			634	690	690	690	690
Tegeta GT Gas			307	297	297	297	297
Mwanza HFO			0	231	306	306	0
Ubungo II			254	513	698	698	698
Kinyerezi Gas I			0	0	513	1,026	1,026
Kinyerezi Gas II			0	0	0	412	1,648
Kinyerezi Gas III			0	0	0	0	0
Tanesco thermal Incremental			326	561	802	970	957
IPPs -GWh	1,604	2,134	2,282	2,338	2,165	1,911	1,627
Aggreko EPP AGO			57	58	46	0	0
Symbion (ex Dowans) EPP Dual Jet A1			98	100	80	0	0
Symbion (ex Dowans) EPP Dual Gas			196	200	160	80	0
IPTL HFO			392	400	320	362	158
Symbion 205 (50MW Dodoma) HFO			67	68	54	0	0
Symbion 205 (50MW Arusha) HFO			42	43	34	0	0
Songas			1,429	1,469	1,469	1,469	1,469
Somanga Fungu Gas			0	0	0	0	0
IPP Incremental		0	148	57	-174	-253	-284
Import and Other -GWh	48	31	80	94	78	78	139
Total Dispatch - GWh	5,322	5,193	5,555	6,225	6,837	7,555	8,310
Technical and Commercial Loss	1,219	1,193	1,105	1,311	1,418	1,541	1,668
Sales - GWh	4,103	4,000	4,450	4,914	5,420	6,013	6,643
Revenues - US\$ m	316	346	536	581	609	648	729
Weighted Average Tariff - \$c/KWh	0.08	0.09	0.12	0.12	0.11	0.11	0.11
Cost - US\$ m	386	554	872	937	982	759	794
IPP Capacity Charge			553	238	238	90	90
IPP Energy Charge				243	213	58	49
Tanesco Owned Plant Fuel Charge			74	97	141	180	166
Import Cost			11	59	64	76	94
Operating Cost			160	185	197	212	223
Depreciation			50	54	63	76	112
Financing Cost			12	42	47	48	39
Bad Debt Provision			12	19	19	20	20
Unit Cost - \$c/KWh	0.09	0.14	0.20	0.19	0.18	0.13	0.12
Before Government Subsidy - US\$m	-70	-208	-336	-356	-373	-111	-64
Other Revenue	31	26	40	32	32	32	32
Tanesco Loss before Government Subsidy - US\$m							
Government Subsidy	31	125	116				
Net Income - \$m	-8	-57	-180	-324	-341	-79	-32

Table 9: TANESCO Financial projections (US\$ Million), Downside Case

	Actual		Forecast				
	2010	2011	2012	2013	2014	2015	2016
Peak Demand	833	828	851	954	1,047	1,157	1,273
		-1%	3%	10%	10%	10%	10%
Power Supplied - GWh	5,322	5,200	5,555	6,225	6,837	7,555	8,310
Demand Incremental -GWh		-122	355	670	612	718	755
Energy Output - GWh							
Hydropower - GWh	2,672	1,993	1,845	1,884	1,884	1,884	1,906
				30%	28%	25%	23%
Hydro Incremental		-679		39	0	0	22
TanESCO thermal - GWh	998	1,042	1,348	1,831	2,454	3,269	4,120
				29%	36%	43%	50%
Ubungo I			634	690	690	690	690
Tegeta GT Gas			307	297	297	297	297
Mwanza HFO			0	154	306	306	306
Ubungo II			254	513	698	698	698
Kinyerezi Gas I			0	0	257	1,026	1,026
Kinyerezi Gas II			0	0	0	0	824
Kinyerezi Gas III			0	0	0	0	0
TanESCO thermal Incremental			326	483	623	815	851
IPPs -GWh	1,604	2,134	2,282	2,416	2,421	2,324	2,145
Aggreko EPP AGO			57	63	64	57	21
Symbion (ex Dowans) EPP Dual Jet A1			98	109	110	98	36
Symbion (ex Dowans) EPP Dual Gas			196	218	219	197	72
IPTL HFO			392	436	438	393	507
Symbion 205 (50MW Dodoma) HFO			67	74	74	67	25
Symbion 205 (50MW Arusha) HFO			42	47	47	42	16
Songas			1,429	1,469	1,469	1,469	1,469
Somanga Fungu Gas			0	0	0	0	0
IPP Incremental		0	148	134	5	-97	-179
Import and Other -GWh	48	31	80	94	78	78	139
Total Dispatch - GWh	5,322	5,193	5,555	6,225	6,837	7,555	8,310
Technical and Commercial Loss	1,219	1,193	1,105	1,311	1,418	1,541	1,668
Sales - GWh	4,103	4,000	4,450	4,914	5,420	6,014	6,643
Revenues - US\$ m	316	346	536	581	609	648	729
Weighted Average Tariff - \$c/KWh	0.08	0.09	0.12	0.12	0.11	0.11	0.11
Cost - US\$ m	386	554	872	941	1032	1006	1041
IPP Capacity Charge			553	238	238	238	238
IPP Energy Charge				261	276	176	119
TanESCO Owned Plant Fuel Charge			74	80	131	163	198
Import Cost			11	59	64	76	94
Operating Cost			160	185	196	211	221
Depreciation			50	54	63	76	112
Financing Cost			12	44	45	46	38
Bad Debt Provision			12	19	19	20	20
Unit Cost - \$c/KWh	0.09	0.14	0.20	0.19	0.19	0.17	0.16
Before Government Subsidy - US\$m	-70	-208	-336	-360	-423	-358	-311
Other Revenue	31	26	40	32	32	32	32
TanESCO Loss before Government Subsidy - US\$m							
Government Subsidy	31	125	116				
Net Income - \$m	-8	-57	-180	-328	-391	-326	-279

Table 10: TANESCO Financial projections (US\$ Million), Upside Case

	Actual		Forecast				
	2010	2011	2012	2013	2014	2015	2016
Peak Demand	833	828	851	954	1,047	1,157	1,273
		-1%	3%	10%	10%	10%	10%
Power Supplied - GWh	5,322	5,200	5,555	6,226	6,837	7,555	8,310
Demand Incremental -GWh		-122	355	671	612	717	755
Energy Output - GWh							
Hydropower - GWh	2,672	1,993	1,845	2,257	2,257	2,257	2,283
			33%	36%	33%	30%	27%
Hydro Incremental		-679		412	0	0	26
TanESCO thermal - GWh	998	1,042	1,348	1,909	2,711	3,389	4,419
			24%	31%	40%	45%	53%
Ubungo I			634	690	690	690	690
Tegeta GT Gas			307	297	297	297	297
Mwanza HFO			0	231	306	14	0
Ubungo II			254	513	698	698	698
Kinyerezi Gas I			0	0	513	1,026	1,026
Kinyerezi Gas II			0	0	0	412	1,430
Kinyerezi Gas III			0	0	0	0	0
TanESCO thermal Incremental			326	561	802	678	1,030
IPPs - GWh	1,604	2,134	2,282	1,967	1,792	1,831	1,469
Aggreko EPP AGO			57	33	22	0	0
Symbion (ex Dowans) EPP Dual Jet A1			98	57	37	0	0
Symbion (ex Dowans) EPP Dual Gas			196	114	74	0	0
IPTL HFO			392	229	149	362	0
Symbion 205 (50MW Dodoma) HFO			67	39	25	0	0
Symbion 205 (50MW Arusha) HFO			42	25	16	0	0
Songas			1,429	1,469	1,469	1,469	1,469
Somanga Fungu Gas			0	0	0	0	0
IPP Incremental		0	148	-315	-174	39	-362
Import and Other -GWh	48	31	80	94	78	78	139
Total Dispatch - GWh	5,322	5,193	5,555	6,226	6,837	7,555	8,310
Technical and Commercial Loss	1,219	1,193	1,105	1,312	1,418	1,541	1,668
Sales - GWh	4,103	4,000	4,450	4,914	5,420	6,013	6,642
Revenues - US\$ m	316	346	536	581	609	648	729
Weighted Average Tariff - \$c/KWh	0.08	0.09	0.12	0.12	0.11	0.11	0.11
Cost - US\$ m	386	554	872	848	891	695	779
IPP Capacity Charge			553	238	238	90	90
IPP Energy Charge				153	121	55	43
TanESCO Owned Plant Fuel Charge			74	97	141	117	157
Import Cost			11	59	64	76	94
Operating Cost			160	186	198	212	223
Depreciation			50	54	63	76	112
Financing Cost			12	42	47	48	39
Bad Debt Provision			12	19	19	20	20
Unit Cost - \$c/KWh	0.09	0.14	0.20	0.17	0.16	0.12	0.12
Before Government Subsidy - US\$m	-70	-208	-336	-267	-282	-46	-50
Other Revenue	31	26	40	32	32	32	32
TanESCO Loss before Government Subsidy - US\$m							
Government Subsidy	31	125	116				
Net Income - \$m	-8	-57	-180	-235	-250	-14	-18

Annex 5: Key messages of the multi-donor gas scoping mission

Gas development is about more than gas alone. Gas is an opportunity for the current generation to leave a proud and prosperous Tanzania to the next generation. A major export project can create large fiscal revenues. Gas is part of the solution to the nation's energy crisis, essential to bring private sector development and diversification of the economy, and inclusive growth. The current generation of Tanzanians owes it to their children and grandchildren. The country will get the best deal out of its gas if ALL Tanzanians act as stewards and work together for a better future of the country.

The country has a small window of time to take the right steps or it may soon be too late. Competition from other countries for gas markets; heightened domestic expectations may constrain policy choice if delayed. The time to act is now. Using international experience and the information gathered during this week in Tanzania, the mission submits the following suggestions for the Government of Tanzania's consideration. The first set of five suggestions addresses issues that need to be tackled urgently and have immediate effect and the second set of five suggestions targets issues that require action now but for which potentially beneficial impact comes only in the future.

A. Urgent actions with immediate impact

1. Communication

A Communications strategy is needed and should cover: managing expectations, transparency, and preparing Tanzanians to seize opportunities. Government at present lacks a communications strategy about gas and has yet to define responsibilities for communications. Misconceptions abound about what gas development might mean; the lack of transparency leads to often unwarranted suspicions about what government and companies are doing; people have little idea of how they might benefit from new opportunities. The experience with the development of mining in Tanzania has left a strong impression that Tanzanians may not benefit as much as expected from the discovery and exploitation of natural gas.

Managing expectations: Gas volumes remain unproven and uncertain; none of the companies exploring for offshore gas has yet secured a market or reached any decision to develop a field commercially; even if substantial, revenues may take 10 years or more to flow; essential regulatory, fiscal and commercial steps must come before project development can proceed. Gas will not turn Tanzania into a rich country overnight. The government needs to communicate this clearly and encourage open discussion and debate with citizens, their representatives in Parliament, and with the private and non-profit sectors. Ghana offers for instance a good example: a solid local coalition for good governance of the oil and gas sector collaborated with government to promote inclusive debate - not least on the drafting of the revenue management, regulatory, and local content bills.

Transparency is key to Tanzania getting it right: Government and the private sector both have obligations. Transparency covers whether to disclose PSAs or not; how to ensure accurate reporting of discoveries and reserves; using legislation where possible instead of confidential contracts; reporting payments and receipts. The best way to provide citizens with the assurance that natural resource extraction will be used to benefit the entire population is to be transparent and explain and engage citizens in how these resources will be exploited to improve the welfare of current and future generations. As a candidate country with a functioning EITI multi-stakeholder group (T-EITI) that includes representatives from government, companies and civil society, Tanzania has already committed to transparency in reporting on revenues from the extractives sector. Ghana made similar commitments early on its discovery and then passed a revenue management law with strong principles of transparency and accountability.

Opportunities for Tanzanians. It is important to prepare the population for the business opportunities that may arise from the gas industry and, equally important, from public investment out of gas

revenues. Clear public information will help - about how the gas industry works and about what government expects from it. Fostering linkages from the gas industry and supporting entrepreneurship are key to harnessing the gas opportunity in Tanzania. Private sector and Government can cooperate to enable Tanzanian businesses and individuals to supply goods and services to gas projects. All this requires capacity development to ensure that gas and supporting activities help to build a diversified economy and attract more private sector investments.

The Mozambique Pande/Temane gas fields and pipeline, a \$1.2 billion investment led by the South African company SASOL, stands out as a good practice in fostering linkages with the local economy at the construction and operation phases.

2. Driving the agenda

Tanzania needs a strong champion with the authority to act to ensure policy coherence for gas development. For gas to form the platform to diversify the economy and put Tanzania on a sustainable growth path, strong coordination across agencies and linkages across sectors need to be built. Broadening the debate to a wide range of stakeholders in the country, working across silos and ensuring policy coherence is essential. This is particularly difficult when the roles and responsibilities of each institution in the gas/petroleum sector are not clarified and inherent conflicts of interest exist notably when regulatory and commercial roles are played by a single entity.

After discovering oil in June 2007, Ghana struggled right from the beginning with inter-ministerial coordination. The process only improved significantly when a high level committee was inaugurated with leadership from a credible champion who was known to be a trusted advisor to the President, located in the Presidency. At the same time, the Minister of Finance, the Minister of Energy and the Minister of the Environment, as well as lawyers in the Attorney General's office, were quick to point out that they were short of the necessary skills to manage their new portfolios. Development partners rushed into support with offers of capacity building. Learning how to coordinate the large number of partners that came forward is also likely a lesson worth sharing. Five years on, Ghana continues to manage these challenges and to mould its own model for the sector. Perhaps the strongest point of the model to-date is the fact that it has been built on the basis of strong technical inputs, an inclusive process which has allowed the country to chart its own course and strong concrete steps, beyond political commitments, to ensure that transparency and accountability characterize the management of the new sector. While the chapter is by no means over, this seems to have minimized some of the risks and allowed the Ghanaians to find their space, while managing the country's expectations.

3. Strengthening negotiation capacity and legislation

Strengthening negotiation capacity requires re-thinking the approach to negotiation and the role of legislation.

- **Focus.** What needs to be done now and what later? For example, fiscal and regulatory treatment of a pipeline or LNG process plant needs early settlement.
- **Narrow the scope of negotiations:** consider using general tax legislation for mid-stream and downstream fiscal terms, not a negotiated contract; consider narrowing the range of negotiable variables in PSAs.
- **Create a "positive-sum game"** in negotiations: is the size and scope of the pie fixed? Or can we enlarge it to the benefit of all parties?
- **Incomplete contracts:** no law and no contract can anticipate all possible future circumstances. Making a contract work requires trust among the parties, a willingness to review and revise (perhaps under built-in procedures)...parties to negotiations is just that, seeking a cooperative solution; they are not irreconcilable adversaries.

- **Portfolio of objectives:** determine what range of objectives the Government wishes to pursue (revenue, knowledge transfer, local content, etc.), identify which areas promote mutual benefit and enlarge the cake and realize there is trade-offs.

The process of Negotiating better Terms should not be viewed as only the final event when the Government sits with the Gas Companies to negotiate the Contract. Instead there is a need to look at it as a three phase process. The First Phase is an advance Preparation phase ahead of the actual negotiations, during which the Government needs review of existing PSA Gas Terms within the context of changed circumstances and after consultation of all relevant Government departments. The second Phase is when the Government actually carries out the negotiations with the relevant Companies being offered the PSA. At this stage the leader of the Government side should be accompanied by all the relevant Government stakeholders and would negotiate on the basis of the guidelines adopted under Phase One. The Third Phase is the post-contract phase when the Government needs to follow up with Implementation of the Agreement ensuring that contractual parties fulfill agreed obligations.

It is important to note that a review of existing contracts is beyond the scope of this mission. Such a review would require time, serious analysis, and a careful handling of its findings given the potential impact of a non-respect of existing contracts on private investment.

4. Fiscal regime

Fiscal terms need both to ensure efficient development (broaden the base) and maximize retention of revenue in Tanzania (tax as much rent as possible). As yet, implementation experience with PSAs is limited to the near-shore gas projects and offshore exploration. The value to Tanzania of sharing terms for gas depends critically on the upstream (field delivery point) price achieved for gas: that depends on how much of the ultimate gas price to consumers goes to owners of lower-taxed midstream and downstream facilities.

- **Transfer prices** into pipelines and processing plants require transparent formulas using international experience; any shift of revenue to these facilities, beyond the minimum necessary, requires clear justification.
- **The general tax system**, and not just production-sharing, makes a difference to revenue generation: rules on debt finance, gains on sales of petroleum rights, capital allowance rules, tax treaties, and models for transfer price rulings all need attention.
- **Participation:** State participation may limit the scope for imposing taxes (because it already imposes a “tax cost” on companies), and if it requires government contributions of cash or assumption of risks (guarantees to gas buyers or to lenders). Forms of state participation therefore need evaluation as part of the fiscal terms.
- **Neutrality among uses of gas:** the fiscal regime should not distort decisions about whether to use gas onshore or for export where one or other is intrinsically more efficient. Thus fiscal incentives for a LNG export project, for example, should not divert gas from domestic use.

5. Unbundling short from medium to long term gas issues

The prospect of large export projects from deep water gas should not divert attention from immediate opportunities to increase gas use. Can on-shore and near-shore gas address adequately domestic demand including electricity? Should offshore gas be for export only?

- **Near-shore gas fields** can help in a short term solution to the energy crisis. It requires further appraisal of gas reserves, increased production capacity in the gas fields and a credible gas purchaser. Then additional gas could reach the (power) market in two to three years.

- **Priority actions** include: to develop a financial solution for the arrears TANESCO has built up and the deficit it will continue to create over the near future; put a policy and managerial framework in place to ensure that TANESCO will (continue to) be a credible gas purchaser; and agree terms with the partners in the gas field that give incentives for further appraisal and increased production capacity.
- **Gas discoveries in offshore deep water** provide an opportunity for inclusive growth. Early stage exploration suggests high, but uncertain, volumes in place. These volumes still require further testing and appraisal to determine recoverable reserves. The high cost of developing these reserves, and expensive transport to market infrastructure can only be justified by a large, stable and long-term market with high netback values. The domestic market in Tanzania does not yet meet these qualifications. Given global commodity market conditions, the most feasible market to serve as an anchor for offshore gas development is LNG export, for instance East Asia. The minimum configuration for LNG export is a two-train LNG plant development that requires approximately 15 Tcf of gas over the lifetime of the plant. First gas revenues may be expected earliest ten years from now and could last for a period of approximately twenty-five years. Such an export project would be the foundation for development of additional gas reserves, more of which could then find a market in Tanzania. Sequencing these actions requires gas policy, gas planning, and the necessary new legislation.

B. Actions to start now with long term benefits to the country

1. Steering clear of “Dutch Disease”

It will be important to take actions aimed at alleviating the “Dutch Disease” – rapid appreciation of the real exchange rate (through inflation or nominal appreciation) that drives out other exporting and import-competing industries. Such actions include close monitoring of debt, fiscal and monetary conditions, inflation and the real and nominal exchange rates. Rapid real appreciation will take hold if spending rises faster than the economy can absorb and, especially, if the balance of that spending is at first heavily tilted towards consumption (driven especially by wage rises, rapid increases in the government or parastatal payroll, and subsidies. “Mortgaging the future” by borrowing in advance of both revenues and the development of public investment capacity poses a special danger. The priorities that follow are important in themselves, and for avoidance of Dutch Disease and other macroeconomic disequilibria arising from a sudden influx of revenues.

2. “Invest in investing”

Successful investment of gas revenues, and in spin-off businesses, requires preparedness – “investing in investing”. Investing in investing involves building the capacity to invest efficiently and profitably through public financial management, public investment management, and a demand-driven human capital accumulation. Also, the capacity in various government organizations needs to be strengthened to deal with the growing work load (increased number of licenses) and complexity (deep water, LNG, massive investment and revenues) in a timely fashion.

Strengthening public financial management. Both macro-economic policies and institutional quality are likely to be a crucial transmission channel between natural resource and long-run growth. Fiscal institutions, including sound Public Financial Management systems, and strong legislative frameworks should be in place to support sound fiscal policies. In the absence of strong institutions, governance challenges are greater, undermining the feasibility of the policy frameworks, and increasing the likelihood of failure. Setting-up a robust system in anticipation of gas revenues and potential increase in public investments is therefore critical.

Increasing efficiency and quality of public investments. Resource Rich Developing Countries (RRDCs) that fail to harness their resources share two characteristics. First, they tend to consume most of the revenues from natural resources, exhibiting low savings/investment rates and a large

infrastructure gap. Second, when they do scale-up investment, they pay little attention to efficiency and quality of investments. Across the Africa region, Public Investment Management (PIM) systems continue to suffer from deficiencies including, among others: (1) Insufficient evaluation and screening of public investment projects prior to selection; (2) Absence of multi-year allocation of the investment budget; (3) Deficiency in monitoring of project implementation; (4) Lack of focus on maintenance and replacement expenditures; (5) Low rate of public investment project completion; and (6) Lack of effective institutional coordination and project oversight. RRDCs are particularly vulnerable to those challenges given the increased revenue flows. A robust PIM system would ensure sound planning, formulation, allocation and supervision of investment projects. PIM therefore represents a critical area where a mix of diagnostic work, technical assistance can help countries strengthening their capacity to invest efficiently.

Investing in human capital formation, and improving human development indicators.

During oil and gas booms, the demand for a wide array of low-skilled, skilled, and highly-skilled jobs across many sectors increases. Specific measures are needed to maximize jobs for nationals through training, and (eventually) to use the revenue from the oil and gas sector to undertake long-term investments in human capital. Central to both propositions is the need for management of natural resources to go beyond the traditional thinking of “a right to extract in return for an obligation to pay royalties and taxes. A strategy to maximizing jobs for nationals includes preparing qualified nationals for jobs in the gas industry (labor supply of skilled nationals) and focusing on binding or incentivizing companies to employ and train nationals through contractual obligations and incentives (enhancing labor demand for nationals).

By contrast, without specific measure most employees in the oil and gas sector could be “fly-in-fly-out” foreigners, leaving nationals with opportunities only for lower-paid jobs, such as day-laborers, security personnel, chauffeurs, and so forth. A lack of good opportunities for local employees increases perceptions of income-inequality, reduces support from local communities and increases the risk of civil strife. Sizeable skills gaps have been identified in the professions demanded by the natural resource sector, including auxiliary services such as hospitality. The gaps include engineers (civil, mining, chemical and production) as well as project managers and graduates of earth sciences (geologists, physicists, and chemists). Skills gaps are also pervasive in skilled trades, such as electricians, machine operators, bricklayers, carpenters, and various forms of technicians.

Building human capital requires quality education, vocational training and on the job training. These should address closely analytical, practical and project, program implementation skills development, covering the entire value chain. Engineering skills in the Upstream are needed and further skills could be developed through synergy with existing mining sector education, drawing from well-established international education and training programs and relying on existing programs implemented by operators active in the Country. Environmental training and softer skills should be addressed as these aspects are not well represented in current curricula.

3. Investing in domestic infrastructure as priority

Once capacity is in place, Gas revenues should be used primarily to promote *sustained, inclusive economic development* through enabling and maintaining *high levels of investment* in the country. The priority in scaling-up investment should be in areas that offer the opportunity to “break the trap of low private investment”. This includes expansion of a reliable energy supply network and lifting of transport constraints for goods and people. The city and port of Dar es Salaam would be the place to start. Public investment should not be limited to physical capital investment.

4. Adapting the institutional and governance frameworks

Building on the short-term establishment of a coordination mechanism to drive “whole of government” work on gas development, design a longer program to make agencies “fit for

purpose” in the new era. Gas will change Tanzania and its governance structure needs to respond. Some of the change will be fiscal or economic (do we need a separate fund to hold petroleum revenues?); gas revenues in any case need to be deployed in a medium-term fiscal framework and integrated with the budget. Some will have more to do with regulatory needs and interface with the private sector (should policy, regulatory and commercial functions of state entities in the energy sector be separated?)

5. Manage the environmental downside risks

From early assessments to communication and oversight, effective management is critical throughout the development and production chain to ensure good social and environmental performance. Gas companies are increasingly seeking efficiencies by contracting out project activities to specialized service companies; chains become more complex when governments impose targets for local procurement. Responsibility needs to be shared throughout the contracting chain, across company departments, and between government and industry, with space for independent third-party oversight.

Elements of an environmental and social management framework

- Apply **internationally accepted environmental principles** based on best practice for oil and gas exploitation (including decommissioning activities) that affect the marine environment. Apply tools such as:
 - ✓ ESIA of extraction, processing and infrastructure activities
 - ✓ Compensation schemes such as biodiversity offsets
 - ✓ ESI management plans (biodiversity as well as community engagement)
 - ✓ Require corporate environmental reporting according to international standards
 - ✓ Ensure technology development and transfer forms and integral part of gas developments to help build local capacity.
- Guide **strategic environmental and social assessments** being carried out before any development takes place, including initial prospecting and exploration.
- Conduct **environmental due diligence** on all actors and contractors in the development and production chain.
- Improve **Land and Marine Use Planning**. Identify and demarcate as well as protect critical zones (habitats, conservation areas, ecosystems). Invest in marine and coastal zone protection.
- **Implement and enforce regulations and controls** to keep operational discharges (e.g., oil, drilling fluid, gas emissions) as well as possible effects of contingencies (accidents, oil spills) to a minimum.
- Develop and assure practicability of an “**Emergency Response Plan**” applicable to all operations. Adapt to individual operations. Monitor and evaluate emergency management.
- **Planning for closure:** Request pre-planning for the decommissioning of facilities and restoration of developed areas to their natural state at an early stage of the gas developments.

Annex 6: Gas supply-demand scenarios

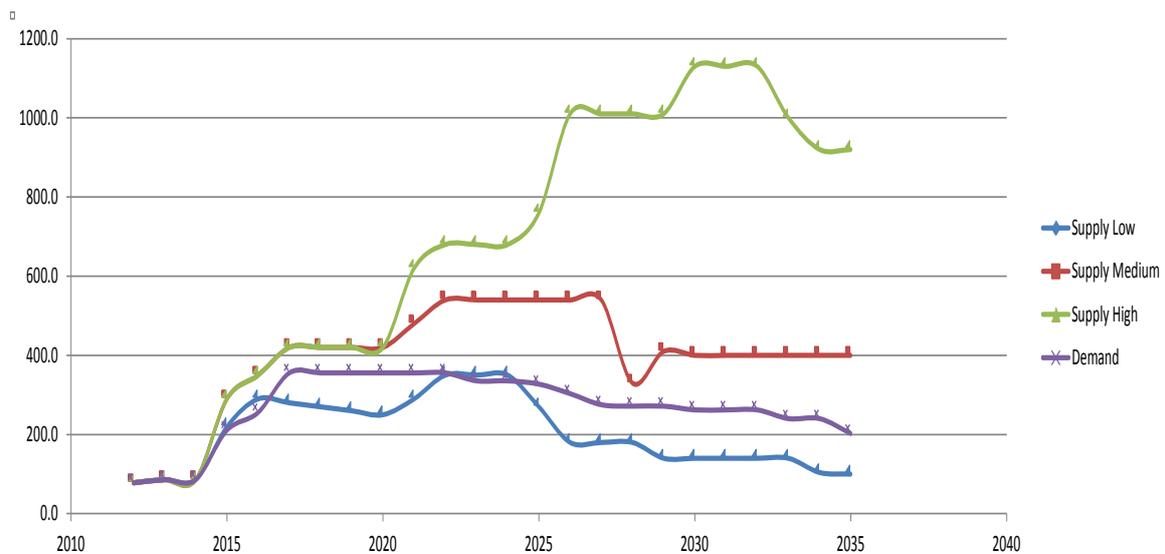
The availability of gas supplies to meet the demand for gas in existing and planned gas-fired power plants (based on the 2012 PSMP) is dependent on the size of natural gas reserves as well as on the timing of installed production and transportation capacities. Because of the inherent uncertainties associated with these numbers, alternative scenarios can be constructed to assess the supply of gas over the next few decades. These scenarios are based on information received from the Government and the private sector, which reflects current knowledge that will change over time when more and more accurate information will become available. The low case scenario accounts for existing proven reserves, while the two other scenarios assume different probabilities for the conversion of probable and possible reserves into proven reserves.

The scenarios show that the likelihood that gas reserves are sufficient to meet the expected demand is high, but that some downside risks need to be managed:

1. In case well productivities in the Mnazi Bay field are lower than anticipated based on current information, the production capacity of the field may not be sufficient to support demand up to 2022. To mitigate this risk the Government has two options: (i) plan to drill additional wells in the Mnazi Bay field. The Government could consider introducing a capacity charge in the GSA in addition to the normal gas volume charge in case these additional wells should prove to be sub-economic; (ii) install increased production capacity in the Songo Songo Main field where well productivities are proven to be high; this would however accelerate depletion of that field.

2. Under the assumptions of the Low Case scenario (proven reserves only) the Songo Songo Main field goes in decline around 2025. The Government and the operators of the various licenses will therefore have to agree well in advance on plans to appraise and develop prospects and discoveries, and on plans for producing fields (investments in data gathering and wells) to convert possible and probable reserves into proven reserves.

**Figure 3: Gas supply and demand for different scenarios
(in million standard cubic feet per day)**



Annex 7: IMF Relations Note

IMF Executive Board Completes Fifth PSI Review and First Review Under the Standby Credit Facility for United Republic of Tanzania, Press Release No.13/07, and January 9, 2013

The Executive Board of the International Monetary Fund (IMF) today completed the fifth review of Tanzania's economic performance under the Policy Support Instrument (PSI) and the first review under the precautionary Standby Credit Facility (SCF) arrangement. In completing the SCF review the Board made available for disbursement an additional SDR 37.3 million (about US\$57 million), bringing total resources available for potential disbursement under the arrangement to SDR 74.6 million (about US\$114 million).

The Board also approved the Tanzanian authorities' request for a waiver of non-observance of the continuous performance/assessment criterion on the ceiling on external non-concessional debt contracted or guaranteed by the government. The staff judged that the nonobservance would not materially affect the country's debt sustainability.

The Executive Board approved the precautionary 18-month SCF arrangement for Tanzania in July 2012 in an amount equivalent to SDR 149.175 million (about US\$228 million—see Press Release No. 12/252).

Following the Executive Board's discussion on Tanzania, Mr. Naoyuki Shinohara, IMF Deputy Managing Director and Acting Chair, made the following statement:

“The Tanzanian authorities are to be commended for their prudent policy management and progress in stabilizing the economy. The overall macroeconomic outlook remains favorable, with buoyant growth and declining inflation. Continued tight fiscal and monetary policies are crucial for securing sustainability.

“The planned tightening of monetary policy is appropriate in view of the remaining inflationary pressures. The authorities are committed to taking additional measures if needed to attain the targeted decline in inflation.

“The budget for 2012/13 appropriately balances the country's development and social spending needs with the debt-stabilizing objective. To preserve the fiscal consolidation path and avoid a build-up of arrears, any revenue shortfalls would be offset by cutbacks in recurrent and non-priority capital expenditures while safeguarding critical social spending. Any financial support to the energy sector would be accommodated within the existing fiscal framework. An action plan is being finalized to address the financial challenges facing the power utility, preventing costly power outages and large quasi-fiscal losses.

“Structural reforms under the program aim to secure fiscal sustainability and support a strong economic expansion in the medium term. Priorities include modernizing the VAT regime, strengthening public financial management, and improving debt management.

“Tanzania's large current account deficit and related vulnerabilities call for readiness to adjust policies in the event of external shocks, with a view to preserving macroeconomic stability and keeping the program on track. The floating exchange regime would continue to provide helpful flexibility in this regard.”

Annex 8: Country-At-Glance

12/18/12

Key Development Indicators

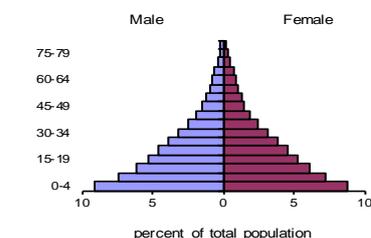
(2011)

	Tanzania	Sub-Saharan Africa	Low income
Population, mid-year (millions)	46.2	853	796
Surface area (thousand sq. km)	947	24,243	15,551
Population growth (%)	3.1	2.5	2.1
Urban population (% of total population)	27	37	28
GNI (Atlas method, US\$ billions)	24.5	1,004	421
GNI per capita (Atlas method, US\$)	530	1,176	528
GNI per capita (PPP, international \$)	1,440	2,148	1,307
GDP growth (%)	6.4	4.8	5.9
GDP per capita growth (%)	3.3	2.3	3.7

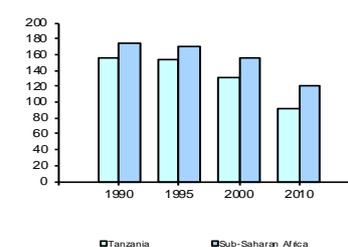
(most recent estimate, 2005–2011)

Poverty headcount ratio at \$1.25 a day (PPP, %)	68	48	..
Poverty headcount ratio at \$2.00 a day (PPP, %)	88	69	..
Life expectancy at birth (years)	55	54	59
Infant mortality (per 1,000 live births)	60	76	70
Child malnutrition (% of children under 5)	16	22	23
Adult literacy, male (% of ages 15 and older)	79	71	69
Adult literacy, female (% of ages 15 and older)	67	54	54
Gross primary enrollment, male (% of age group)	101	104	108
Gross primary enrollment, female (% of age group)	103	95	101
Access to an improved water source (% of population)	53	61	65
Access to improved sanitation facilities (% of population)	10	31	37

Age distribution, 2010



Under-5 mortality rate (per 1,000)



Net Aid Flows

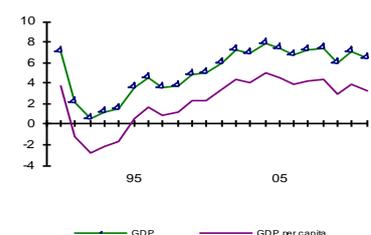
	1980	1990	2000	2011 ^a
<i>(US\$ millions)</i>				
Net ODA and official aid	676	1,163	1,064	2,961
<i>Top 3 donors (in 2010):</i>				
United States	28	39	25	457
United Kingdom	73	27	153	241
European Union Institutions	25	42	32	193
Aid (% of GNI)	..	28.6	10.5	13.1
Aid per capita (US\$)	36	46	31	66

Long-Term Economic Trends

Consumer prices (annual % change)	30.2	35.8	6.4	12.7
GDP implicit deflator (annual % change)	..	22.4	7.6	9.2
Exchange rate (annual average, local per US\$)	8.2	195.1	800.4	1,521.7
Terms of trade index (2000 = 100)	108	79	100	137

Population, mid-year (millions)	18.7	25.5	34.0	46.2
GDP (US\$ millions)	..	4,259	10,186	24,665
<i>(% of GDP)</i>				
Agriculture	..	46.0	33.5	27.7
Industry	..	17.7	19.2	25.1
Manufacturing	..	9.3	9.4	10.2
Services	..	36.4	47.3	47.2
Household final consumption expenditure	..	80.9	78.3	66.1
General gov't final consumption expenditure	..	17.8	11.7	16.4
Gross capital formation	..	26.1	16.8	36.7
Exports of goods and services	..	12.6	13.4	31.1
Imports of goods and services	..	37.5	20.1	50.2
Gross savings	..	7.7	13.2	20.5

Growth of GDP and GDP per capita (%)



1980–90 1990–2000 2000–11
(average annual growth %)

1980–90	3.1	2.9	2.8
1990–2000	..	3.0	7.0
2000–11	..	3.2	4.3
	..	3.1	9.1
	..	2.8	8.6
	..	2.6	7.8
	..	5.3	-2.1
	..	-8.8	22.9
	..	-1.1	13.0
	..	11.7	13.0
	..	4.7	16.7

Note: Figures in italics are for years other than those specified. 2011 data are preliminary. .. indicates data are not available.

^a Aid data are for 2010.

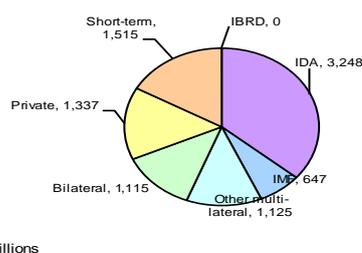
Development Economics, Development Data Group (DECDG).

Balance of Payments and Trade	2000	2011
<i>(US\$ millions)</i>		
Total merchandise exports (fob)	710	4,253
Total merchandise imports (cif)	1,587	10,166
Net trade in goods and services	-757	-2,945
Current account balance as a % of GDP	-4.3	-9.0
Workers' remittances and compensation of employees (receipts)	8	25
Reserves, including gold	-197	-128

Central Government Finance	2000	2011
<i>(% of GDP)</i>		
Current revenue (including grants)	9.5	16.4
Tax revenue	8.5	15.2
Current expenditure	9.9	19.2
Overall surplus/deficit	-4.8	-10.6
Highest marginal tax rate (%)		
Individual	30	30
Corporate	30	30

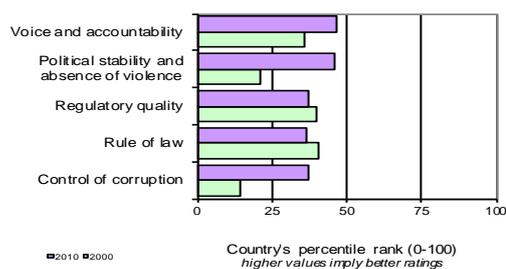
External Debt and Resource Flows	2000	2011
<i>(US\$ millions)</i>		
Total debt outstanding and disbursed	7,183	10,044
Total debt service	168	150
Debt relief (HIPC, MDRI)	2,969	2,503
Total debt (% of GDP)	70.5	40.7
Total debt service (% of exports)	12.4	2.1
Foreign direct investment (net inflows)	463	1,009
Portfolio equity (net inflows)	0	..

Composition of total external debt, 2010



Private Sector Development	2000	2011
Time required to start a business (days)	-	29
Cost to start a business (% of GNI per capita)	-	30.9
Time required to register property (days)	-	73
Ranked as a major constraint to business (% of managers surveyed who agreed)	2000	2010
Electricity	72.9	..
Access to/cost of financing	9.3	..
Stock market capitalization (% of GDP)	2.3	5.5
Bank capital to asset ratio (%)	..	..

Governance indicators, 2000 and 2010



Source: Worldwide Governance Indicators (www.govindicators.org)

Technology and Infrastructure	2000	2010
Paved roads (% of total)	8.6	6.7
Fixed line and mobile phone subscribers (per 100 people)	1	47
High technology exports (% of manufactured exports)	1.2	3.5

Environment

Agricultural land (% of land area)	38	40
Forest area (% of land area)	42.3	37.7
Terrestrial protected areas (% of land area)	27.0	27.5
Freshwater resources per capita (cu. meters)	2,344	1,930
Freshwater withdrawal (billion cubic meters)	..	..
CO2 emissions per capita (mt)	0.08	0.15
GDP per unit of energy use (2005 PPP \$ per kg of oil equivalent)	2.1	2.7
Energy use per capita (kg of oil equivalent)	393	451

World Bank Group portfolio	2000	2010
<i>(US\$ millions)</i>		
IBRD		
Total debt outstanding and disbursed	11	0
Disbursements	0	-
Principal repayments	4	-
Interest payments	1	-
IDA		
Total debt outstanding and disbursed	2,593	3,248
Disbursements	142	653
Total debt service	23	23
IFC (fiscal year)		
Total disbursed and outstanding portfolio of which IFC own account	43	58
Disbursements for IFC own account	43	58
Portfolio sales, prepayments and repayments for IFC own account	8	12
Portfolio sales, prepayments and repayments for IFC own account	4	5
MIGA		
Gross exposure	175	-
New guarantees	172	0

Note: Figures in italics are for years other than those specified. 2011 data are preliminary. .. indicates data are not available. - indicates observation is not applicable.

12/18/12

Development Economics, Development Data Group (DECDG).

Millennium Development Goals

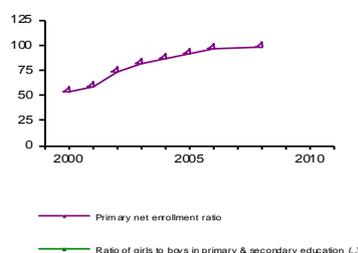
Tanzania

With selected targets to achieve between 1990 and 2015

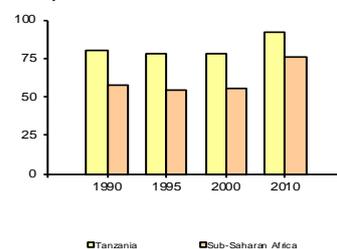
(estimate closest to date shown, +/- 2 years)

	Tanzania			
	1990	1995	2000	2010
Goal 1: halve the rates for extreme poverty and malnutrition				
Poverty headcount ratio at \$1.25 a day (PPP, % of population)	72.6	..	84.6	67.9
Poverty headcount ratio at national poverty line (% of population)	38.6	..	35.6	33.4
Share of income or consumption to the poorest quintile (%)	7.4	..	7.3	6.8
Prevalence of malnutrition (% of children under 5)	25.1	26.9	25.3	16.2
Goal 2: ensure that children are able to complete primary schooling				
Primary school enrollment (net, %)	51	49	53	98
Primary completion rate (% of relevant age group)	47	58	55	90
Secondary school enrollment (gross, %)	5	5	6	27
Youth literacy rate (% of people ages 15-24)	..	..	78	77
Goal 3: eliminate gender disparity in education and empower women				
Ratio of girls to boys in primary and secondary education (%)	97	97	..	..
Women employed in the nonagricultural sector (% of nonagricultural employment)	..	..	..	31
Proportion of seats held by women in national parliament (%)	..	18	16	36
Goal 4: reduce under-5 mortality by two-thirds				
Under-5 mortality rate (per 1,000)	155	155	130	92
Infant mortality rate (per 1,000 live births)	95	94	81	60
Measles immunization (proportion of one-year olds immunized, %)	80	78	78	92
Goal 5: reduce maternal mortality by three-fourths				
Maternal mortality ratio (modeled estimate, per 100,000 live births)	870	840	730	460
Births attended by skilled health staff (% of total)	44	38	36	49
Contraceptive prevalence (% of women ages 15-49)	10	18	25	34
Goal 6: halt and begin to reverse the spread of HIV/AIDS and other major diseases				
Prevalence of HIV (% of population ages 15-49)	4.8	7.8	7.3	5.6
Incidence of tuberculosis (per 100,000 people)	226	226	236	177
Tuberculosis case detection rate (% , all forms)	39	59	68	77
Goal 7: halve the proportion of people without sustainable access to basic needs				
Access to an improved water source (% of population)	55	55	54	53
Access to improved sanitation facilities (% of population)	7	8	9	10
Forest area (% of land area)	46.8	..	42.3	37.7
Terrestrial protected areas (% of land area)	26.6	26.9	27.0	27.5
CO2 emissions (metric tons per capita)	0.1	0.1	0.1	0.2
GDP per unit of energy use (constant 2005 PPP \$ per kg of oil equivalent)	2.2	2.1	2.1	2.7
Goal 8: develop a global partnership for development				
Telephone mainlines (per 100 people)	0.3	0.3	0.5	0.4
Mobile phone subscribers (per 100 people)	0.0	0.0	0.3	46.8
Internet users (per 100 people)	0.0	0.0	0.1	11.0
Computer users (per 100 people)	..	..	..	..

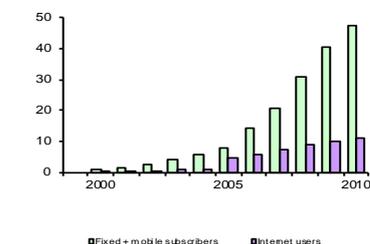
Education indicators (%)



Measles immunization (% of 1-year olds)



ICT indicators (per 100 people)



Note: Figures in italics are for years other than those specified. .. indicates data are not available.

12/18/12

Development Economics, Development Data Group (DECDG).

Annex 9: Key Economic Indicators and Exposure Indicators

A. Key Economic Indicators

Indicator	Actual			Estimate			Projected		
	2007	2008	2009	2010	2011	2012	2013	2014	2015
National accounts (as % of GDP)									
Gross domestic product ^a	100	100	100	100	100	100	100	100	100
Agriculture	30	30	29	28	28	28	27	27	26
Industry	23	23	24	25	25	25	25	25	26
Services	47	47	47	47	47	47	48	48	48
Total Consumption	87	84	83	79	82	77	75	74	74
Gross domestic fixed investment	29	29	28	32	36	39	39	38	37
Government investment	7	8	9	8	9	9	9	9	8
Private investment	22	21	20	23	27	30	30	29	29
Exports (GNFS) ^b	24	25	23	28	31	31	32	33	34
Imports (GNFS)	41	39	35	39	50	48	46	46	46
Gross domestic savings	13	16	17	21	18	23	25	26	26
Gross national savings ^c	15	19	20	24	20	25	26	27	27
<i>Memorandum items</i>									
Gross domestic product (US\$ million at current prices)	16826	20715	21368	22901	24665	28421	32114	35051	38408
GNI per capita (US\$, Atlas method)	410	440	490	520	530	570	..	..	720
Real annual growth rates (% , calculated from 01 prices)									
Gross domestic product at market prices	7.1	7.4	6.0	7.0	6.4	6.5	6.8	7.1	7.1
Gross Domestic Income	5.7	8.3	6.3	8.9	7.0	8.4	8.4	8.0	8.0
Real annual per capita growth rates (% , calculated from 01 prices)									
Gross domestic product at market prices	4.2	4.4	3.0	3.9	3.3	3.3	..	..	..
Total consumption	3.7	3.5	2.8	3.2	9.1	2.7	..	..	..
Private consumption	3.0	1.9	3.0	-69.8	10.8	2.5	..	..	..
Balance of Payments (US\$ millions)									
Exports (GNFS) ^b	3751	4834	5086	5743	7051	7918	9154	10361	11501
Merchandise FOB	2037	2916	3268	3805	4896	5528	6433	7359	8185
Imports (GNFS) ^b	5684	7542	7876	8365	9995	12961	13845	14588	15383
Merchandise FOB	4336	6021	6220	6596	8012	10617	11359	11968	12620
Resource balance	-1934	-2708	-2789	-2622	-2945	-5042	-4691	-4226	-3882
Net current transfers	526	888	940	883	995	923	904	922	939
Current account balance	-1567	-2110	-2124	-2047	-2213	-4331	-4297	-3930	-3581
Net private foreign direct investment	492	914	1100	988	1009	1630	1627	1926	2023
Long-term loans (net)	-8276	919	987	1443	847	1610	2416	1771	1194
Official	627	510	876	986	541	720	691	450	227
Private	-8903	409	111	457	307	890	1725	1321	968
Other capital (net, incl. errors & omissions)	9588	778	302	186	485	1213	526	532	692
Change in reserves ^d	-237	-501	-264	-570	-128	-121	-273	-298	-328
<i>Memorandum items</i>									
Resource balance (% of GDP)	-11.5	-13.1	-13.1	-11.5	-11.9	-17.7	-14.6	-12.1	-10.1
Real annual growth rates (YR01 prices)									
Merchandise exports (FOB)	..	..	..	..	..	..	..	..	..
Primary	5.7	39.5	10.0	16.7	28.3	14.5	..	..	..
Manufactures	25.0	113.8	40.9	-9.1	70.8	-13.1	..	..	..
Merchandise imports (CIF)	26.7	37.6	-0.6	10.7	19.1	39.7	..	..	..

(Continued)

Indicator	Actual			Estimate			Projected		
	2007	2008	2009	2010	2011	2012	2013	2014	2015
Public finance (as % of GDP at market prices)^e									
Current revenues	13.1	14.7	15.2	14.9	15.3	16.1	17.4	17.8	17.8
Current expenditures	15.7	13.7	16.6	17.7	17.8	15.5	17.7	18.0	16.9
Current account surplus (+) or deficit (-)	-2.7	1.0	-1.4	-2.8	-2.5	0.6	-0.3	-0.2	0.9
Capital expenditure	5.6	7.3	7.9	8.1	7.3	8.8	8.7	8.8	7.5
Foreign financing	3.4	2.9	3.4	4.3	2.9	3.9	6.8	4.4	2.8
Monetary indicators									
M2/GDP	26.7	26.9	26.8	30.4	32.3	29.9	31.3	32.7	34.0
Growth of M2 (%)	20.1	19.0	13.3	29.8	23.6	10.4	21.8	17.5	17.5
Private sector credit growth / total credit growth (%)	116.4	130.4	154.9	75.3	88.3	87.5	103.3	149.4	95.3
Price indices (YR01 =100)									
Merchandise export price index	134.7	167.1	168.0	183.6	212.0	222.0	232.9	234.1	235.3
Merchandise import price index	169.2	202.5	189.4	190.8	216.7	223.4	226.2	224.7	222.6
Merchandise terms of trade index	79.6	82.5	88.7	96.2	97.8	99.4	103.0	104.2	105.7
Real exchange rate (US\$/LCU) ^f	92.4	98.6	102.1	96.5	90.0	..	..	..	..
Consumer price index (% change)	7.0	10.3	12.1	7.2	12.7	15.6	9.8	7.4	6.7
GDP deflator (% change)	9.0	10.1	7.4	6.9	9.2	11.8	9.0	5.0	5.3
<p>a. GDP at factor cost</p> <p>b. "GNFS" denotes "goods and nonfactor services."</p> <p>c. Includes net unrequited transfers excluding official capital grants.</p> <p>d. Includes use of IMF resources.</p> <p>e. Consolidated central government.</p> <p>f. "LCU" denotes "local currency units." An increase in US\$/LCU denotes appreciation.</p>									

B. Key Exposure Indicators

Indicator	Actual			Estimated			Projected		
	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total debt outstanding and disbursed (TDO) (US\$m) ^a	5057	6012	7624	8987	10044	10248	10696	10830	10789
Net disbursements (US\$m) ^a	654	299	1372	1285	1177	..	..	..	..
Total debt service (TDS) (US\$m) ^a	46	43	59	67	72	125	115	101	91
Debt and debt service indicators (%)									
Total Debt Outstanding/Exports of GS	131.4	120.3	145.9	151.1	137.8	125.4	114.2	102.1	91.6
Total Debt Outstanding/GDP	30.1	29.0	35.7	39.2	40.7	36.1	33.3	30.9	28.1
Total Debt Service/Exports of GS	1.2	0.9	1.1	1.1	1.0	1.5	1.2	1.0	0.8
Concessional/Total Debt Outstanding	55.2	55.4	55.6	58.2	57.6	61.8	65.7	69.2	71.6
IBRD exposure indicators (%)									
IBRD Debt Service/public DS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IDA TDO (US\$m) ^d	1585	1971	2598	3248	3490	3937	4311	4551	4670
<p>a. Includes public and publicly guaranteed debt, private nonguaranteed, use of IMF credits and net short-</p> <p>d. Includes present value of guarantees.</p>									

TANZANIA

- SELECTED CITIES AND TOWNS
- ⊙ PROVINCE CAPITALS
- ⊕ NATIONAL CAPITAL
- RIVERS
- MAIN ROADS
- RAILROADS
- PROVINCE BOUNDARIES
- - - INTERNATIONAL BOUNDARIES

