

Evaluating the Case for Cash Transfers of Resource Revenues in Sierra Leone

Arvind Nair

Abstract

At 4.7 billion tons, the iron ore deposits discovered in the Tonkolili fields in northern Sierra Leone in 2009 are among the largest in the world. It is projected that iron ore exports from these mines could lead to a projected real GDP growth rate of 51% in 2012 with resource revenues increasing by 8% of GDP in the next three years. In light of the projected resource revenue influx, this paper examines the feasibility and potential benefits for Sierra Leone of instituting a broad-based cash transfer of resource revenues to its citizens, against the alternative strategy of spending the revenues towards re-building infrastructure.

This paper argues that spending resource revenues exclusively on infrastructure will weaken the accountability of the government towards Sierra Leonean citizens, and given the current mismanagement of public investments, likely lead to suboptimal outcomes. Alternatively, cash transfers of resource revenues have several potential advantages: a potentially significant boost in incomes for the average Sierra Leonean household and increased incentives for accountability of the government towards the citizens. Lack of political support might prove the most significant obstacle to implementation of broad based cash transfers, as the government has committed itself to an ambitious program of infrastructure development. However, with donor engagement and support, there exists some space for gradual implementation of cash transfers- initially, existing cash transfer schemes could be augmented with resource revenues and then scaled up.

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About the Author

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Preface

The discovery of large oil or mineral deposits in a developing country is potentially beneficial and, simultaneously, potentially calamitous. While this so-called resource curse is well established in the literature, solutions to counteract its corrosive effects remain highly elusive. CGD's Oil-to-Cash initiative is exploring one policy option that may address the root mechanism of the resource curse: using cash transfers to hand the money directly to citizens and thereby protect the social contract between the government and its people. Under this proposal, a government would transfer some or all of the revenue from natural resource extraction to citizens in universal, transparent, and regular payments. The state would treat these payments as normal income and tax it accordingly—thus forcing the state to collect taxes, fostering public accountability and more responsible resource management.

This background paper by Arvind Nair, commissioned as part of CGD's Oil-to-Cash Initiative, explores the potential benefits and drawbacks of establishing a system of distribution of iron ore rents in Sierra Leone. Nair argues that while there are implementation and political-economy challenges in distributing resource rents, the very real risks of corruption and inefficient infrastructure spending in Sierra Leone suggest that the idea should at least be explored. This discussion is particularly timely given the recent discovery of offshore oil, whose management will also represent an opportunity and a threat to Sierra Leone.

Todd Moss
Center for Global Development

At 4.7 billion tons, the iron ore deposits discovered in the Tonkolili fields in Sierra Leone in 2009 are among the largest in the world. These deposits have attracted significant investment of close to \$1.5 billion by African Minerals, a London based mining company, and Shangdong Iron and Steel, a major Chinese steel producer. Iron ore exports commenced in the fourth quarter of 2011, leading to a projected real GDP growth rate of 51% in 2012 with revenues increasing by 8% of GDP in the next three years (IMF 2011).

Resource revenues have not had a positive impact in Sierra Leone in the past. Revenues from alluvial diamonds were used by President Siaka Stevens to maintain an autocratic regime from 1968-1985. This was achieved through effective networks of extraction with private mining interests (mainly from the minority Lebanese diaspora community), whereby Stevens was guaranteed revenue from alluvial diamond mining in exchange for active state support to the mining companies (Reno 1995, Snyder 2004). Stevens was able to hand power over to his chosen successor; however, these networks of extraction did not endure past his reign. Private mining interests were becoming more powerful than the state, depriving the state of revenue and driving a deep fiscal crisis in the late 1980s (Snyder 2004). These chaotic conditions in the late 1980s helped lay the ground for the decade long civil war from 1991-2002 and proceeds from diamond mining were used by several rebel militias to sustain the fighting through weapons purchases and recruitment of cadres (TRC 2004).

The key policy question, in light of the new resource discovery, is how Sierra Leone can avoid the mistakes of the past and make resource revenues a force for positive change. This paper outlines one potential policy option, which is to distribute the resource revenues to the people through a system of cash transfers. Specifically, the paper will examine the potential scale and benefits of cash transfers including the boost in incomes for the poorest households in Sierra Leone and a potential increase in accountability of the government towards the people. The paper will also examine concerns regarding the appropriateness of cash transfers, given the need for public investment in infrastructure necessary for post-conflict reconstruction, and also evaluate the implementation constraints facing large-scale cash transfers in Sierra Leone.

In Section 2, this paper begins with a brief review of post war reconstruction in Sierra Leone, with highlights of the political and economic gains in the post war period. Section 3 reviews the current state of resource revenue collection in the country and outlines the estimated resource revenue influx in the future. Section 4 outlines options facing the government in utilizing the natural resource revenues. The potential scale and accountability benefits of cash transfers of resource revenues, as well as the technical and political feasibility of the approach, are evaluated in this section. Section 5 concludes.

Section 2: Political and Economic Gains in Post War Reconstruction

Approximately 100,000 people were killed, two million people were displaced, and several thousand refugees escaped to neighboring countries out of population of 5 million during the civil war in Sierra

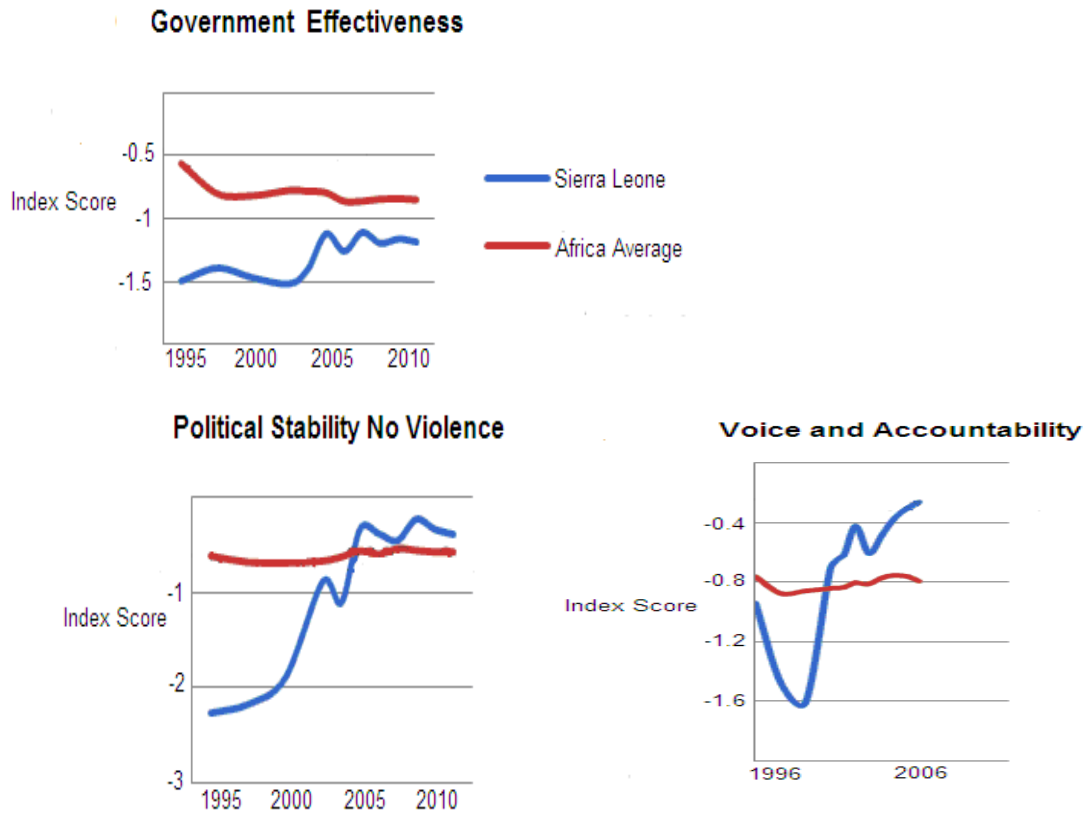
Leone (World Bank 2000). It is estimated that the economy contracted by approximately 4.5% annually during the conflict period (CIA 2009) and state revenues shrank to approximately 6% of GDP in 1998- the lowest in the world. Sierra Leone thus faced immense political, economic and fiscal challenges in post conflict reconstruction. However, with substantial external support, the country has made significant progress in political and economic reconstruction in the past decade.

2.1: Political Challenges: Peace Building and Mitigating the Risk of Further Conflict

Research in post conflict reconstruction clearly points to a substantial increase in the risk of further conflict in a post-conflict environment (building on the work of Collier et al. 2004). Sierra Leone has been successful in overcoming this risk of further conflict to emerge relatively stable and peaceful in the decade after the war. The presence of a sizable UN peacekeeping force of approximately 17500 soldiers until 2005, and a substantial Demobilization, Disarmament and Reintegration (DDR) program by the UN has been instrumental in securing the peace (Olonisakin 2008). Considerable material, institutional and security support from donors, including the United Kingdom, have also played a key role in peace-building with over 50% of the national budget in the immediate post war period being funded by donors.

The peace-building process has also been characterized by the building of political institutions, especially the re-introduction of multi-party democracy and holding of free elections. The first multi-party election was held in 2002, and despite misgivings about the fragility of the country, another election was held in 2007 and power was transferred peacefully between political parties. There has also been notable progress in the nature of governance in the country, as shown below by Sierra Leone's improvement, compared to the rest of Africa, on several of the World Bank's governance indicators including Voice and Accountability, Political Stability and Government Effectiveness (see Figure 1 below).

Figure 1: World Bank Governance Indicators: Sierra Leone versus Rest of Africa



Source: Kaufmann, Kraay and Massimo (2010)

2.2: Reviving the Economy

Sierra Leone's progress in economic reconstruction has been more modest than in the political sphere. The immediate post war years of 2003 and 2004 saw a short lived boom in growth, partly due to the extremely low base and also due to a large influx in aid through peacekeeping operations (IMF 2003). Since then, growth has been steady rather than spectacular, averaging 5% per annum. Some sectors of the economy have seen a revival, with the resumption of mining activities in bauxite and rutile and the export of more diamonds through official channels. Electricity production has also seen a significant boost with the commissioning of a long delayed hydroelectric project (Bumbuna Dam) that has finally seen an improvement in the supply of electricity in the capital. The next three years are set to see a growth spurt with an estimated 51% GDP growth in 2012, driven largely by iron ore mining (IMF 2011).

However, Sierra Leone remains one of the lowest ranked countries on the Human Development Index. An estimated 70% of the working age population is unemployed and close to 70% of the population is under the \$1 a day extreme poverty line (WDI 2010). The country's maternal mortality ratio of 970 per 100,000 live births is amongst the highest in the world, at over three times the average for all

developing countries (WDI 2010). The challenge facing the country is, thus, to translate the potential mining driven growth spurt in the next few years into jobs and material benefits for the population. A key element in this relationship will be the ability of the state to raise revenues and to spend them efficiently.

2.3: Revenue Stagnation in the Post War Period

Revenue capacity of the state has arguably seen the least gains among all the dimensions in post conflict reconstruction. Domestic revenue collection reached a post-war high of 15.3% of GDP in 2003, on the back of relatively strong customs and excise revenue collections of 10.3% of GDP (see Table 1 below). However, revenue collections have since stagnated at 12-13% of GDP, driven by a steep fall in import duties and excise revenues (to approximately 4.2% of GDP in 2010) without a commensurate increase in income and corporate tax collections. Resource revenues have also stagnated at less than 0.5% of GDP.

The revenue to GDP ratio of 12-13% in Sierra Leone does not compare favorably to the Sub-Saharan African average of 18% of GDP but is comparable to other post-conflict countries such as Liberia and Mozambique (IMF 2011). However, worryingly, unlike Sierra Leone, other post conflict countries have shown an upward, rather than a downward trend in revenue collection in the post war period.

Domestic revenues have stagnated despite significant de jure policy and tax administration reforms enacted by the government in the past decade. The Income Tax Act was enacted in 2000 to create a uniform tax code and to replace the Income Tax laws enacted during the military administration in 1994. The National Revenue Authority (NRA) was created in 2002, which unified all the revenue collecting departments – notably the Income Tax and the Customs departments – and involved significant staffing changes, with close to half the department replaced with younger and more qualified recruits (Tax Justice Network 2011).

Why have these reforms, specifically the formation of the NRA, not translated into revenue gains? There are several potential causes, including a narrow tax base, reduction of tariffs, corruption within the revenue authority and a stagnation in resource revenues.

- ➔ *Corruption within the Revenue Authority:* A potential cause has been increasing corruption within the revenue authority. The NRA was perceived, along with the Police, to be the most corrupt public institution in a Corruption Perception Survey commissioned by the national Anti Corruption Commission (ACC 2010). Accounts of several large taxpayers have not been audited in the past few years, and corruption allegations and investigations of officials in the NRA are commonplace: in fact, the Commissioner of the NRA was suspended in 2009 on allegations of corruption (Tax Justice Network 2011).
- ➔ *Narrow Tax Base:* Another potential constraint for revenue collection is the narrow tax base in Sierra Leone with over 90% of corporate taxes being collected from the 20 largest companies,

and less than 2% of the population paying any form of income tax (Tax Justice Network 2011). The introduction of a Goods and Services Tax in 2010 has broadened the tax base to a limited extent, but in order to raise revenue efficiently, significantly more taxpayers would have to be brought into the fold.

- ➔ *Decrease in Tariffs:* Revenue stagnation has been especially marked in customs and excise related revenues and in resource related revenues. The fall in trade related revenue can be attributed in part to a reduction in tariffs on account of signing of trade treaties, as in other countries in Sub Saharan Africa, but is also driven by increasing corruption among customs officials and the frequent granting of discretionary duty waivers by the Government (Tax Justice Network 2011).
- ➔ *Stagnation of Resource Revenues:* The stagnation in resource revenues in the post war period is especially surprising given the resumption of mining and exploration activity in rutile, bauxite, diamonds and iron ore. The next section explores the reasons for the stagnation in resource revenue collection and outlines the prospects for resource revenues in the near future on account of increased mining activity.

Figure 2. Composition of Revenue

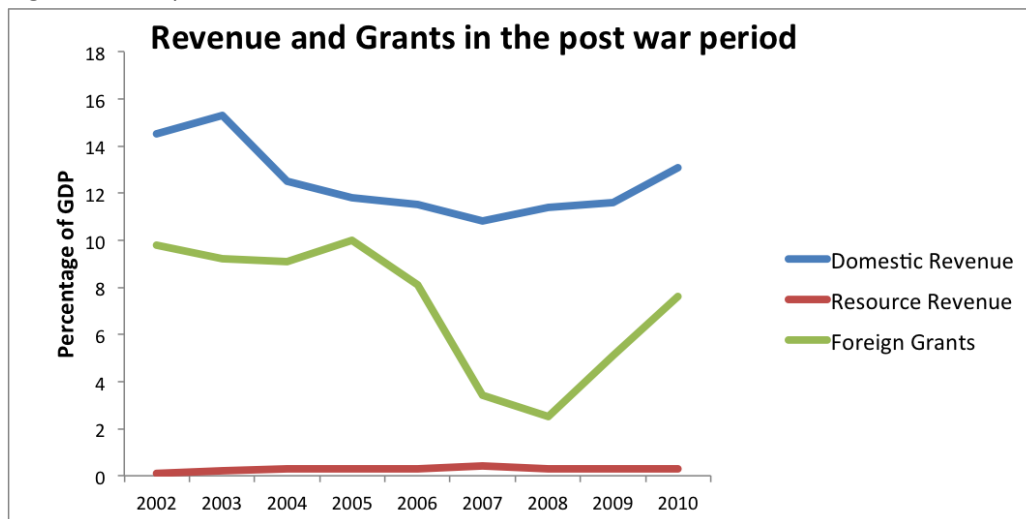


Table 1. Post War Revenue Profile

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	% of GDP								
Total Revenue and Grants	24.3	24.5	21.6	21.8	19.6	14.2	13.8	16.8	20.6
Domestic Revenue	14.5	15.3	12.5	11.8	11.5	10.8	11.4	11.6	13.1
Income and Corporate Tax	3.8	4.1	3.4	3.3	3.2	2.9	3.4	3.3	4.0
Goods and Services Tax (since 2010)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Customs and Excise Revenues	9.8	10.3	7.8	6.7	6.5	6.2	6.2	6.5	4.2
Resource Revenues	0.1	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3
Other Non-Tax Revenues	0.8	0.8	1.1	1.6	1.5	1.3	1.5	1.5	1.3
Foreign Grants	9.8	9.2	9.1	10.0	8.1	3.4	2.5	5.1	7.6

Source: GoSL Fiscal Data and IMF Staff Reports

Section 3: Resource Revenue Stagnation and Future Potential

Resource revenues have stagnated at close to 0.3% of GDP in the post war period—just 2% of the total domestic revenue collected by the government—despite the resumption of significant mining activity, especially in diamonds, rutile and bauxite. The ratio of resource revenue to total domestic revenue collected in Sierra Leone is the lowest among natural resource exporting countries (IMF 2011). Even accounting for lower resource endowments compared to other natural resource exporters; this suggests a combination of excessively low revenue tax rates and significant weaknesses in enforcement.

The mining revenue profile (Table 2) indicates that royalties have been an insignificant part of mining revenues (although there has been some improvement in the last two years), and the bulk of mining related revenues accrue from the issuing of licenses. Disaggregated data on corporate taxes on profit paid by particular mining companies is unavailable. However, since corporate taxes as an aggregate are not significant, it would suggest that corporate taxes are not significant for mining related activities either.

Table 2. Resource Revenue Profile

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Mineral Resource Revenues (Central Government)	0.88	1.19	2.70	3.49	4.96	6.24	6.10	5.23	6.06
Royalty Collections	-	-	-	0.68	0.73	0.78	0.74	0.50	0.76
Exploratory and Mining Licenses	0.88	1.19	2.70	2.81	4.22	5.46	5.36	4.72	5.30
Nominal GDP	714	272	998	1,200	1,444	1,672	1,915	1,671	1,906

Note: All figures are in millions of dollars.

Source: GoSL Fiscal Data and IMF Staff Country Reports.

Sierra Leone's weakness in resource revenue collection is potentially driven by multiple factors, including the underreporting of profits by mining companies, increased smuggling and extensive tax concessions in mining agreements.

- ➔ *Cooking the Books:* Profits are significantly underreported by mining companies in Sierra Leone, and according to the National Advocacy Coalition on Extractives (NACE), a prominent civil society organization involved in mining oversight, no mining company is currently reporting a profit or has reported a profit in the last three years despite rising mineral prices. Mining company accounts are not audited on account of weak audit capacity and potential corruption among mining officials, and thus, collections from corporate taxes on profits from mining companies is negligible.
- ➔ *Smuggling:* Extensive smuggling, especially of diamonds, also depresses the collection of resource revenue. The International Crisis Group estimates that over half (\$100 m in 2005) of diamonds mined are smuggled out of Sierra Leone through porous land borders with Guinea and Liberia. In fact, diamonds are smuggled as far as Gambia, which is now recording diamond exports despite not having any diamond mines (NACE 2009).
- ➔ *Extensive tax concessions:* All mining contracts signed before 2010 are governed under different laws/agreements that were negotiated individually and often with a lack of transparency. Typically, these processes have led to agreements with significant tax holidays (in one case a 30 year tax holiday for the mining of rutile) and exemptions from royalty payments for a specified period (typically 8-10 years).

The country enacted a Mines and Minerals Law in 2010 that attempts to provide a clear and transparent regime for regulating mining. It stipulates that all mining contracts include a minimum royalty rate of 6% on precious metals (and up-to 15% on certain high value diamonds and gold), and corporate tax on profits of 25%. However, agreements signed before 2010 supersede the mining law, which implies that, in effect, the current mining activity in Sierra Leone is not covered under the provisions of the law. In fact, the major mining agreement for

the Tonkolili iron ore fields was signed just weeks before the Mining Act was enacted in 2010, and the royalty was pegged at 3% far below the provisions of the law (although there are some signs that this agreement might be renegotiated) (Economist 2010).

3.1: Future Resource Revenue Potential

Despite current challenges in collection, resource revenues could still be very significant in the medium to long term given the scale of new investments especially in iron ore mining. Iron ore has the potential of replacing diamonds as Sierra Leone's main mineral export. In 2009, African Minerals, an exploratory company announced a significant high quality iron ore deposit of 4.7 billion tons in the Tonkolili district in northern Sierra Leone. The government signed a 65-year mining agreement with the company in 2010, with the expectation that it could lead to job creation and an exponential increase in resource revenues in the near future. Further iron ore mining agreements, for smaller but still considerable iron ore deposits, have also been signed with London Mining and the South African Cape Lambert mining company.

IMF estimates suggest that this surge in iron ore mining could lead to a 10-fold increase in Sierra Leone's exports and a potential doubling of real GDP growth in the next three-five years. However, the exponential increase in exports will not yield commensurate revenue gains as agreements signed by the government and iron ore mining companies feature generous tax holidays (for instance, a 25% corporate tax rebate for African Minerals for the first five years of operations) and some significant royalty concessions (in the case of London Mining, an exemption from royalties when in a tax loss position) (Economist 2010).

These concessions notwithstanding, conservative estimates are that iron ore revenues from royalties alone could increase to \$116 million annually by 2015—an increase in the revenue to GDP ratio of as much as 8% of GDP (IMF 2010). These estimates also do not include the potential revenues from oil exports that may be realized in the next five to ten years. In 2009 and 2010, a consortium led by Anadarko Petroleum, a U.S. based petroleum exploration company, discovered oil reserves off the coast of Sierra Leone estimated at 450 million barrels. Preliminary estimates by the Association of Journalists on Mining Extractives, a civil society organization, suggest that oil revenues could be as much as \$100 million (equivalent to projected iron ore revenues) if and when exports commence. However, this estimate is subject to considerable uncertainty, as the commercial viability of the oil find is still in question and significant investment related to the extraction of oil is yet to commence.

Section 4: Cash Transfers: An appropriate and feasible option for Sierra Leone?

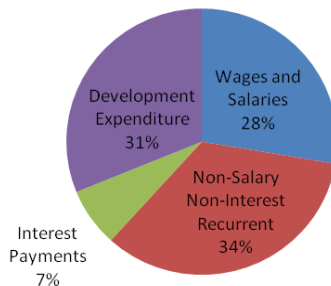
Sierra Leone has no special provisions in place to manage the potentially large inflow of resource revenues of close to 8% of GDP. According to the Minerals Act, revenues accruing from the mining of iron ore, rutile, bauxite, and gold are to be transferred to the central consolidated fund and allocated through the standard budgetary processes.¹

As indicated in Figure 2 below, the majority of budgetary expenditure in Sierra Leone in the past two years has been directed towards so-called “development expenditure” (including spending on capital projects as well as social safety nets and input subsidies for farmers) with the share of development spending rising significantly in FY 2010. This is followed closely by spending on wages and salaries, but the share of spending on wages and salaries has, in fact, fallen from a post war peak of 35% in FY 2007 to 26% in FY 2010 in line with efforts to reform payroll and remove ghost workers from the civil service (Pay Reform Report 2011).

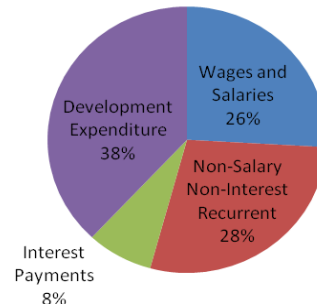
If this spending pattern holds, it is likely that the bulk of the resource revenue influx in the budget will not be channeled towards spending on wages and will instead be channeled towards development expenditure and specifically towards investment in infrastructure in roads, energy and water in line with the priorities of the current president, Ernest Bai Koroma.

Figure 2. Sierra Leone Expenditure Profile (FY2009 and FY2010)

FY 2009 Expenditure Profile



FY 2010 Expenditure Profile



Source: GoSL Fiscal Data

¹ On account of the fractious history of diamond mining in the country, diamond revenues are treated differently and 25% is channeled back to mining area communities through the Diamond Area Community Development Fund (DACDF) created in 2003. The funds are transferred by the mining ministry to communities through the use of a formula that awards funds in proportion to the value of diamonds mined in the area. These funds are then allocated to development activities through a committee headed by “village leaders”. The fund has come in for criticism of elite capture and allegations of misappropriation, leading to its suspension in 2008 (Dupoy and Binningsbo 2010). It has since been reinstated in 2010, with more provisions of community oversight through meetings, but its efficacy cannot yet be evaluated.

4.1: Potential Pitfalls of Channeling Resource Revenues to Infrastructure

The president had made infrastructure rebuilding the central plank of his campaign manifesto in 2007 (the 'Agenda for Change') and the key thrust of the government's Poverty Reduction Strategy Paper. Key elements of his government's infrastructure plan include bringing electricity to all 10 major provincial towns in the next two to three years (at present only 2 of the 10 provincial towns have electricity), doubling the electricity generated and distributed in the capital Freetown, rebuilding over 400 km of key national highways and building over 4000 km of rural roads.

An independent costing of the infrastructure plan (IMF 2010) places the need for additional capital at 50-60% of GDP in the next three years. Only a fraction of this capital need can likely be met through donor funding as external budget support has been shrinking from the post conflict peak (see Table 1), and, since private capital is not yet significant in Sierra Leone, it is likely that the government will view the resource revenue influx as a means to finance infrastructure. This may seem appropriate given that only 1-5% of the population have access to electricity, less than 1% of the population has access to piped water and less than 8% of the country's roads are paved and in a good condition (World Bank 2011). The infrastructure deficit in the country has held back growth, and World Bank estimates suggest that, if this deficit is addressed, growth per capita could increase by up to 3.3% per year (World Bank 2011).

Despite the potential benefits, using resource revenues to address the infrastructure deficit may not be the best use of the revenues. Public investment in Sierra Leone is inefficient and compromised by non-transparent selection of projects, significant completion delays, as well as a lack of monitoring and impact evaluation (World Bank Public Expenditure Review 2010).² There are no transparent selection criteria by which infrastructure projects are chosen for funding and projects often enter the funding stage without proper appraisal, outside of the budget process and without sufficient scrutiny within the Cabinet or the Parliament (World Bank 2010). Almost all infrastructure projects in Sierra Leone suffer significant delays and cost overruns due to inefficiencies in procurement and administrative procedures and the frequent unavailability of cash to pay for projects (project costs are often significantly under-budgeted to fulfill the desire to include a large list of projects, which, in the presence of a fixed budget constraint, implies that costs for each project is artificially reduced). Apart from delays, ad-hoc monitoring and a lack of systematic evaluation of the progress of projects and their impacts also hamper infrastructure projects; at present, Sierra Leone lacks a well-resourced and staffed central project planning and monitoring office and has no monitoring offices in key infrastructure ministries such as road transport, energy and water (World Bank 2010).

² The Bumbuna Hydroelectric Project in the Northern Province is symptomatic of wider public investment failures in Sierra Leone. Initiated in 1975, it was completed only in 2009 with costs increasing several times over the initial budget and a history of corruption and stealing of power cables. The government also incurred significant debt in the course of the project (in foreign currency, thus increasing the burden) and was forced to sign a long-term maintenance contract with a private service provider on unfavorable terms in order to keep the dam operational. (World Bank 2011)

Directing resource revenues to infrastructure will make a meaningful dent in the infrastructure deficit only if significant reforms are undertaken in the management of public investments. However, the government's incentives to address the problems associated with public investment will likely diminish with the influx of revenues. More revenue could lead to more projects being introduced for political reasons, without recourse to technical feasibility. It could also increase leakages and waste during implementation of projects, as it might diminish the perceived need by government to rigorously monitor and evaluate projects since capital would be readily available.

4.2: Cash Transfer of Resource Revenues

Some have suggested that a better alternative to managing resource revenues would be to take all, or part, of the revenues and redistribute them to citizens through a universal cash transfer (Moss 2011; Moss and Young 2009). This could lead to a greater incentive for government to tax back some of the transfer, which, in turn, helps build a fiscal contract between government and citizens and strengthens the mechanisms through which the citizens can hold the government accountable (Moss 2011). This section will examine the potential scale and accountability benefits of a cash transfer scheme, as well as evaluate the technical and political feasibility of universal cash transfers in the Sierra Leonean context.

4.2.1: Potential Scale of a Cash Transfer Scheme

Resource revenues in Sierra Leone could increase to \$116 million annually by 2015, using a conservative estimate of the revenue potential from iron ore mining (IMF 2010). To put this number in perspective, this additional amount could potentially cover almost the entire wage bill for the government. If transferred directly, this amount could also modestly increase the incomes of the poorest and most vulnerable Sierra Leoneans.

According to the latest Sierra Leone Integrated Household Survey conducted in 2003/2004, the average annual per capita consumption expenditure is only \$290- less than a dollar a day. Assuming a 10% operational cost for a cash transfer scheme (in line with other public works schemes implemented in Sierra Leone), the potential resource revenue available for transfer could amount to \$105 million annually by 2015. Assuming that the population, currently estimated at approximately 5.97 million people, grows at the estimated growth rate of 2.4%, the annual per capita transfer is estimated at \$16 in 2015, which is close to 5.4% of mean annual per capita expenditure. The cash transfer will make a more significant difference to those residing below the extreme poverty line of \$216 annual expenditure (estimated at close to 40% of population) by boosting their spending power by close to 7.4%.

Table 3: Cash Transfers relative to Per Capita Expenditure

Estimated Population in 2015 (A)	6,567,584
Estimated Resource Revenue in 2015	\$116,000,000
Less Operational Cost (assumed at 10%)	\$11,600,000
Total Resource Revenue available for Cash Transfer (B)	\$104,400,000
Average Annual Per Capita Cash Transfer in 2015 (B/A)	\$16
Mean Per Capita Expenditure	\$290
Annual Cash Transfer as a % of per capita expenditure	5.4%
Extreme Poverty Line expenditure per annum	\$216
Annual Cash Transfer as a % of Extreme Poverty Line	7.4%

4.2.2: Accountability Impact of Cash Transfers

Moss (2011) has proposed two broad paths for increased accountability through cash transfers: by increasing the incentives for government to tax the citizens and by giving citizens strong incentives to monitor incoming revenue and management of natural resources.

Building Accountability through increasing incentives to tax

The transferring of resource revenues could potentially force the government to raise revenues from citizens through taxation (usually through direct taxation of incomes). This reliance on tax revenue could then potentially encourage the building of a fiscal contract between the government and its citizens: whereby the government is expected to improve delivery of services in exchange for the right to collect taxes. Literature for developed and developing countries (surveyed in Brautigam (2008) and in Devarajan et al. (2010)) links taxation (and implicitly, the building of such a fiscal contract) to an increase in budget accountability as well as better public spending efficiency.

Could these accountability benefits through increased levels of taxation materialize in Sierra Leone? A key constraint is the dysfunctional tax administration, so that even if the government were incentivized to collect revenue, it may be unable to do so in the short run. The revenue authority suffers from multiple challenges in terms of skilled staff, lack of audit capacity, lack of computerization of records, and not least of all, substantial charges of corruption (Revenue Modernization Plan 2008).

However, there has been some evidence that Sierra Leone's tax administration is capable of implementing new taxes that require significant technical and administrative capability. The government implemented a Goods and Services (GST) value added tax in 2010, and despite concerns of the potential challenges in implementation (especially with regard to registering new businesses and in computerizing tax administration), these tax streams significantly over-performed in regard to expectations and is likely to be a major tax revenue source for the country going forward (IMF 2011).

While the successful implementation of GST is yet to be studied in detail, it does suggest that, with resources and a political drive to improve revenue collection, weak tax administration need not be a binding constraint in terms of revenue collection. A potentially workable proposal, in the context of cash transfers of resource revenues, could be to earmark a proportion of resource revenues for building tax administration capacity along with more stringent (and enforced) targets for revenue collection.

Building accountability through citizen's monitoring of resource revenues

Cash transfers of resource revenues could give the citizens a greater incentive to monitor incoming revenues and management of the resources, as any mismanagement would now result in volatility in a direct source of their income (Moss 2011). In order for this accountability mechanism to be effective, firstly, citizens must be aware of how much resource revenue should be collected by the government in a given period and the formula that will determine how much should be allocated to them. Such information should also be available in a transparent and credible manner. Sierra Leone has made some progress in transparency in resource revenue collection through legislation and efforts made to become EITI compliant, and potential pressure from citizens invested in increasing cash transfers could provide further incentive to increase transparency.

Another aspect that is critical to ensuring further accountability is the ability of citizens to effectively pressure the government to change policy when faced with volatility in cash transfers. Such pressure could potentially be applied through the ballot box, the theory being that if cash transfers of resource revenues were to decrease due to mismanagement (instead of a credible reason such as a sharp drop in international mineral prices) then citizens could use the issue in the next election to vote the government out.

Elections in Sierra Leone, however, are not issue-based and are still patronage driven (DFID 2008). The two main political parties, the African People's Congress (APC) and the Sierra Leone People's Party (SLPP), draw their support from the northern and the southern provinces of the country respectively, and the focus of political campaigns is to satisfy key regional power brokers (such as paramount chiefs) who can then deliver votes from their community. This potentially weakens the accountability benefits of cash transfers, as the citizens may not vote on the issue to sanction the government.

However, citizen's pressure need not solely be exerted by the ballot box- it can also be driven through the media and through civil society groups that could act as pressure groups on the government. Media is relatively free in Sierra Leone with a number of newspapers and a network of community radio stations that cover most of the country. Civil society organizations focused on oversight of the mining industry such as the National Advocacy Coalition on Extractives, that already exist and have a national presence, could become more prominent with cash transfers. These organizations have been shown to be effective in the way (Dupuy and Binningsbo 2010) they exert pressure as their sustained criticism, audit of funds and community mobilization through community radio stations helped drive the

government to reform the process of diamond revenue distribution and redesign the Diamond Area Community Development Fund.

4.2.3: Technical Feasibility of Cash Transfers in Sierra Leone

Cash transfer schemes, of even a modest scale, have a relatively short history in Sierra Leone. These include a small scale direct cash transfer for elderly and other vulnerable groups run by the Ministry of Labour; and cash-for-work programs for unemployed youth and ex-combatants implemented with donor support (see Table 4 for more details on specific programs). These programs have reported misappropriation of funds (direct cash transfers run by the Ministry of Labor reported only 40% of the intended transfers actually received), as well as other implementation constraints including the lack of proper identification of beneficiaries, the lack of skilled personnel as well as an effective transaction mechanism (Holmes and Jackson 2007).

Identification of beneficiaries

Any cash transfer scheme has to begin with correctly and uniquely identifying the intended beneficiaries, which requires citizens to have unique national identification number. The government announced a National ID scheme in 2009, with biometric identification, implemented through the National Registration Secretariat (NRS) with support from the African Development Bank. Phase 1 of the project was supposed to have been completed by 2011 with the registration of citizens in Freetown and its environs, with a subsequent nationwide rollout and completion of the project by 2015. However, the implementation of the scheme has been stalled, as the procedure for the selection of the contractor has come under scrutiny and funds are yet to be released. It is as yet unclear when the project will potentially be completed.

Lack of skilled personnel

A key constraint in implementation of programs in general in Sierra Leone is the dearth of skilled personnel within the civil service, including accountants, auditors, economists and project managers (Pay Reform report). This has been driven in part by an exodus of professionals prior to and during the civil war, and also by the movement of professional to donor funded projects and agencies, which offer substantially higher remuneration.

Holmes and Jackson (2007), in an evaluation of cash transfer schemes in Sierra Leone in 2007, also point to a lack of skilled staff in all the key ministries, departments and agencies responsible for cash transfers as a key constraint in implementation. Such skilled professionals, including accountants, auditors, monitoring and evaluation officers, etc. will need to be hired, and in some cases, lured from the donor projects with extremely competitive wages in the short term which could increase the operational costs of a cash transfer scheme. Furthermore, several of these professionals will need to be trained, which would take significant resources and time.

Effective transaction mechanism to get the money to the people

A large cash transfer scheme will need to be underpinned by a transaction system that minimizes the ability of officials to steal the money en route to the beneficiaries. Rural areas, outside of some district towns, have a complete absence of banks or other institutions such as post offices/postal savings accounts, which has prevented direct transfers in the past. Instead, the government has relied on officials to physically deliver the money to the people, which in turn encourages corruption. An analysis of the government's subsidy for girl children in school, delivered to the beneficiaries through Ministry of Education district officials and local government officials, revealed that only 58% of the intended amount was actually reaching the girl children in primary and secondary schools (Public Expenditure Tracking Survey 2005).

There are some emerging alternatives to using the government machinery to distribute cash transfers, which might overcome some of these implementation constraints. One option that has been tried, with some success in Sierra Leone and in other conflict areas such as Somalia, is hiring private agencies that undertake the risk of transferring resources in exchange for a specified service fee. For instance, Sierra Leone hired KPMG, a private accounting firm, to pay school fees subsidy directly to primary and secondary schools, with a service fee of 10%. Subsequent follow up surveys revealed that the amount reaching the schools increased from 58% to 81.5%- subtracting the 10% service fee, this implied only a 8.5% loss (PETS 2005).

Another novel approach could be to take advantage of the rapid increase in cell phone penetration in Sierra Leone, as in the rest of Africa. The number of subscribers in the country has increased ten-fold from 113,000 in 2003 to a little over 1 million in 2008 covering nearly 20% of the population (ITU 2008). Furthermore, two operators offering mobile banking services are also operational in Sierra Leone, with a steadily increasing subscriber base of over 100,000 customers. Mobile banking services could potentially be used to implement the cash transfers but this approach could face major challenges. Cell phone use, even though widespread, is still concentrated in urban centres as rural areas do not have access to electricity and are not in the range of cell phone towers. Furthermore, for mobile money to be used, all users must be uniquely registered which is a challenge as cell phone SIMs are sold largely through small operators and are unregistered (although the national telecommunications regulator has now mandated operators to register all SIMs). However, despite the challenges, given the rapid growth in the area, it is not inconceivable that mobile money could become a viable option in the near future.

Table 4: Cash Transfer Programs in Sierra Leone

	Implementing Agencies	Target Areas	Target Groups	Time Period	Number of Beneficiaries	Issues
Pilot Direct Cash Transfer	Ministry of Labour	7 chiefdoms in North, East and South	Elderly and most vulnerable with no other means of support	Started in January 2007 as a pilot and still ongoing.	7,000	<ul style="list-style-type: none"> - Community targeted through social safety net committees. - Providing approximately \$60 every six months to beneficiaries. - Issues in terms of cost of implementation as money had to be physically taken to villages. - Ex-post assessment revealed significant leakage of funds with several beneficiaries receiving on average only 40% of the intended transfer.
Cash-for-Work Public Works Programme	National Commission for Social Action (NaCSA)	National	Unemployed Youth.	Started in 2007 with support from the AfDB and still ongoing with support from World Bank.	Unavailable, but reports suggest close to 10,000 youth may have benefited.	<ul style="list-style-type: none"> - Program provides wages up to \$2.50 a day for workers to build roads and conduct other public works projects in communities. - Projects identified by communities and targeting of beneficiaries done through chieftaincy level councils. - Program initially targeted for ex-combatants, but continued with World Bank money in order to mitigate impact of food crisis. - Ex-post assessment suggests that leakages in this program have been reduced significantly over time, and close to 40% of the total outlay is used for wages.
Cash-for-Work Youth Employment Scheme	Ministry of Youth and Children	National	Ex-combatants and unemployed youth	GoSL funded program. Discontinued in 2008.	5,000	<ul style="list-style-type: none"> - Providing \$46 a month for youth to conduct public works such as cleaning streets, agricultural work, etc. - Aim to provide at-risk youth with skills, and temporarily alleviate youth unemployment.

(Source: Holmes and Jackson (2007) and conversations with NaCSA officials)

4.2.4: Political Feasibility of Cash Transfers

A case can be made for cash transfers of resource revenues given the potential boost in incomes of the poorest Sierra Leoneans, coupled with possible accountability gains through stronger incentives for tax reform and greater citizen oversight on natural resource management. However, cash transfers may not be politically feasible as there is significant political pressure on the government to direct the resource revenue influx towards flagship infrastructure projects that have already been inaugurated with significant publicity.

These projects are a critical part of the ruling party's election strategy for the parliamentary and presidential elections as they are seen to be popular and are a means to reward supporters in its strongholds as well as garner votes in opposition strongholds. In this vein, major infrastructure projects initiated in the last year have included the electrification of the President's home town of Makeni, rebuilding of highways in the opposition held Eastern Province and the building of 20 km of roads in all the key district towns across the country. Another key political aspect of these projects is that they are publicized as "fully Government of Sierra Leone funded", with limited donor engagement, in order to further signal the government's initiative in rebuilding infrastructure. This implies that the significant funding shortfalls envisaged will likely not be covered through donor support, thus leading to even more pressure to direct resource revenues for this purpose.

Despite the political challenges, some opportunities for implementing cash transfers of resource revenues do exist in Sierra Leone, especially for the potential oil revenue that might be generated in the next 5-10 years. The magnitude and the timing of these oil revenues are still uncertain and thus, the interests against the scheme are less likely to be entrenched (Gilles 2010). Furthermore, legislation governing petroleum extraction is still at the drafting stage, and with sufficient pressure from external donors and civil society, provisions for implementing a cash transfer could be debated and included in the legislation. The role of donors in exerting pressure is significant since external budget support still constitutes a significant proportion of the national budget (see Table 1). This leverage could also be used to promote donor led projects akin to cash transfers and to scale up some existing cash transfer projects that are being implemented through the Ministry of Labor (see Table 4). If these projects are implemented efficiently and deliver some of the potential gains outlined in the paper, this could in turn increase the pressure on the government to implement cash transfers.

Section 5: Conclusion

How should the government of Sierra Leone use the substantial revenues generated from iron ore mining in the next few years? A universal and uniform cash transfer of these resource revenues to all Sierra Leoneans has the potential to boost incomes of the poorest households, reduce the ability of government to engage in patronage politics, and to promote accountability in service delivery (especially of infrastructure) by increasing the incentives for the government to engage in meaningful tax reform. Given the constraints in tax administration in Sierra Leone, cash transfers could be phased-in

gradually, with some of the resource revenues initially being directed towards improving the capacity of the revenue authority.

Drawing from the experience of previous small-scale cash transfer schemes implemented in Sierra Leone, there are technical constraints regarding national identification, lack of skilled personnel and an efficient and transparent transaction system, that need to be addressed for this scheme to be successful. Some of these implementation constraints could conceivably be addressed through the creative use of technology, especially mobile money schemes that have grown rapidly in the country in the last few years.

However, given the repeated electoral promises made by the President and the ruling party to engage in an ambitious infrastructure program, it is unlikely that a large scale cash transfer scheme will be considered in Sierra Leone. It is likely, instead, that the government will look to use the resource revenue influx to rebuild roads, power generation plants and transmission lines and other infrastructure devastated by the civil war and years of neglect. While this goal of infrastructure building may seem optimal from the perspective of promoting economic growth, given the current mismanagement of public investments characterized by lack of transparency in project selection, corruption and waste, this investment may not yield significant returns.

There could be some space, created with donor support, to implement smaller scale cash transfer schemes using a part of the resource revenues and scaling these up gradually. This gradual approach could still yield some of the potential longer-term accountability benefits of cash transfers and avoid some of the pitfalls in channeling resource revenues solely towards infrastructure.

References

- Agence France Press. 2011. "Sierra Leone could earn \$100m from oil: Report".
<http://news.yahoo.com/leone-could-earn-100-mn-oil-report-190040057.html>
- Anti Corruption Commission, Government of Sierra Leone. 2010. "National Public Perception Survey on Corruption."
- Awareness Times. 2010. "In Sierra Leone, Splash Money Transfer Goes Nationwide".
http://www.news.sl/drwebsite/publish/article_200514247.shtml.
- Brautigam, Deborah. 2008. "Introduction: Taxation and State Building in Developing Countries," in Brutigam, D., O. Fjeldstad, and M. Moore, eds. *Taxation and State Building in Developing Countries*. Cambridge: Cambridge University Press.
- Central Intelligence Agency. 2009. "World Factbook." CIA, Washington DC.
- Collier, Paul, Hoeffler, Anke and Soderbom, Mans. 2004. "On the Duration of Civil War." *Journal of Peace Research*.
- Cottarelli, Carlo. 2011. "Revenue Mobilization in Developing Countries." *International Monetary Fund Working Paper*.
- Department for International Development, UK. 2008. "Elections in Sierra Leone in 2007 and 2008". London, UK.
- Devarajan, Shanta, Le, Tuan M., and Raballand, Gael. 2010. "Increasing Public Expenditure Efficiency in Oil-rich Economies: A Proposal." Paper presented at Centre for the Study of African Economies 2010 Annual Conference.
- Dupuy, Kendra and Binningsbo, Helga. 2010. "The Diamond Area Community Development Fund: Implementing a Wealth Sharing Policy in Sierra Leone." *Paper presented at the 2010 session of the International Studies Association, New Orleans*.
- Economist. 2010. "Digging for Trouble." <http://www.economist.com/node/17581551>
- Extractive Industry Transparency Initiative. 2010. "The EITI Board decides EITI status of Eight Countries." <http://eiti.org/news-events/eiti-board-decides-eiti-status-eight-countries>
- Gillies, Alexandra. 2010. "Giving Money Away? The Politics of Direct Distribution in Resource Rich States." Center for Global Development Working Paper 231.

Government of Sierra Leone. 2011 (forthcoming). "A Multi Year Pay Reform Strategy from 2011-15."

_____. 2008. "National Revenue Authority Modernization Plan from 2008-12."

_____. 2007. "An Agenda for Change: Poverty Reduction Strategy Paper II."

_____. 2004. "Sierra Leone Integrated Household Survey 2003/04."

Holmes, Rebecca and Jackson, Adam. 2007. "Cash Transfers in Sierra Leone: Appropriate, Affordable and Feasible?" *Overseas Development Institute Cash Transfers Series, London.*

International Monetary Fund. "Sierra Leone: 2003 Article IV consultation." Washington DC.

_____. "Sierra Leone: 2009 Article IV consultation." Washington DC.

_____. "Sierra Leone: 2010 Article IV consultation." Washington DC.

_____. "Sierra Leone: 2011 Second and Third Reviews under the Extended Credit Facility." Washington DC.

International Telecommunications Union. 2008. "Mobile Cellular Subscriptions: ICT Statistics Database." http://www.itu.int/ITU-D/icteye/Reporting/ShowReportFrame.aspx?ReportName=/WTI/CellularSubscribersPublic&RP_intYear=2008&RP_intLanguageID=1

Kaldor, Nicholas. 1963. "Will Underdeveloped Countries Learn to Tax?" *Foreign Affairs.*

Kaufmann, Daniel, Kraay, Aart, and Massimo, Mastruzzi. 2010. "Governance Matters VII: Aggregate and Individual Governance Indicators, 1996-2009." *World Bank Policy Research Paper No 4978.*

Ministry of Finance, Government of Sierra Leone. 2005. "Public Expenditure Tracking Survey 2004: Report."

Ministry of Mineral Resources and Ministry of Local Government, Government of Sierra Leone. 2008. "Diamond Area Community Development Fund: Operational Procedures and Guidelines." Freetown, Sierra Leone.

Moss, Todd. 2011. "Oil-to-Cash: Fighting the Resource Curse through Cash Transfers." Center for Global Development Working Paper 237.

National Advocacy Coalition on Extractives. 2009. "Sierra Leone at the Crossroads: Seizing the Chance to Benefit from Mining." Freetown, Sierra Leone.

- National Registration Secretariat, Government of Sierra Leone. 2010. "Press Release: National Registration to be Expanded Nationwide."
- Olonisakin, F. 2008. "Peacekeeping in Sierra Leone: the story of UNAMSIL." Lynne Reiner Publishers, Inc. Boulder CO.
- Public Expenditure and Financial Accountability (PEFA) Assessment. 2007. "Sierra Leone: Public Financial Management Performance Assessment Report." Washington DC.
- Reno, William. 1995. "Corruption and State Politics in Sierra Leone". Cambridge University Press.
- Snyder, William. 2006. "Does Lootable Wealth Breed Disorder? A Political Economy of Extraction Framework." *Comparative Political Studies*. Vol 39, Number 8.
- Tax Justice Network. 2011. "Building a Fair, Inclusive and Transparent Tax System in Sierra Leone." Tax Justice Country Report Series.
- Tilly, Charles. 1975. "The Formation of National States in Western Europe." Princeton University Press: Princeton NJ.
- Transparency International. "Report on the Transparency International Global Corruption Barometer 2009." Berlin.
- Truth and Reconciliation Commission, Sierra Leone. 2004. "Witness to Truth: Report of the Sierra Leone Truth and Reconciliation Commission"
- UNDP. 2003. "Human Development Report 2003". www.hdr.undp.org/reports/global/2003.
- United National Environment Program. 2010. "Sierra Leone: Environment, Conflict and Peacebuilding Assessment."
- World Bank. 2000. "Sierra Leone: Disarmament, demobilization and reintegration (DDR)." Washington DC.
- _____. 2010. "World Development Indicators". Washington DC.
- _____. 2010. "Sierra Leone Public Expenditure Review". Washington DC.
- _____. 2011. "Sierra Leone's Infrastructure: A Continental Review". Washington DC.