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Sharing Natural Resource Revenues with Affected Communities: Policy Options for Mozambique

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Como em muitos outros países ricos em recursos, o desenvolvimento dos sectores de mineração e do gás natural em Moçambique tem levantado questões importantes e desafiantes sobre a distribuição das receitas geradas no sector, particularmente para as áreas afectadas pelas indústrias extractivas. Estima-se que Moçambique possui vastas reservas de carvão, gás natural e outros recursos minerais. Estes recursos, se geridos correctamente, têm o potencial de transformar a economia do país através da aplicação de ganhos que daí resultem no investimento em infra-estruturas e apoio aos esforços de diversificação da economia e redução da pobreza. Mas a alocação eficiente e equitativa das receitas provenientes dos recursos naturais é uma tarefa árdua e um desafio para os formuladores de políticas públicas, os quais frequentemente enfrentam pressões intensas na tomada de decisões visando canalizar parte do que se colecta aos territórios locais onde a exploração é feita. Neste contexto, estabelecer regras fiscais claras para a distribuição de receitas, incluindo a sua atribuição obrigatória às comunidades nas áreas afectadas, pode evitar que as mesmas sejam alvo de influência indevida, garantindo que uma parte significativa dos retornos da extracção de recursos seja destinada a compensar os custos sociais, ambientais e de infra-estrutura.

Em 2013, o Governo de Moçambique (GdM) alocou a sete localidades, em três províncias ricas em recursos naturais, 2,75% dos *royalties* gerados pelos sectores de mineração e de gás natural. Esta medida tem fundamento legal nos artigos 19 e 11 das Leis 11/2007 e 12/2007, ambas de 27 de Junho, que defendem a canalização de uma percentagem (embora não especificada) de *royalties* para o desenvolvimento comunitário das zonas de exploração de recursos extractivos. Esta disposição foi cumprida no orçamento de 2013 (artigo 7 da Lei do Orçamento 1/2013), que concretiza a política de partilha de receitas, uma vez que inscreve 2,75% das receitas dos *royalties* para ser partilhado entre as localidades de Topíto, na província de Nampula; Cateme, 25 de Setembro, Benga e Chipanda II, na Província de Tete; e Pande e Maimelane, na província de Inhambane. O pressuposto base é que essa partilha de receitas pode gerar benefícios significativos uma vez que fornecem um financiamento adicional aos governos locais para enfrentarem os principais desafios de desenvolvimento da comunidade. Assegurar que estes fundos sejam efetivamente geridos a nível local constitui, no entanto, um desafio significativo de longo prazo.

Enquanto o tamanho e a trajectória da transferência das receitas de recursos naturais são questões importantes de política fiscal, o impacto institucional destas transferências nos governos locais é uma preocupação premente. Actualmente, os recursos partilhados correspondem a uma percentagem relativamente pequena do total das transferências fiscais para os distritos ricos em recursos naturais. Após o início previsto das exportações do gás da bacia do Rovuma, no fim da presente década, as receitas fiscais poderão aumentar, mas se os formuladores de políticas nacionais continuarem a alocar 2,75% do total das receitas dos recursos naturais aos governos locais, estas transferências continuarão a corresponder a uma percentagem relativamente pequena do total do envelope de recursos dos distritos ricos em recursos naturais.

Uma vez que a extracção de recursos e a partilha das receitas são assuntos relativamente novos em Moçambique e considerando as limitações de capacidade dos governos locais, uma percentagem de transferência limitada pode ser desejável nesta fase inicial. Todavia, provavelmente será necessário aumentar a percentagem no futuro para atender tanto os objectivos de desenvolvimento do governo central assim como os objectivos locais das comunidades afectadas. A eficácia do incremento das transferências das receitas dependerá da eficiência na gestão das finanças públicas pelos governos locais. A criação de capacidade será, pois, essencial para o êxito da política de partilha das receitas, assim como a clarificação das funções e responsabilidades dos diferentes actores envolvidos na execução da despesa.

Por outro lado, acções adicionais serão necessárias para assegurar a participação significativa das comunidades locais na determinação das prioridades de desenvolvimento social e económico.

Embora altamente positiva, a política de partilha das receitas não constitui ainda uma regra fiscal. O governo actualmente determina o tamanho da alocação numa base anual com recurso ao poder discricionário dos formuladores de políticas nacionais, o que levanta preocupações sobre a transparência das decisões sobre as receitas. Este sistema também cria uma incerteza considerável nos governos locais relativamente aos seus envelopes de orçamento anual e desencoraja a implementação de projectos plurianuais. Para solucionar este problema, o governo poderia considerar o estabecimento de um sistema formal que determine a taxa dos r*oyalties* transferíveis para os governos distritais. Isto poderia ser alcançado através da fixação de uma percentagem a ser transferida, anualmente, num horizonte de tempo determinado, ou adoptando uma fórmula que reflicta o crescimento projectado do envelope de recursos provenientes dos *royalties*, a evolução das necessidades de gastos locais e a capacidade de implementação dos governos locais.

As receitas dos recursos naturais são instáveis devido a imprevisibilidade da produção e a volatilidade dos mercados internacionais de *commodities*; esta instabilidade pode ter impacto nos orçamentos nos níveis nacional e local. Como solução, o governo central poderia poupar as receitas "em excesso" durante o período em que os preços das *commodities* e os seus volumes de produção são altos e, em seguida, usar estas poupanças durante os períodos subsequentes de redução das receitas. Diversas variações neste sistema também são possíveis. Por exemplo, (i) o governo pode determinar o valor a ser transferido com base na média plurianual da receita, ao invés de receitas reais por ano; (ii) poderia estabelecer um valor mínimo a ser transferido, sobre o qual uma parte de eventuais receitas "em excesso" pode ser adicionado ou (iii) transferir as receitas recebidas no ano anterior.

É crucial minimizar a volatilidade para a eficácia da partilha das receitas. Enquanto o tamanho ideal da transferência das receitas de recursos naturais depende das circunstâncias de cada país, a estabilidade é crucial em todos os casos. Flutuações não controladas de receitas podem comprometer a previsibildade orçamental dos governos locais, prejudicando a eficiência da política fiscal e desencorajando a planificação do investimento plurianual a nível local e regional. Por outro lado, a transferência estável e previsível de recursos financeiros pode ajudar a alcançar os objectivos chave de desenvolvimento através da construção de capacidada administrativa a nível local e reforço do capital social nas comunidades afectadas pela extracção de recursos naturais. A transferência das receitas dos recursos naturais é mais efectiva quando complementada, por um lado, por esforços visando melhorar a selecção, implementação e avaliação de projectos e, por outro, por processos participativos de tomada de decisão e mecanismos locais de responsabilização e supervisão.

Atrasos no desembolso das receitas dos recursos naturais comprometem a implementação de planos de investimento a nível local. Esta situação levanta questões de fundo na gestão das finanças públicas, uma área crítica para uma economia emergente rica em recursos naturais. Embora uma revisão profunda da gestão das finanças públicas a nível nacional esteja para além do escopo desta Nota de Políticas, uma série de acções imediatas podem ser desenvolvidas pelo Ministério das Finanças no sentido de reforçar o sistema de alocação das receitas dos recursos naturais para as localidades-alvo, ajudando a garantir o desembolso oportuno de fundos.

Ao longo do tempo, o governo poderia considerar a expansão do sistema de partilha das receitas para incluir os distritos não-produtores de recursos naturais. Um programa nacional de transferências fiscais descentralizadas precisa de ser introduzido de forma gradual tendo em conta os constrangimentos relacionados com a capacidade administrativa, e as lições aprendidas com o actual sistema, o que é fundamental para o seu sucesso. No entanto, enquanto o alargamento do âmbito de aplicação do sistema de partilha das receitas oferece muitos potenciais benefícios, este não deve vir em detrimento das áreas produtoras de recursos naturais, que ostentam uma parte desproporcional dos custos envolvidos na extracção de recursos. A manutenção da equidade exigirá que áreas produtoras de recursos continuem a receber transferências suficientes para compensar os impactos negativos (sociais, económicos e ambientais) da exploração de recursos naturais.

Para promover os objectivos da política nacional, o governo deveria fornecer uma orientação clara sobre o uso das receitas dos recursos naturais para garantir a conformidade com as prioridades estabelecidas na circular 1/MPD-MF/2013 e, por outro lado, considerar o uso da abordagem de desenvolvimento dirigida à comunidade (*community driven development*) no sistema de partilha de receitas. A experiência inicial de partilha de receitas ilustra a extensão com que os padrões de gastos locais tendem a ser inconsistentes com os objetivos da política tal como definida na mencionada circular. A estratégia de desenvolvimento de Moçambique enfatiza a necessidade urgente de se resolver o défice enorme de infra-estruturas no país, e a importância de melhorar o acesso aos serviços e bens públicos básicos como um princípio orientador para os governos locais. Os governos provinciais deveriam ser motivados a ajudar as comunidades no estabelecimento de prioridades locais que sejam consistentes com este objectivo geral bem como na elaboração de planos de desenvolvimento de curto, médio e longo prazos. Cada comunidade deveria formular um plano para ultrapassar as lacunas locais de infra-estruturas e alcançar os objectivos específicos de desenvolvimento socioeconómico. Estes planos e metas deveriam ser regularmente revistos e actualizados a partir de reuniões consultivas envolvendo as partes interessadas, incluindo funcionários do governo local, líderes comunitários, representantes da sociedade civil e sector privado. Eles deveveriam ser integrados no Plano Distrital de Desenvolvimento, que fornece a base para alocar e gerir receitas dos recursos naturais a nível local. Para além da circular 1/MPD-MF/2013, que define os princípios gerais do sistema de transferência de recursos, o governo poderia considerar o uso de uma abordagem de desenvolvimento dirigida à comunidade para alocar e gerir as receitas de recursos naturais a nível local.

Os governos locais deveriam melhorar a transparência orçamental e prestação de contas bem como reforçar os mecanismos de orçamentação participativa. Governos locais nas zonas afectadas pela extracção de recursos deveriam publicar informação clara, acessível e detalhada sobre os recebimentos e uso de receitas advindas dos recursos naturais. Uma maior transparência iria facilitar a tomada de decisão participativa e promoveria a prestação de contas no uso das receitas dos recursos naturais. Enquanto a publicação *online* tornou-se padrão para os relatórios financeiros a nível nacional, as rádios comunitárias, reuniões públicas e outros canais de comunicação podem ser mais apropriados.

Finalmente, o governo deveria difundir, para todo o país, numa linguagem simples, orientações relacionadas com o uso das receitas de recursos naturais. Certos elementos da política de transferência parecem ser bem definidos e geralmente aderidos, tal é o caso do uso imperativo de receitas de recursos naturais para os gastos de investimento apenas. No entanto, o foco do governo central, relativo ao reforço de infra-estruturas socio-económicas, não é sempre consistentemente aplicado pelos governos locais. Estabelecer prioridades detalhadas de despesas para a transferência de receitas de recursos naturais permitiria uma maior coordenação em prol dos objectivos de desenvolvimento nacional. Equilibrar os interesses do governo central com a capacidade das autoridades locais para determinar suas próprias agendas de investimento é e será um desafio constante. A existência de uma orientação explícita sobre os tipos de infra-estrutura socioeconómica a serem financiados através das receitas dos recursos naturais pode ajudar a coordenar as decisões de investimento, mas o governo deve estar atento para assegurar que as comunidades locais retêm um grau significativo de discrição sobre o uso dos fundos transferidos.

EXECUTIVE SUMMARY

As in many other resource-rich countries, the development of Mozambique's mining and natural gas sectors has raised important and challenging questions regarding the distribution of resource revenues, particularly in areas directly impacted by the extractive industries. Mozambique is estimated to possess vast reserves of coal, natural gas and other mineral resources. If they can be managed properly, these resource reserves have the potential to transform the country's economy by financing much-needed infrastructure investment and supporting vital economic diversification and poverty reduction efforts. However, ensuring that resource revenues are allocated efficiently and equitably presents a serious challenge, as policymakers often face intense pressures to channel resource rents to influential constituencies. In this context, establishing clear fiscal rules for revenue sharing, including the mandatory allocation of rents to communities in affected areas, can help to shield resource revenues from undue influence and guarantee that a meaningful share of the returns to resource extraction is devoted to offsetting its social, environmental and infrastructure costs.

In 2013 the Government of Mozambique (GoM) allocated 2.75 percent of the royalties generated by the mining and natural gas sectors to seven localities in three resource-rich provinces. This policy builds upon two laws passed on June 27th 2007 (Articles 19 and 11 of Laws 11/2007 and 12/2007), which mandated that a certain (though unspecified) percentage of resource royalties be earmarked for community development in the areas in which extractive-industry projects are located. This provision was fulfilled in the 2013 budget (Article 7 of Budget Law 1/2013), which implemented the revenue-sharing policy by setting aside 2.75 percent of resource royalties to be divided between the localities of Topito in Nampula Province; Cateme, 25 de Setembro, Benga and Chipanda II in Tete Province; and Pande and Maimelane in Inhambane Province. This revenue-sharing policy is expected to generate significant benefits by providing local governments with the funding necessary to address key community development challenges. Yet ensuring that these funds can be effectively managed at the subnational level presents its own set of significant long-term challenges.

While the size and trajectory of resource revenue transfers are important fiscal policy issues, the institutional impact of these transfers on subnational governments is a more pressing concern. At present, resource revenue sharing represents a relatively small percentage of total fiscal transfers to resource-rich districts. After the projected start of gas exports in the Rovuma Basin toward the end of the decade revenue transfers are expected to increase, but if national policymakers continue to allocate just 2.75 percent of total resource revenues to subnational governments, these transfers will remain a small percentage of districts' overall resource envelope. Given that resource extraction and revenue sharing are both relatively new to Mozambique, and considering the capacity limitations of its subnational governments, a low transfer rate may be desirable at this stage. However, it will likely become necessary to increase the transfer rate in the future in order to meet both the central government's development objectives and the local goals of affected communities. The effectiveness of increased revenue transfers will hinge on the expenditure capacity and public financial management efficiency of subnational governments, and building this capacity will be essential to the success of Mozambique's resource revenue policies. No less important is the need to clarify the roles and responsibilities of the different actors involved in investing resource revenues, and further action will be required to ensure the meaningful participation of local communities in determining their social and economic development priorities.

Though a highly positive step, the revenue-sharing policy does not constitute a fiscal rule. The government currently determines the size of the allocation on an annual basis at the discretion of national policymakers, which raises concerns regarding the transparency of revenue decisions. This system also produces considerable uncertainty among local governments regarding their annual budget envelopes and discourages them from undertaking multiyear projects. To address these issues the government could consider establishing a formal system for determining the rate at which resource royalties are transferred to subnational governments. This could be achieved either by fixing a percentage to be transferred annually over a given time horizon, or by adopting a formula that reflects the projected growth of resource royalties, the evolution of local spending needs, and the implementation capacity of subnational governments.

Resource revenues are inherently unstable due to unpredictable production schedules and the volatility of international commodity markets; left unchecked, this instability can impact budgets at both the national and local levels. As a remedy, the central government could save excess revenue during times when commodity prices and production volumes were high, then draw on these savings during subsequent revenue shortfalls. Several variations on this system are also possible. For example, (i) the government could determine the transfer amount based on a multiyear revenue average, rather than actual revenues in each given year; (ii) it could establish a minimum transfer amount to which a share of any excess windfall revenue could be added or (iii) could simple transfer the revenues received in the previous year.

Minimizing volatility is crucial to the effectiveness of revenue sharing. While the optimal size of resource-revenue transfers depends on the unique circumstances of each country, stability is crucial in every case. Unchecked revenue fluctuations undermine budgetary predictability among subnational governments, damaging the efficiency of fiscal policy and discouraging multiyear investment planning at the regional and local levels. Conversely, stable, predictable resource transfers can advance key development objectives by building subnational administrative capacity and enhancing social capital in communities affected by resource extraction. Resource-revenue transfers are most effective when complemented by efforts to improve project selection, implementation and evaluation, and by support for participatory decision-making processes and local accountability and oversight mechanisms.

Delays in the disbursement of earmarked revenues undermine the implementation of investment plans at the local level. This underscores larger issues in public financial management and expenditure execution, two critical policy areas for an emerging resource-rich economy. Although a thorough review of national-level public financial management is beyond the scope of this policy note, a number of immediate actions are available to the Ministry of Finance that could greatly strengthen the system for allocating resource revenues to target localities, helping to ensure the timely disbursement of earmarked funds.

Over time, the government may consider expanding its revenue-sharing system to include non-resource-producing districts. A nationwide program of decentralized fiscal transfers would need to be phased-in gradually to account for administrative capacity constraints, and the lessons learned from the current system of revenue sharing in resource-producing districts could prove instrumental to its success. However, while extending the scope of the revenue-sharing system offers many potential benefits, these should not come at the expense of resource-producing areas, which bear a disproportionate share of the costs involved in resource extraction. Maintaining equity will require that resource-producing areas continue receiving sufficient transfers to offset the negative social, economic and environmental impacts of extractive industries.

To advance its national policy objectives the government must provide clear guidance on the use of resource revenues to ensure compliance with the priorities set forth in 1/MPD-MF/2013 circular, yet at the same time it should provide a greater role for community driven development in the revenue-sharing system. The government's initial experience with revenue sharing illustrates the extent to which local spending patterns tend to be inconsistent with the goals of the policy as defined in the

1/MPD-MF/2013 circular. Mozambique's development strategy emphasizes the urgent need to address the country's enormous infrastructure deficit, and the importance of enhancing access to basic public goods and services should be a guiding principle for local governments. Provincial governments should be encouraged to assist communities in establishing local priorities that are consistent with this overarching objective and designing development plans for the short, medium and long terms. Each locality should formulate a plan to address local infrastructures gaps and achieve specific social and economic development goals. These plans and goals should be regularly revised and updated through consultative meetings involving relevant stakeholders, including community leaders, local government officials, and representatives from civil society and the private sector. They should be incorporated into the overall District Development Plan, which provides the basis for allocating and managing resource revenues at the local level. In addition to the 1/MPD-MF/2013 circular, which sets out the broad principles of the resource-transfer system, the government should consider using a community-driven development approach for allocating and managing the resource revenues at the subnational level.

Local governments should work to improve budgetary transparency and accountability and strengthen mechanisms for participatory budgeting. Local governments in areas affected by resource extraction should publish clear, accessible and detailed information on the receipt and use of resource revenues. Greater transparency would facilitate participatory decision-making and promote local accountability for the use of resource revenues. While online publication has become standard for reporting national-level financial information, at the local level community radio, public meetings and other communication channels may be more appropriate.

Finally, the government should clarify its nationwide guidelines for the use of resource-revenue transfers. Certain elements of the transfer policy appear to be well defined and generally adhered to, such as the mandatory use of resource revenues for investment spending only. However, the central government's focus on enhancing economic and social infrastructure is not always consistently applied by local governments. Establishing more detailed expenditure priorities for resource-revenue transfers would allow for greater coordination in the pursuit of national development goals, and balancing the interests of the central government with the ability of local authorities to determine their own investment agendas will be a continuous challenge. Offering explicit guidance as to which types of socioeconomic infrastructure are to be financed through resource-revenue transfers may help to coordinate investment decisions, but the government must be careful to ensure that local communities retain a meaningful degree of discretion over the use transferred funds.

INTRODUCTION

1. **Following years of extensive resource exploration and successive large-scale discoveries, Mozambique is now poised to become a major exporter of natural gas, coal and other valuable minerals.** The country is estimated to possess vast reserves of extractable resources, and in the coming years it is expected to become a significant force in international commodity markets, not only regionally but worldwide. Massive coal deposits in Tete Province, in the country's central-western region, have attracted the attention of both domestic and international stakeholders. There are currently over 32 billion tons of confirmed coal deposits in Mozambique, and full exploitation of these resources could make the country one of the world's leading coal exporters. Though remarkable, the economic potential of Mozambique's coal reserves is dwarfed by its emerging natural gas sector. Natural gas extraction and processing began in 2004 at the Sasol gas-processing plant in Inhambane, in southern Mozambique, but the recent discovery of enormous gas fields in the Rovuma Basin, along the border with Tanzania, will radically transform the structure of the Mozambican economy for decades to come. The Rovuma Basin holds 130 trillion cubic feet of confirmed gas reserves, and it is likely that further discoveries of substantial commercial value will be made in the near future. The continued development of the natural gas sector could allow Mozambique to become a major exporter of liquid natural gas (LNG) and other hydrocarbon fuel products over the medium term (World Bank 2013).

2. **If managed properly, these resource reserves have the potential to transform Mozambique's economy by financing much-needed infrastructure investment, as well as economic diversification and poverty reduction programs.** However, ensuring that resource revenues are allocated efficiently and equitably presents a serious challenge, as policymakers will continuously face strong pressure to distribute resource rents to influential constituencies. In this context, establishing clear fiscal rules for revenue sharing, including the allocation of resources to communities in affected areas, can help to shield resource revenues from undue influence and guarantee that a share of the returns to resource extraction is devoted to offsetting its social, environmental and infrastructure costs.

3. **A growing recognition of the considerable risks posed by natural resource development has prompted increased attention to questions of equity in the distribution of resource revenues, including the allocation of funds to areas directly affected by extractive industries.** The resource sector is very different from other spheres of economic activity. The extraction and sale of nonrenewable resources is an inherently unsustainable activity; it frequently generates damaging economic distortions, especially in countries with undiversified economies and limited policy capacity; and it imposes considerable negative externalities that impact local communities in resource-rich areas (Stiglitz *et al*., 2007). Over time, extractive industries permanently diminish the value of a region's stock of natural wealth. In order to justify these costs, nations and communities alike must receive adequate compensation for their extractable resources, and they must use the revenues from resource extraction to build the foundation for enduring economic growth (Otto, 2001).[1]

4. **Beyond the purely economic case for equity, the international experience has shown that political instability is too often a consequence of the poorly managed development of natural resources.** If economic growth comes at the expense of resource-rich regions, if infrastructure access, public service delivery and overall living standards rise faster in areas that do not bear the costs of resource extraction, or if local communities regard themselves as unable to influence decisions about the use of resource revenues, the perception of distributive injustice may lead to political unrest or open violence. In recent memory, equity concerns regarding the use of resource revenues have been a major

[1] The principle of reinvesting resource revenues in productive physical and human capital in order to offset declining natural wealth stocks and maintain a consistent stream of consumption, commonly known as "Hartwick's Rule," was developed by Solow (1974) and elaborated by Hartwick (1977).

factor in conflicts in South Sudan (oil), Nigeria (oil) and East Bengal (jute), and elsewhere (Agustina *et al.*, 2012).

5. **Recognizing the importance of ensuring equity in the returns to natural resource development, governments have designed and tested a variety of systems for offsetting social, environmental and infrastructure costs of extractive industries.** These systems reflect each country's unique legal and institutional framework, and each is distinct in terms of its methodology and objectives. However, the broader principle of revenue sharing has become increasingly accepted as a pillar of responsible and effective natural resource management.

6. **In this context the Government of Mozambique (GoM) has established a legal framework for allocating a share of resource revenues to local communities in areas affected by extractive industries.** In 2013 the GoM allocated 2.75 percent of the royalties generated by mining and petroleum to seven localities in three resource-rich provinces.[2] This allocation was mandated in the annual budget law, and the objectives of the revenue-sharing policy, which focused on boosting broad-based growth and poverty reduction through accelerated infrastructure investment, were defined in the 1/MPD-MF/2013 circular. This document comprised a set of guidelines issued jointly by the Ministry of Finance and the Ministry of Planning and Development regarding the management of subnational transfers. However, the circular was not published until May of 2013, well after the start of the fiscal year, and it provided only limited guidance on how to utilize the transferred funds. In addition, the disbursement of revenues in Moatize district was significantly delayed, and by the end of the first half of the fiscal year none of the earmarked revenues had been transferred.

7. **This note analyzes the institutional and policy context in which Mozambique allocates and manages resource revenues at the subnational level.** Its objectives are (i) to better understand the extent to which the current revenue-sharing system advances the country's stated development goals, (ii) to identify any significant weaknesses or constraints in the current system, and (iii) to provide recommendations for strengthening the policy framework and institutional mechanisms for sharing resource revenues. This analysis is informed by the international experience with allocating and managing resource revenues at the subnational level, and it applies a number of important lessons learned.

8. **The policy note is divided into five sections.** Section 1 presents projections for future resource revenue transfers to subnational governments, both in absolute terms and as a share of each district's total budget. Section 2 reviews the international experience with resource sharing and identifies key lessons to inform successful policies. Section 3 presents a broader look at fiscal decentralization in Mozambique. Section 4 discusses the main findings of the analysis and situates them in the context of Mozambique's current revenue-sharing policies. Section 5 concludes the note by laying out recommendations to improve Mozambique's institutional and policy framework for allocating resource revenues at the subnational level.

9. **This policy note is based on a survey of the international literature on fiscal decentralization in general and resource revenue sharing in particular.** This survey is complemented by the team's extensive experience in Mozambique and informed by a thorough review of the legal and policy documents related to revenue sharing. As part of the groundwork for this analysis a number of meetings were held with the Ministry of Planning and Development, the National Budget Directorate of the Ministry of Finance, the Provincial Directorates of Planning and Finance in Nampula and Tete Provinces, the District Governments of Moma (in Nampula province) and Moatize (in Tete Province) and several

[2] A share of resource revenues is currently allocated to three provinces: Inhambane, which produces natural gas, Tete, which produces coal, and Nampula, which produces heavy mineral sands. In the near future the GoM expects to expand its revenue-sharing program to include other resource-producing areas.

local councils in Moatize. Moma and Moatize are located in two of the three provinces currently receiving a share of resource revenues, and they were the focus of the research conducted for this policy note.

1. PROJECTED RESOURCE REVENUE TRANSFERS TO SUBNATIONAL GOVERNMENTS

Revenue Transfers to Areas Impacted by Extractive Industries

10. **Resource revenue sharing currently represents a relatively small percentage of total fiscal transfers to resource-rich districts**. Natural gas production in the Rovuma Basin is projected to begin toward the end of the decade, after which resource revenue transfers will increase. However, assuming that national policymakers continue to allocate 2.75 percent of resource royalties to subnational governments, over the near term resource revenue transfers will remain relatively small as a percentage of the total resource envelope available to the target districts, though they will represent a more substantial and growing share of district investment budgets.

Table 1: Revenue Transfers to Resource-Producing Districts

(In million meticais)	Moatize		Moma		Govuro		Inhassoro	
	2013	2014	2013	2014	2013	2014	2013	2014
Current Exp.	224.1	284.4	159.1	185.8	58.7	76.8	72.3	91.6
Investment Exp.	31.3	25.6	31.1	32.1	19.7	20.1	21.8	22.2
Total Exp.	255.4	310.0	190.2	210.9	78.4	96.9	94.1	113.8
Royalties	8.6	13.0	3.5	4.4	3.6	1.3	3.6	5.7
% of Royalties in Total Exp.	3%	4%	2%	2%	5%	1%	4%	5%
% of Royalties in Investment Exp.	28%	51%	11%	14%	18%	7%	17%	25%

Source: Ministry of Finance, Government of Mozambique

11. **As part of this policy note an analysis was conducted to gauge the sensitivity of resource revenue transfers to a variety of shocks.** The full analysis is included in the attached Annex, but its principal conclusions are presented here. Compared with the baseline projections for coal and gas revenues price shocks of one standard deviation (both positive and negative) produce large variations. Meanwhile, even relatively modest production shocks also generate considerable revenue volatility. Moreover, due to Mozambique's current system of discretionary allocations the share of resource revenues transferred to subnational governments is itself an additional exogenous variable. At the current rate of 2.75 percent, resource revenue transfers are expected to rise from US$1 million in 2014 to US$13 million in 2032, and cumulative transfers over the next two decades could exceed US$170 million. However, this projection depends entirely on the maintenance of the 2.75 percent share.

12. **In extreme scenarios involving price shocks in both the coal and natural gas markets, and with production slowing in response to these price changes, subnational revenue transfers in 2032 could amount to anywhere between US$9 million and US$16 million.** Natural gas revenues are more sensitive than coal revenues to both price and production shocks. This is demonstrated by the observed divergence in revenue curves beginning in 2019, when natural gas exports are expected to start in the Rovuma Basin (see Annex). Price and production shocks in the coal market could cause revenue transfers to vary between US$11 million and US$14 million by 2032, while in the natural gas sector a price shock alone could cause revenues to range between US$10 million and US$15 million.

13. **As noted above, the volume of revenue transfers accounts for a relatively small share of the budget of resource-producing districts.** At present, revenue transfers do not amount to more than 5 percent of any district budget, and consequently revenue volatility is not a major concern. However, it is important to note that at 2.75 percent Mozambique allocates a smaller proportion of its resource revenues to subnational transfers than do many of its fellow resource-rich developing countries. In the Democratic Republic of Congo, Madagascar and Nigeria transferred revenues routinely exceed 10 percent[3] of total revenues, while in Cameroon transferred revenues reach 25 percent. These shares are even higher in developing countries elsewhere in the world, with local communities in both resource-producing and non-resource-producing districts of Indonesia[4] and Peru[5] receive as much as 32-50 percent of total resource revenues. While it is important to respect the absorptive capacity constraints of subnational governments, Mozambican policymakers may find it necessary to increase the transfer rate in the future in order to meet public investment objectives in affected communities. In the initial phase, however, the size of revenue transfers may be less important than their institutional impact on local governments, particularly in terms of social capital formation and the ability of local authorities to ensure effective stakeholder participation in investment decisions.

14. **If policymakers were to increase the transfer rate to 15 percent, the amount received by subnational governments would rise from US$8 million in 2014 to US$69 million in 2032, with cumulative revenues over the period reaching almost US$1 billion.** This would represent a dramatic increase over the current transfer rate of 2.75 percent, and in this scenario transferred revenues would form a significant share of local budgets in resource-producing districts. As a result, the impact of resource revenue volatility would be greatly magnified. For instance, shocks in coal prices and production volumes could cause revenue transfers to range between US$63 million and US$75 million by 2032. Alternatively, price shocks affecting both coal and gas could cause revenues to range from US$53 million to US$84 million by 2032.

15. **15. Increasing the transfer rate to 40 percent of total royalties would cause the total volume of revenues allocated to resource-producing communities to rise from US$20 million in 2014 to US$183 million by 2032.** At this rate, the amount transferred in 2032 alone would be larger than the total transfers made to these districts over the entire two-decade period at the current transfer rate of 2.75 percent (US$170 million), while cumulative transfers would amount to as much as US$2.5 billion. Such a radical increase in the transfer rate would raise significant concerns about local absorptive capacity. Under this scenario, a price and production shock in the coal sector could cause transfers to range between US$169 million and US$199 million by 2032, and combined shocks in coal and gas prices could cause revenues to range between US$142 million and US$224 million by 2032. As a result, managing revenue volatility at the local level would present a critical challenge.

Sharing Resource Revenues with Non-Resource-Producing Areas

16. **While this policy note focuses on systems for sharing resource revenues with areas impacted by extractive industries, the extension of revenue sharing to non-resource-producing areas will likely become an important issue over the longer term.** While the current size of resource-revenue transfers in Mozambique is small, at just 2.75 percent of total revenue, its anticipated growth may raise political-economy concerns regarding interregional equity. Just as a failure to share the benefits of resource extraction with resource-producing communities may provoke political tensions, so too may the exclusion of non-producing regions from the revenue-sharing system.

[3] See Table 2 of the 2011 EITI Report on Madagascar.
[4] Agustina *at al*., 2012
[5] Brosio and Jiménez, 2012

17. **Nationwide revenue transfers would need to be scaled-up slowly to account for local capacity constraints, and the experience of the subnational governments currently involved in revenue sharing could yield important lessons to guide the implementation of a national system.** The government could begin by setting a target for the number of districts to be included the revenue-sharing system each year, with an overarching goal of reaching all districts by a given year, and transfer amounts to each district could be gradually increased over time. Gradual expansion would also be crucial to avoid rivalry between resource-producing and non-resource-producing districts, as it would be important to ensure that the latter do not benefit at the expense of the former. Box 1, below, describes the challenges faced by Brazil in extending its revenue-sharing system to non-resource-producing areas.

Box 1: Resource-Revenue Sharing in Brazil

In Brazil, states and municipalities in which extractive industries are located receive 26.3 percent and 35 percent of resource royalties, respectively.[6] Meanwhile, non-resource-producing states and municipalities receive only 8.8 percent of resource royalties, which are disbursed via the State Participation Fund and the Municipal Participation Fund (Barroso and Araujo, 2013). The distribution of revenue from petroleum products is especially skewed in favor of oil-producing states. The states of Rio de Janeiro and Espírito Santo, and the oil-producing municipalities within them, receive the lion's share of petroleum royalties. Rio de Janeiro alone received about 80 percent of petroleum royalties between 1999 and 2012 (*ibid*.).

Under a new revenue-sharing rule adopted in 2012 (Law 12.734/12), the share of resource revenues earmarked for transfer to non-producing states and municipalities was increased to 49 percent, while the share allocated to resource-producing states and municipalities was reduced to 22 percent and 7 percent, respectively. The new law also changed the distribution rules for revenue from newly developed oil fields, again favoring non-oil-producing states and municipalities. The large and sudden shift in revenue allocation became a source of significant controversy, and three oil-producing states filed injunction claims at the Supreme Court challenging the new law. The court has not yet resolved the case, but it has suspended the law due to its potentially damaging effects on the finances of certain subnational governments.

Source: Barroso and Araújo (2013)

18. **Ensuring that revenue transfers to resource-producing areas do not decline in absolute terms could provide a useful principle to mitigate the political risks involved in expanding the revenue-sharing system.** The projected increase in total resource revenues will open fiscal space to extend revenue-sharing without forcing a shift in revenues from producing to non-producing areas. However, the government should continue to bear in mind that offsetting the localized costs incurred by extractive industries is a key objective of resource-revenue sharing, and revenue transfers to resource-rich areas must at least offset the social, economic and environmental damage caused by resource extraction. Ultimately the government must consider issues of both equity and equality when determining the optimal allocation of natural resource revenues.

[6] The shares differ between the first and the second half of the royalty rate. Thus, the number presented is the average.

2. The International Experience with Resource-Revenue Sharing

Resource-Revenue Sharing in Selected Countries

19. **Systems for sharing resource revenue at the subnational level are becoming increasingly common worldwide.** Table 2**,** below, provides a brief overview of these systems and their governing legislation. In some cases allocations are completely discretionary, raising issues of transparency and predictability (Brosio and Singh, 2013). Recognizing the importance of establishing clear fiscal rules to guide revenue sharing, governments have worked to develop appropriate regulations for allocating and managing resource revenues. In Uganda, for example, the Mining Act of 2003 entitles the central government to 80 percent of all mining royalties, while local governments in mining-affected areas receive 17 percent, and the owner of the land from which the resources are extracted receives 3 percent. Under the Democratic Republic of Congo's 2002 Mining Law, 60 percent of resource revenues are allocated to the national government and 40 percent to the provincial authorities, of which 10 percent goes to local communities resource-producing areas. Cameroon's 2002 Mining Code allocates 75 percent of mineral royalties to the central government and 25 percent to local authorities, while its 1999 Forestry Law evenly splits logging royalties between the local and national governments.[7]

Table 2: Laws Governing the Management of Natural Resources and Resource Revenues in Selected African Countries

Country	Resource ownership in the constitution	Regulations on the management and sharing of resource revenues
Uganda	Ownership is vested in "the Government of behalf of the Republic of Uganda." Art. 244.	Minerals and oil are exploited "taking into account the interest of the individual landowners, local governments and the Government". Art. 244 of the Constitution. According to the Mining Act of 2003 the central government is entitled to 80 percent of mining royalties, local governments in resource-producing areas are entitled to 17 percent and the owner of the land receives 3 percent.
Ethiopia	"…the right to ownership... to all natural resources is exclusively vested in the State and the people of Ethiopia." Art. 40.	
Kenya	"All land in Kenya belongs to the people of Kenya collectively as a nation, as communities and as individuals." Art .61 (f)	"All minerals and mineral oils are defined as public by law". Art. 62. "The State (a) ensures sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensures the equitable sharing of the accruing benefits". Art. 69 of the Constitution.
Democratic Republic of Congo	"The State has permanent sovereignty over soil, subsoil, waters, forests, airspace, lakes, rivers, sea, coastal areas and the continental shelf." Art. 9.	Under the 2002 Mining Law 60 percent of resource revenues go to the national government and 40 percent to the provinces, from which 10 percent is allocated to local communities.
Ghana	"Every mineral in its natural state that is under or upon the land in Ghana.., is the property of the Republic as vested in the President in trust of the people of Ghana." Art.257.6	The Mineral Development Fund established in 1993 receives 20 percent of mining royalties. Half of the fund is earmarked for investment in mining-affected areas, 25 percent is disbursed via the district assemblies and the rest goes directly to local communities.
South Africa	The government is responsible for the "secure, ecologically sustainable development and use of natural resources." Section 24.	Mineral and Petroleum Resources Development Act of 2002 states that, "Mineral and petroleum resources are the common heritage of all the people of South Africa and the State is the custodian thereof for the benefit of all South Africans." The Public Finance Management Act of 1999 establishes that the Minister of Minerals and Energy may determine that any community or local government may receive a payment from mining royalties. These payments are disbursed through the Local Economic Development Fund administered by the National Department of Provincial and Local Governments.
Nigeria	The federal government is vested with "control of	"The principle of derivation shall be constantly reflected in any

[7] Brosio and Singh, 2013.

	all minerals, mineral oils and natural gas.'' Section 162.1.	approved formula, as being not less than 13 percent of the revenue accruing to the Federation Account directly from any natural resources." Section 162.2 of the Constitution.
Chad	"The state exercises its complete and permanent sovereignty over all national wealth and natural resources for the wellbeing of the whole national community." Article 57.	According to the 1999 Petroleum Revenue Management Law, Eastern Logone, the country's oil-producing region, receives 4.5 percent of oil royalties.
Cameroon	Mining and natural resources are subject to legislation by Parliament. Article 26.	According to the 2002 Mining Code 75 percent of mineral royalties go to central government and 25 percent go to local governments. Under the 1999 Forestry Law royalties from forest resources are shared on a 50/50 basis between the central and local governments.
Angola	"The solid, liquid and gaseous natural resources existing in the soil, subsoil, territorial waters, in the exclusive economic zone, and in the continental shelf shall be the propriety of the State." Article 16.	The state "shall determine the conditions for concessions, surveys and exploitation." Article 16 of the Constitution.

Source: Brosio and Singh, 2013.

20. **This trend towards statutory resource sharing is not restricted to Sub-Saharan Africa, and similar laws have proliferated in Latin America.** With the exception of Argentina, a classic federal system, and Ecuador, subnational governments in both resource-producing and non-resource-producing areas of Latin America typically have direct access to a portion of resource rents. In many cases revenue sharing is among the few mechanisms available for addressing interregional economic disparities. This is particularly true of Bolivia, Brazil and Peru (Brosio and Jiménez, 2012). Latin American countries also exhibit considerable variation in the scope of resource transfers. While most Sub-Saharan African countries allocate only a modest share of resource revenues to subnational governments, some Latin American countries have experimented with large-scale revenue sharing. In Peru, for example, fifty percent of income taxes paid by resource-sector firms and 100 percent of resource royalties are transferred to subnational governments. However, in order to be effective revenue transfers must account for local capacity constraints. A recent World Bank paper on the limited spending capacity of subnational authorities argued that increases in transfers to subnational governments should be gradual and complemented by measures to improve public financial management (Loayza *et al.*, 2011).

Box 2: Resource Revenue Sharing in Colombia

In Colombia, resource royalties are levied according to the value of production, with tax rates varying for different resources. Oil taxes range from 8 to 25 percent, and rates progressively increase in line with the daily volume of production. Compensation agreements include specific references to transportation infrastructure costs, environmental damage, and the social and cultural impact of extractive industries. Municipalities that do not produce resources but whose territory is crossed by oil and gas pipelines receive a share of the transportation taxes collected by the central government. Finally, indigenous communities are entitled to a share of royalties levied on oil fields and mines situated no further than 5 km from their settlements. This share amounts to 5 percent of royalties accruing to the local admnistrative department and 20 percent of royalties accruing to the local municipality.

Colombian law regulates how these resources may be invested by the various subnational governments and public agencies that receive them. Most of these resources must be used for investment in priority projects included in the General Development Plan for each local administrative department. According to Article 15 of Law 141 of 1994 shared royalties and direct compensation paid to local governments are designed for the following purposes:

- 90 percent must be invested in development projects included in the General Development Plan, with priority given to projects in the environmental, health, education, electricity, and water and sanitation sectors;
- 5 percent must be used for the technical supervision of these projects; and
- 5 percent must be used to cover operational expenses, with as much as half used to pay management and administrative costs incurred by the national agencies tasked with the collection and distribution of royalties and other forms of compensation.

According to the Law on Royalties, the National Royalties Committee must consider the following criteria for the allocation of resource revenues:

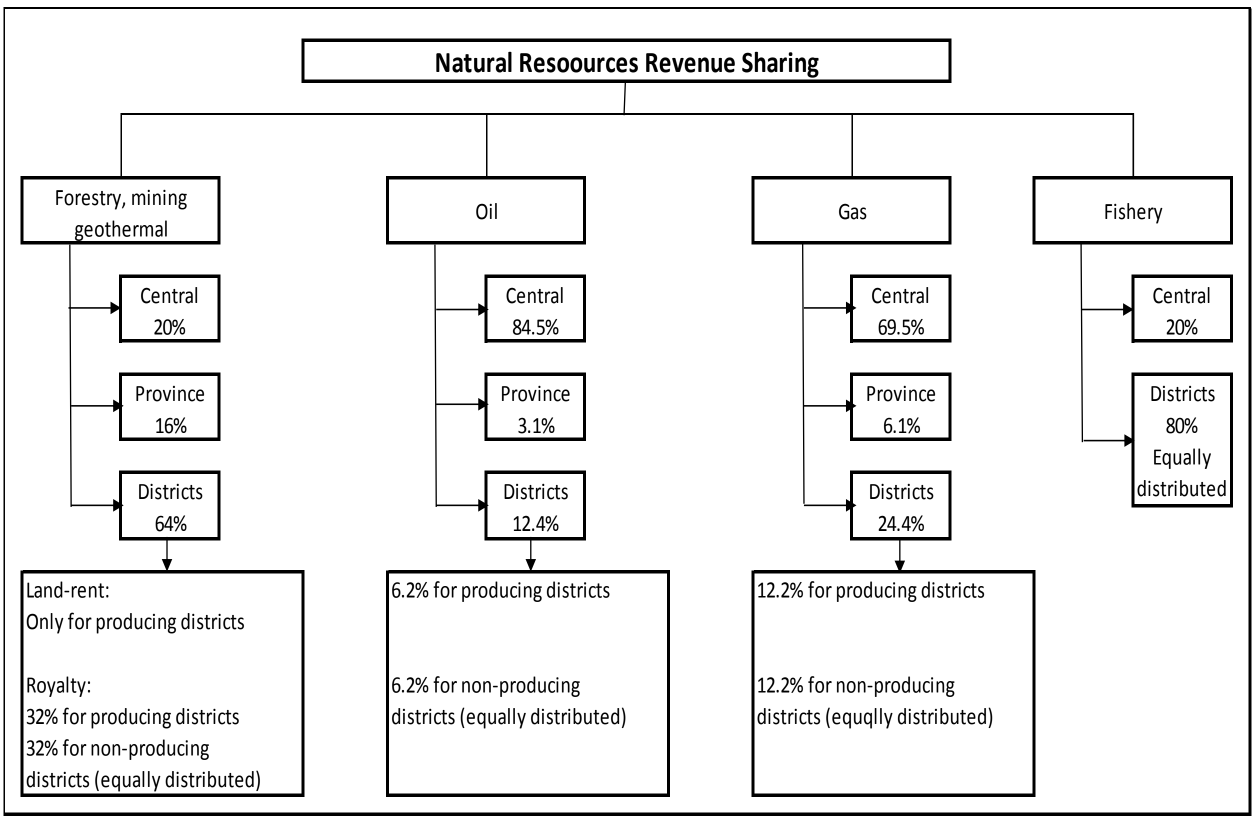
- Regional differences in social and economic indicators as illustrated in the National Index of Unfulfilled Needs;
- The importance of promoting equitable and complementary development across regions;
- The environmental, social, and economic impacts of proposed investment projects;
- The environmental, social, and economic impacts of the extraction, transportation and processing of natural resources;
- The financing needs of regional development plans; and
- The relative population size of each region.

Colombian law explicitly considers equity criteria in revenue sharing. Under Law 756, as long as indicators such as infant mortality, health and education outcomes, and water and sanitation access fail to meet basic thresholds, at least 60 percent of total resource royalties must be allocated to these sectors.

Source: Brosio and Jimenez, 2012; World Bank, 2005

21. **In Indonesia, the fiscal decentralization framework requires the central government to allocate a share of the income from natural resources to provincial and local governments.** Under Law 33/2004, mandatory revenue sharing not only covers the oil and gas sectors, but also includes other general mining operations, geothermal energy production, forestry and fishing. Revenue-sharing arrangements differ according to the type of natural resources, the level of government, and whether or not the recipient is located in a resource-producing region. Regional governments typically retain 80 percent of the revenues from natural resource extraction, with the exception of oil and gas. The flows and shares of natural resource revenues are illustrated in Figure 1, below.

Figure 1: The Framework for Revenue Sharing in Indonesia



Source: UU33/2004 in Agustina *at al*., 2012.

Discretionary Allocations versus Revenue Formulas

22. **There are advantages and disadvantages involved in both discretionary and formula-based systems for sharing resource revenues.** Under a fully discretionary system revenue allocations are determined each year by national policymakers. In principle this should enable the government to adjust allocations to reflect evolving priorities, including the maintenance of fiscal stability. In practice, however, excessive discretion can leave policymakers vulnerable to pressure from powerful constituencies, potentially threatening the transparency and efficiency of revenue sharing. Meanwhile, the inherent unpredictability of discretionary budgeting can create uncertainty at the subnational level and discourage the implementation of multiyear projects. Conversely, formula-based systems can promote transparency in allocation decisions and enhance budgetary predictability, but the built-in rigidity of allocation formulas limits their ability to adapt to new circumstances, and in some cases these systems may tend to encourage fiscal procyclicality (Bahl, 2000).

23. **Worldwide, very few countries have chosen to use fully discretionary systems for allocating resource revenues, and nearly all have adopted fiscal rules or guidelines that limit the discretion of policymakers.** The formulas that govern resource revenue sharing differ significantly from one country to the next, and the international experience reveals a number of important lessons regarding the particular merits and drawbacks of different approaches.

Revenue Volatility and Local Capacity Constraints

24. **Natural resource revenues are inherently volatile due to both the unpredictable nature of resource production and the chronic instability of global commodity prices**. Because of the wider range of financial instruments at their disposal, central governments are typically better equipped to manage these revenue fluctuations than are local authorities. Local governments are often forced to respond to unanticipated revenue shortfalls with sudden expenditure cuts, which not only threaten to derail multiyear investment projects, but may even endanger the provision of essential public services. Conversely, revenue spikes can overwhelm a local government's capacity to use resources effectively, which may incentivize corruption and waste, or encourage policymakers to enter into unsustainable long-term spending commitments. Inadequate expenditure capacity and limited access to appropriate savings mechanisms are also frequently a concern at the national level, but these issues tend to be much more severe among subnational governments and individual public agencies. Moreover, the central government is generally the optimal place to address these issues, as volatile resource revenues often accrue to the national government first. Consequently, actions to mitigate volatility at the national level can smooth revenue fluctuations across the entire public administration, obviating the need for each local government to adopt its own mitigation strategy (Brosio and Jiménez, 2012).

25. **Even when national governments have adopted appropriate measures to stabilize revenue inflows, some degree of budgetary volatility may still be transmitted to subnational governments.** Using inherently unreliable resource revenues to fund either current expenditures or multiyear investment projects carries an elevated risk that subnational governments may be ill equipped to manage. The use of resource revenues to finance current expenditures has proven especially problematic, prompting a number of countries, particularly in Latin America, to restrict resource revenues to investment projects only (Brosio and Jiménez, 2012).

Options to Address Revenue Volatility and Boost Local Absorption Capacity

26. **A number of policy instruments can be used to address revenue volatility.** Governments can hedge against risk by setting up stabilization funds and by introducing fiscal rules governing the use of resource revenues. In principle, futures markets could also be used to smooth revenue fluctuations over time, but in practice their usefulness is constrained by inadequate information, high transaction costs and political-economy concerns. In some cases subnational stabilization funds have been established to allow windfall income to be saved and drawn upon when needed, but thus far these mechanisms have only been employed highly developed countries such as the United States and Canada.

27. **Some countries have adopted fiscal rules that impose a ceiling on the debt-to-revenue ratios of local governments or that explicitly link expenditure growth to the growth of revenues.** Each type of rule aims to curb the deficit bias of fiscal policy in order to maintain a manageable debt burden. However, fiscal rules tend to be most useful during revenue spikes, when they help to prevent unsustainable expenditure decisions from threatening the local government's long-term fiscal stance. These rules are less effective at maintaining adequate spending levels during revenue shortfalls unless they can be linked to a stabilization fund or a similar savings mechanism.

28. **In many cases local governments lack the institutional knowledge and administrative capacity necessary to design and implement more sophisticated policies for managing resource revenues.** Poorly developed systems for revenue management can threaten transparency and accountability and reduce the efficiency of local policy actions (UNDP/World Bank, 2005). To address these concerns, local governments in resource-rich areas must build their capacity to manage revenues effectively, and national governments and their development partners should ensure that training and support are available to local authorities. This is particularly urgent in Mozambique, where a revenue-sharing system is currently being implemented, but where the specifics of revenue management are not yet fully understood by subnational governments. In order to maximize the impact of revenue transfers Mozambique and its development partners must work to improve the organizational, technical and financial capabilities of subnational governments, enabling them to effectively manage their inherently volatile and swiftly growing revenue streams.

Equity Concerns in Revenue-Sharing Systems

29. **Most extractive industries are focused on a relatively small number of geographic areas, which bear an inordinate share of the costs associated with resource extraction.** Resource revenue sharing can only be consistent with equity concerns if it provides meaningful compensation to resource-producing areas. This compensation should be adequate not only to offset the immediate economic, social and environmental costs incurred by the presence of extractive industries, but should also be sufficient to finance the long-term development of the region's non-resource economy, ensuring that it is capable of delivering a consistent stream of returns even as its natural wealth stock is inevitably depleted (Bahl, 2002).

30. **Equity concerns may arise from either inadequate or excessive compensation.** The size of incoming revenues should reflect the cost considerations described above, neither disproportionately favoring the interests of communities in resource-rich areas, nor failing to appreciate them. In Mozambique, the recently created Zambezi Valley Development Agency (*Agência de Desenvolvimento do Vale do Zambeze* – ADVZ) can play an important role in ensuring an equitable distribution of benefits to communities in the Zambezi Valley, both in areas that produce extractable resources and in those that do not.

31. **Currently the ADVZ's budget, which is also financed by resource revenues, far exceeds the amount of the resource revenues transferred to subnational governments.** In 2013 the ADVZ received MZN 94.4 million, while just MZN19.2 million were transferred directly to production-affected areas in the region (i.e. Moatize, Govuro, Inhassoro and Moma Districts). Going forward, it will be important to ensure that the operations of the ADVZ are well coordinated with complementary public investment efforts at the district level. It is still too early to determine whether Mozambique's current resource revenue-sharing system will be adequate to account for the costs of its nascent extractive industry sector, or to overcome the larger issues involved in the nationwide distribution of revenues described above, but equity concerns should be a guiding principle for policymakers as the system continues to evolve.

3. FISCAL DECENTRALIZATION IN MOZAMBIQUE

32. **Mozambique's political structure is divided into three levels: (i) the central government, (ii) provincial governments, (iii) and district governments and municipalities.** The legal basis for municipalities was established in 1997 (Law 2/97), while the broader framework for decentralized governance is regulated by the 2003 Law of Local Public Administrations (*Lei dos Órgãos Locais do Estado*), which establishes the principles, competencies and functions of provincial, district and local authorities. Under this law, the district is the focus of local administration, planning, economic, social, and cultural development. Mozambique is progressively increasing the size of budgetary transfers to subnational authorities, though these transfers are still relatively low as a share of total fiscal resources. Districts are increasingly responsible for salary payments, and as a result increases in district spending tend to be weighted toward recurrent expenditures. Municipal resources remain very modest in both absolute and relative terms, but the municipal revenue structure is rapidly evolving.

Municipalities

33. **Public finance management reforms adopted in 2008 modernized municipal taxes, greatly expanding their potential own-source revenue base.** While municipalities are responsible for the bulk of tax collection, the vast majority of taxes are levied by the central government and most revenues are channeled to it. While municipalities have the administrative structure necessary for local tax collection, their authority to levy taxes is limited. As a result, municipalities depend largely on transfers from the central government to finance local spending.

34. **Municipalities receive a variety of transfers from the central government.** These include the municipal compensation fund (FCA), the strategic fund for the reduction of urban poverty (PERPU)[8] and the Road Fund. The total resource amount varies by type of transfer. The FCA initially received 3 percent of total national tax revenue, but this was reduced to 1.5 percent after the tax system was modernized. The investment fund for municipal initiatives (FIIA) receives 0.75 percent of national tax revenue (thought this is not defined in the law), the PERPU receives MZN140 million (approximately US$4.4 million) each year regardless of tax levels, and the Road Fund receives 10 percent of fuel-tax revenues.

The Provincial and District levels

35. **Revenue collection at the provincial and district levels is much more limited.** Taxes collected by provinces and districts are shared with the central government, but little information is available as to

[8] The PERPU aims to generate employment and promote social protection. Loans are provided, which need to be repaid so that funds can be lent again, as part of a 'rotating fund.'

how this sharing system operates. Districts and provinces also levy certain user charges, including fees for commercial licenses and the use of public markets. Provinces and districts are free to set either nominal or ad valorem rates for the revenue types they collect, as long as these rates conform to a number of general criteria, such as equity concerns and ability to pay.

36. **There are three main types of fiscal transfer to subnational governments.** The largest is a block grant transferred to provinces for financing provincial- and district-level expenditures. In principle, this transfer is allocated based on population size and local poverty rates. Districts also receive two additional grants directly from the central government, a district investment fund (FID) and a district development fund (FDD). FID is a budgetary allocation for the construction and rehabilitation of district infrastructures. The FDD is a rotating fund that focuses on food production, employment and income generation at the individual level. Although this is ostensibly a lending mechanism, repayment rates appear to be low.

4. RESOURCE-REVENUE SHARING IN MOZAMBIQUE

The Legal and Policy Framework

37. **In 2013 the GoM allocated 2.75 percent of the royalties generated by the mining and natural gas sectors to seven localities in three resource-rich provinces.** This policy builds upon two laws passed in 2007 (Articles 19 and 11 of Laws 11/2007 and 12/2007), which mandated that a certain (though unspecified) percentage of resource royalties be earmarked for community development in the areas in which extractive-industry projects are located. This provision was fulfilled in the 2013 budget (Article 7 of Budget Law 1/2013), which implemented the revenue-sharing policy by setting aside 2.75 percent of resource royalties to be divided between the localities of Topito in Nampula Province; Cateme, 25 de Setembro, Benga and Chipanda II in Tete Province; and Pande and Maimelane in Inhambane Province.

38. **This revenue-sharing policy is designed to provide local governments with the funding necessary to address key community development challenges.** Yet ensuring that these funds can be effectively managed at the subnational level presents its own set of significant long-term challenges. Currently, the amount allocated is based on the revenues collected in each jurisdiction according to the so-called "derivation principle." Although this share is relatively low, the size of the 2013 transfer is already straining the expenditure capacity of the target localities. Given the projected rise in resource revenues over the medium term, maintaining the quality of public spending in these areas will continue to present a major concern.

39. **In Mozambique, royalty payments for mineral and natural gas extraction are based on the sale prices of these commodities at the time of production.** If no sales are made, the international market price is used to determine the value of the quantity extracted.[9] For natural gas products, the royalty tax is determined by applying the weighted average prices of different hydrocarbon fuels at main international export centers.[10]

40. **Direct transfers to affected communities overlap with broader regional development initiatives that are also financed by resource revenues.** In addition to the 2.75 percent of total resource revenues allocated to local communities, Ministerial Diploma 107/MPD/GM/2013 issued by the Ministry of Planning and Development and the Ministry of Finance in 2013 allocates a full 25 percent of revenues from the production tax and surface tax to the Zambezi Valley Development Agency (*Agência de*

[9] Article 7 of Law 11/2007.
[10] Article 5 of Law 12/2007.

Desenvolvimento do Vale do Zambeze – ADVZ). The remaining percentage of revenues is retained by the central government and used to finance the national budget. The ADVZ is the successor to the Department for Development Planning in the Zambezi Region (*Gabinete do Plano de Desenvolvimento da Região do Zambeze*) and receives a share of the resource royalties collected in the Zambezi Valley. The ADVZ's core responsibilities include (i) undertaking studies and presenting strategies for the economic and social development of the Zambezi Valley region, (ii) providing technical and financial assistance to economic and social development initiatives, including the mobilization of resources and the targeting of beneficiaries, (iii) working with local governments on planning and land-use issues, as well as broader socioeconomic development strategies.[11] The Zambezi Valley includes all of Tete Province, where the mining firms Rio Tinto and Vale Moçambique are currently developing coal fields.

41. **Following the passage of Laws 11/2007 and 12/2007 and Article 7 of Budget Law 1/2013, the Ministry of Planning and Development and Ministry of Finance issued the 1/MPD-MF/2013 circular,[12] which describes the type of projects to be funded through resource revenue transfers.** According to the circular, eligible projects are aimed at building socioeconomic infrastructure in communities affected by resource extraction. Target sectors include:

- Education;
- Healthcare;
- Agriculture;
- Forestry;
- Commercial facilities such as public markets;
- Roads, bridges and other transportation infrastructure; and
- Water and sanitation systems.

42. **According to the circular these projects should be implemented in coordination with the District and Provincial Sector Authorities, i.e. the Provincial Directorate and District Service Agencies.** The District Secretary is responsible for the management of the funds. While the circular provides general guidance on how revenues should be invested, determining specific projects is the responsibility of the local community. Project proposals must originate from communities directly affected by extractive industries, and they must be evaluated, approved and prioritized by the local Advisory Council. The proposed projects must be implemented within the territory of the locality; they must be social and economic viable and sustainable; and they must maximize the use of the local human capital and other productive resources.

43. **The Provincial Government of Tete issued the Ofício 57/DPPFT/Gab-Dir/58 on August 15, 2013, which broadly defines its investment priorities.** The document allocates 30 percent of transferred resource revenues to community infrastructure projects and 70 percent to projects aimed at increasing food production, generating employment and raising incomes. Project objectives are determined using the same criteria as the District Development Fund. Meanwhile, local authorities in Moma District, Nampula Province, prioritized investment in local public administration facilities and communications infrastructure.

[11] Decree no.º22/2010 of June 30, 2010.

[12] Guideline issued by the Ministry of Finance and Ministry of Planning and Development on how to manage the subnational transfers. However, the guidance was available already in the financial year, May 2013.

Allocating Resource Revenues to Subnational Governments

44. **Development strategy at the district level is based on two overarching plans, the Strategic Plan for District Development and the District Social and Economic Plan and Budget.** Local Advisory Councils assist in identifying development priorities and incorporating them into the District Social and Economic Plan and Budget. District-level plans are then used to inform the Provincial Social and Economic Plan and Budget, which in turn informs the National Social and Economic Plan and the State Budget, which are formulated jointly by the Ministry of Planning and Development and the Ministry of Finance. In principle, all projects to be implemented at district level should be incorporated into district planning documents, but in practice this is not always the case.

45. **Resource revenue transfers between the central government and subnational administrations are defined in the budget law.** The funds are deposited in a specific account at each District Office earmarked for local community development. Once the funds are available, the District Office allocates financing to projects approved by the local Advisory Council. As noted above, these projects must meet the following criteria: project proposals must originate from communities directly affected by extractive industries; the projects themselves must be deemed necessary by the community, and they must be evaluated, approved and prioritized by the local Advisory Council; all projects must be implemented within the territory of the locality; and they must be socially and economically viable and sustainable. In addition, local governments must use the transferred funds in accordance with relevant laws on public financial administration, as is the case with other types of public resources.

46. **The share of resource revenues allocated to subnational governments is determined annually as part of the budget process.**[13] Consequently, it is unknown what share will be set aside in future budgets, or what the nominal amount of future revenue transfers will be. This system of annual decisions generates considerable uncertainty on the part of local governments and discourages sound budget management and multiyear investment planning.[14]

47. **Moreover, revenue volatility has generated significant disparities between the amounts initially budgeted for revenue sharing and the amounts that were ultimately transferred.** In 2013 the national budget originally approved transfers of MZN32.8 million to local governments in areas impacted by extractive industries. This was based on projections of resource royalties at the start of the fiscal year, but by the end of the year only MZN19.2 million (US$629.9 thousand) had been transferred out of a total of MZN698.1 million (US$22.9 million) collected. This difference was caused in part by the interruption of coal exports in Moatize District due to flooding, highlighting the inherent volatility of resource production. The MZN22.3 million initially budgeted for Moatize was revised downward to MZN8.6 million.[15] And by the end of 2013 Moatize had received only 85 percent of the revised MZN8.6 million meticais. The district government expected to receive the final tranche of the transfer in January of 2014, but as of April it had still not been disbursed. Nationwide, actual resource revenue transfers equaled just 58.4 percent of the initial budgeted amount.

48. **Although the regulatory framework provides for the failure to transfer funds allocated to subnational government, these provisions are not sufficient to ensure budgetary predictability.** According to the Ministry of Finance, any funds allocated to subnational governments that are not transferred within the year are automatically added to the amount allocated for transfer in the following year's budget. In addition, any unspent balances from resource revenues remaining at the end of the fiscal year are collected by the National Treasury Directorate and carried over to the following year's budget.

[13] This is legally mandated under Article 19 of Law 11/2007 and Article 11 of Law 12/2007.
[14] Bahl, 2000
[15] See the 2013 Budget Execution Report.

While these regulations mandate that all revenues will eventually be incorporated into the national and subnational budgets, they do little to mitigate budgetary uncertainty in any given year.

Table 3: Resource-Revenue Sharing, Budgeted vs. Actual

		Revenues budgeted (in million meticais)		**Revenues transferred (in million meticais)**	**Revenues transferred (%)**	**Difference between budgeted amounts and actual disbursements (%)**
Province/ District	**Locality**	Initial	Revised[16]			
Inhambane		5.7	7.1	7.1	100%	
Govuro	Pande	2.9	3.6	3.6	100%	
Inhassoro	Maimelane	2.9	3.6	3.6	100%	
Tete		22.3	22.3	8.6	38.7%	61.3%
Moatize	Cateme	6.1	6.1	1.6	27.7%	72.3%
	25 de Setembro	6.1	6.1	1.4	22.2%	77.8%
	Chipanga II	6.1	6.1	4.3	70.6%	29.4%
	Benga	3.9	3.9	1.4	34.8%	65.2%
Nampula		2.1	3.5	3.5	100%	
Moma	Topito	2.1	3.5	3.5	100%	
Total		30	32.8	19.2	58.4%	

Source: Adapted from the 2013 Budget Execution Report

49. **The difference between budgeted amounts and actual disbursements compromised the implementation of development plans at the subnational level.** When the first disbursement of resource revenues reached the authorities in Tete Province, Moatize's district government announced it and encouraged local communities to submit project proposals according to the approved procedures. However, the significant reduction in the amount allocated to Moatize frustrated community expectations, and only a small fraction of eligible projects could ultimately be funded.

50. **These problems were exacerbated by delays in the disbursement schedule.** Although officials in Moatize's government could monitor the amount budgeted for their district through Mozambique's financial management database,[17] the initial funding tranche only became available in September. According to the Provincial Directorate of Finance in Tete and the National Treasure Directorate in Maputo, the delay in disbursement was due to technical problems with the classification of royalty revenues in the database and the transfer of funds to the Single Treasury Account. These delays may recur in 2014, as Moatize and Moma districts had not yet received any revenue transfers by April 2014 despite these transfers appearing in the government's execution report (*Relatório de Execução Orçamental: Janeiro-Março 2014*). The considerable uncertainty surrounding the size and schedule of revenue transfers has dissuaded district governments from pursuing multiyear projects regardless of their potential benefits to local communities.

[16] Revenues planned to be transferred based on actual prices
[17] The Electronic System for State Financial Administration, or e-SISTAFE

51. **Provincial and district governments have received limited guidance on how to use transferred resource revenues.** General guidelines were provided in the 1/MPD-MF/2013 circular published by the Ministry of Planning and Development and the Ministry of Finance several months into the fiscal year. Given the administrative capacity constraints facing local governments in Mozambique, as well as the relative novelty of the revenue-sharing system, additional information on how best to utilize these funds will be critical to ensure that spending decisions among provincial and district governments are consistent with the government's development objectives and the goals of the revenue-sharing policy.

52. **Due to the limited guidance offered in the circular and its late publication, projects financed with resource revenues generally failed to reflect the central government's prioritization of investment in social and economic infrastructure.** For example, Tete's provincial government allocated just 30 percent of its resource revenues for community infrastructure, while 70 financed various projects aimed at bolstering food production, generating employment and increasing incomes according to the same criteria used by the District Development Fund (FDD). Although an important policy instrument, the goals of the District Development Fund are not always consistent with the policy objective of the resource-sharing program, particularly given the latter's focus on building socioeconomic infrastructure in communities affected by resource extraction.

53. **While provincial and district governments are deliberately granted significant latitude in defining local development objectives, it is important that these objectives be well coordinated and contribute to broader national goals.** As these goals have been inadequately defined, with limited guidance provided on how to advance them, project selection has been unsystematic,[18] and some local authorities have tended to pursue the objectives of pre-existing programs with which they were already familiar, such as the District Development Fund. However, the aims of these programs are not always consistent with the central government's spending rules that govern resource revenue transfers.

[18] The District Government of Moatize used a small share of its funds to build one water pump in Moatize-Sede and repair another. This was the extent of its infrastructure investment. Meanwhile, the district financed 14 projects aimed at increasing food production, employment and incomes. See: "*Governo da Província de Tete. Relatório específico sobre o impacto das receitas geradas na exploração mineira destinada a promoção do desenvolvimento comunitário.*" February 2014.

54. **In addition to the guiding principles for resource revenue transfers set out in the 1/MPD-MF/2013 circular, the GoM should consider drawing on community-driven development (CDD) approaches to the allocation and management of the resource revenues at the subnational level.** Many countries have used CDD grants to finance community infrastructure during the early stages of their revenue-transfer systems, only later moving to programs focused on individual beneficiaries (such as the FDD). Based on this experience, subnational governments in Mozambique should focus on using revenue transfers to finance community infrastructure, rather than food production, employment or income generation, at this stage in the development of the transfer system. This would require that local governments adhere more closely to the 1/MPD/MF/2013 circular and its emphasis on infrastructure investment. Drawing on CDD techniques can help subnational government to build productive infrastructure by mobilizing and developing the capacities of local communities. As communities expand their ability to collaborate with local governments, they can begin to pursue a wider range of objectives beyond infrastructure development. By vesting decision-making power in local communities rather than regional or nation authorities, CDD seeks to empower the poor and encourage more democratic and participatory forms of local governance (Guggenheim *at al*., 2004).

55. **Box 3, below, provides a brief overview of the CDD approach.**

Box 3: Community Driven Development in Indonesia

THE KECAMATAN DEVELOPMENT PROGRAM (KDP) is an initiative launched by the Government of Indonesia aimed at alleviating poverty in rural communities and improving local governance. In 2004 the project covered 28,000 villages spread across 30 of Indonesia's 34 provinces. KDP provides block grants of between US$40,000 and US$114,000 directly to sub-districts and villages to finance small-scale infrastructure, social and economic activities.

How KDP works

A facilitated planning process helps villagers decide how to use the funds offered through the program, which are made available each year for up to five years. The funds are distributed within each sub-district through a sub-district forum. The forum consists of village heads and local civil-society leaders, as well as three additional representatives (one man and two women) selected from each participating village. The sub-district forum designates a Financial Management Unit to manage KDP funds and to oversee any large procurement orders. The KDP project cycle includes six stages: (i) information and awareness; (ii) planning; (iii) proposal preparation and verification; (iv) funding decisions; (v) implementation; and (vi) follow-up. Community participation and transparency are emphasized at each stage of the process.

Information and Awareness

Communities are provided with information about the KDP systems through workshops held at the provincial, district and sub-district levels. These workshops involve community leaders, local government officials, local media outlets, educational institutions and NGOs.

Planning

Planning meetings occur at the village and sub-village levels. Facilitators disseminate information about KDP procedures and encourage villagers to submit ideas for KDP funding. Women also hold their own separate meetings to formulate proposals. At the second round of meetings, villagers' ideas are discussed and the forum decides which ideas the village should propose to the sub-district forum.

Proposal Preparation and Verification

Each village can submit up to three proposals to the forum. One of these must come from the women's meeting and a second from the women's savings and loan group. The proposal format is very simple, providing basic information on the proposed project's location, number of beneficiaries, and general characteristics; it may include a rough cost estimation. The community also selects a proposal preparation team to be trained by the facilitator. Proposals can include a range of social, economic and infrastructure-related activities. Verification of the proposals' technical elements occurs during the proposal review stage. The sub-district verification team usually includes community leaders, sub-district facilitators, and appropriate technical staff recommended by the District Engineer. The District Engineer also does a final check before the results of the verification are presented to the sub-district forum. The verification team reviews proposals for (i) technical and economic feasibility; (ii) number of beneficiaries and pro-poor targeting; (iii) provisions for long-term operating costs and/or debt service payments; (iv) plans for maintenance and upkeep plans (or repayment plans in the case of economic loans) in place; (v) community participation in

proposal development; and (vi) local community buy-in.
Verification reports are presented to the forum. If any proposals are found to be unfeasible, these issues would be discussed with the communities at the time of the visit, so that the proposal could be modified, or the community could understand the reason for its rejection. However, while facilitators can recommend rejection, the communities must still make the decision themselves. The verification phase usually takes three to four weeks and is crucial to screen projects for overall quality.

Project Selection
All proposals are discussed in the second forum meeting to determine a priority ranking. High-ranking proposals are subject to detailed design and cost estimation. Project designs are developed by the village with assistance from the facilitator. These designs are based on the results of technical surveys undertaken with community participation. Designs are discussed and approved by the village and the facilitator, and then inspected by the district Management and Technical Consultant. Once the designs are ready, the villages meet one more time to determine which proposals will be funded A grant agreement is prepared for the chosen projects, which includes the specifics of the project's design, its budget, a map, the commitment for community contributions, and other requirements. It is then signed by the manager for KDP, the village chief, and the head of the Activity Management Unit. The forum selects an independent oversight team to monitor all aspects of project implementation. On average, a minimum of six elected representatives (three of whom must be women) from each village in the sub-district attend these meetings. Final decisions from the forum meeting are posted on KDP information boards and shared with villagers at a third village-level meeting, as well as smaller sub-village and group meetings.

Financial Management and Accounts
The head of the sub-district financial unit, the sub-district facilitator and a village representative open a KDP account at a legally registered bank. Once the project agreements have been finalized, they are endorsed by the local government project officer, and a copy is sent to the Office of the Treasury. The Treasury then orders an initial transfer to the KDP bank account. Funds are disbursed in three tranches of 40 percent, 40 percent and 20 percent. Villages must provide reports to the community on the use of the funds after each tranche has been utilized. The final 20 percent cannot be disbursed until a progress certificate has been signed by the District Engineer.

Managing KDP II
At the national level, the Deputy for Regional Development for the National Development Planning Agency heads the National Coordination Team that provides oversight, strategic planning, and evaluation for the KDP. The management of the KDP is the responsibility of the Ministry of Home Affairs Community Development Agency, which handles its day-to-day operations. Government coordination teams representing various ministries also assist with the KDP. This structure is replicated at the provincial and district levels. Each level of government is supported by teams of consultants who contribute to the technical implementation of the program.

Source: Adapted from Guggenheim *et al*., (2004)

Participation, Transparency and Accountability

56. **Preliminary assessments of Mozambique's revenue-sharing system indicate that local Advisory Councils are not participating as actively in the management of resource revenues as envisioned in the 1/MPD-MF/2013 circular.** Local councils often have little information regarding the availability of resource revenues or the procedures for utilizing them. In addition, their opportunity to participate in the allocation and management of these funds is constrained by the lead role of the district administrator. For example, in the locality of Topito, Moma District, the local council and the district government had different priorities. The local council wanted to use the funds to build a vocational school, while the district government prioritized local administration facilities and communications infrastructure. While the local council's proposal was arguably aligned more closely with the objectives of the 1/MPD-MF2013 circular, the district government ultimately opted to pursue its own agenda. The limited clout of local councils also raises questions of equity in the distribution of funds at the community level, and in Moatize District village leaders have voiced their concern that not all communities affected by the mining industry are benefitting from resource revenues. Going forward, the provision of training to local council members and the adoption of measures to strengthen their role in public financial management will greatly enhance the integrity of the revenue-sharing system.

57. **A lack of transparency regarding how resource revenues are allocated within districts undermines the credibility of district authorities.** Communities have little information on exactly how revenues are being used, which weakens accountability at the local level. Timely and comprehensive

publication of revenue transfers and a description of spending allocations would put communities and the general public in a better position to scrutinize local decision-making.

58. **The standard of the Extractive Industries Transparency Initiative (EITI) is an important tool for ensuring transparency and accountability in resource revenue sharing.** EITI initially focused on the transparent reporting of all payments and fiscal transfers between extractive industry firms and the national government. However, both governments and companies are under increasing pressure to show how the extractive industries are materially benefiting those communities affected by their operations (RWI, 2008). Article 3.8 of the newly revised EITI standard, which the GoM has explicitly expressed its desire to implement in full, states that, "…the multi-stakeholder group is encouraged to include further information on revenue management and expenditures in the EITI Report, including: (i) a description of any extractive revenues earmarked for specific programs or geographic regions. This should include a description of the methods for ensuring accountability and efficiency in their use" (EITI, 2013*)*. EITI Reports in, Ghana, Guinea, and Mongolia already include subnational revenue transfers in addition to fiscal flows between the national government and resource firms (RWI, 2008).

59. **In nearby Madagascar, the 2011 EITI report provided extensive information on the management of resource royalties.** The regular publication of reports on the status of extractive industry development is consistent with the revised EITI standard. These reports not only record revenue transfers received by regional and municipal governments, they also describe the use of resource revenues by communities and regions practicing participatory budgeting,[19] including a breakdown of current and capital expenditures for each subnational government (EY, 2013).

<u>Monitoring and Oversight</u>

60. **In addition to providing guidance on the type of projects to be funded through resource revenue transfers, the central government requires that local governments use the funds in line with all relevant laws and regulations for public financial administration.** Resource revenue transfers are monitored by the Ministry of Finance and are subject to internal and external audit controls and reporting requirements, though at present the primary publication on resource revenue transfers is the execution report, which only provides information on the amounts transferred and, contrary to its name, does not record expenditure execution.

5. CONCLUSION AND RECOMMENDATIONS

61. **While the size and trajectory of resource revenue transfers are important fiscal policy issues, the institutional impact of these transfers on subnational governments is a more pressing concern.** At present, resource revenue sharing represents a relatively small percentage of total fiscal transfers to resource-rich districts. After the projected start of gas exports in the Rovuma Basin toward the end of the decade revenue transfers are expected to increase, but if national policymakers continue to allocate just 2.75 percent of total resource revenues to subnational governments, these transfers will remain a small percentage of districts' overall resource envelope. Given that resource extraction and revenue sharing are both relatively new to Mozambique, and considering the capacity limitations of its subnational governments, a low transfer rate may be desirable at this stage. However, it will likely become necessary to increase the transfer rate in the future in order to meet both the central government's

[19] Participatory budgeting allows citizens to influence the budget through discussions and negotiations with local government officials (Aslam *et al.*, 2010). This ensures that citizens are involved in local political decisions and encourages them to become active participants in community problem-solving (Rocamora 2004 in Aslam *et al.*, 2010).

development objectives and the local goals of affected communities. The effectiveness of increased revenue transfers will hinge on the expenditure capacity and public financial management efficiency of subnational governments, and building this capacity will be essential to the success of Mozambique's resource revenue policies. No less important is the need to clarify the roles and responsibilities of the different actors involved in investing resource revenues, and further action will be required to ensure the meaningful participation of local communities in determining their social and economic development priorities.

62. **In order to mitigate revenue volatility and enhance the predictability of subnational budgets, the government must develop a system for reliably projecting the amount and disbursement schedule of future transfers.** Mozambique has only recently adopted a revenue-sharing policy, and its limitations are in part a reflection of its novelty. Over time, the mechanisms by which resource transfers are budgeted, disbursed and utilized by target communities will evolve as the authorities work to address the weaknesses of the present system. The current practice of determining the share of resource revenues to be transferred on an annual basis at the discretion of national policymakers is a concern, as it greatly increases the already significant budgetary uncertainty faced by subnational governments. To remedy this situation the GoM should consider fixing the rate at which resource royalties are transferred to subnational governments. This could be achieved either by establishing a fixed percentage to be transferred annually over a given time horizon, or by adopting a formula that reflects the projected growth of resource royalties, local spending needs and the implementation capacity of local governments.

63. **Given the small size of resource revenue transfers relative to the national budget, the central government is well positioned to absorb the volatility risk by earmarking nominal amounts of revenue for transfer, rather than a share of actual revenues collected.** Mozambique's current revenue transfer system includes no measures to mitigate the impact of revenue volatility at the subnational level. In 2013 the amounts transferred to areas producing coal deviated significantly from the initial and even the revised budget. This exacerbates the uncertainty faced by subnational governments, but it could be avoided by including a nominal transfer amount in the budget.

64. **Absorbing revenue transfer volatility at the national level would provide the government with an opportunity to pilot a resource revenue savings mechanism.** In order to ensure that the specified transfer amount would be available each year, regardless of actual resource revenues, the central government could save excess revenue during times when commodity prices and production volumes were high, then draw on these savings during subsequent revenue shortfalls. Several variations on this system are also possible. For example, (i) the government could determine the transfer amount based on a multiyear revenue average, rather than actual revenues in each given year; (ii) it could establish a minimum transfer amount to which a share of any excess windfall revenue could be added or (iii) it could transfer an amount equivalent to a fraction of the revenues received in a previous year, for instance the scheduled transfer for 2015 could equal the total revenue received in 2013.

65. **Minimizing volatility is crucial to the effectiveness of revenue sharing.** While the optimal size of resource-revenue transfers depends on the unique circumstances of each country, stability is crucial in every case. Unchecked revenue fluctuations undermine budgetary predictability among subnational governments, damaging the efficiency of fiscal policy and discouraging multiyear investment planning at the regional and local levels. Conversely, stable, predictable resource transfers can advance key development objectives by building subnational administrative capacity and enhancing social capital in communities affected by resource extraction. Resource-revenue transfers are most effective when complemented by efforts to improve project selection, implementation and evaluation, and by support for participatory decision-making processes and local accountability and oversight mechanisms.

66. **The government should ensure that resources are transferred in full and on schedule.** Delays in the disbursement of revenue transfers exacerbate the uncertainty of the revenue-sharing system. Whether due to technical issues or political interference, these delays disrupt the predictability of local budgets, undermining the implementation of community plans and discouraging multiyear investment projects. To some extent the government's experience in 2013 reflected the unanticipated obstacles that frequently accompany new public policies. However, proactive steps will be necessary to strengthen public financial management and ensure that budgeted resource transfers are executed reliably and predictably.

67. **Over time, the government may consider expanding its revenue-sharing system to include non-resource-producing districts.** A nationwide program of decentralized fiscal transfers would need to be phased-in gradually to account for administrative capacity constraints, and the lessons learned from the current system of revenue sharing in resource-producing districts could prove instrumental to its success. However, while extending the scope of the revenue-sharing system offers many potential benefits, these should not come at the expense of resource-producing areas, which bear a disproportionate share of the costs involved in resource extraction. Maintaining equity will require that resource-producing areas continue receiving sufficient transfers to offset the negative social, economic and environmental impacts of extractive industries.

68. **The government should build the capacity of local authorities and provide clear guidance on the use of resource revenues to ensure compliance with the priorities set forth in 1/MPD-MF/2013 circular.** The government's initial experience with revenue sharing illustrates the extent to which local spending patterns tend to be inconsistent with the objectives of the policy as defined in the 1/MPD-MF/2013 circular. Mozambique faces an enormous infrastructure deficit, and the pressing need to focus on basic public goods and services should be a guiding principle for local governments. Provincial governments should be encouraged to assist communities in establishing local priorities and designing development plans for the short, medium and long terms. Each locality should formulate a plan to address local infrastructures gaps and achieve specific social and economic development goals. These plans and goals should be regularly revised and updated through consultative meetings involving relevant stakeholders including community leaders, local government officials, civil society, private sector and they should be incorporated into the overall District Development Plan, which provides the basis for allocating and managing resource revenues at the local level.

69. **To advance its national policy objectives the government must provide clear guidance on the use of resource revenues to ensure compliance with the priorities set forth in 1/MPD-MF/2013 circular, yet at the same time it should provide a greater role for community driven development in the revenue-sharing system.** The government's initial experience with revenue sharing illustrates the extent to which local spending patterns tend to be inconsistent with the goals of the policy as defined in the 1/MPD-MF/2013 circular. Mozambique's development strategy emphasizes the urgent need to address the country's enormous infrastructure deficit, and the importance of enhancing access to basic public goods and services should be a guiding principle for local governments. Provincial governments should be encouraged to assist communities in establishing local priorities that are consistent with this overarching objective and designing development plans for the short, medium and long terms. Each locality should formulate a plan to address local infrastructures gaps and achieve specific social and economic development goals. These plans and goals should be regularly revised and updated through consultative meetings involving relevant stakeholders, including community leaders, local government officials, and representatives from civil society and the private sector. They should be incorporated into the overall District Development Plan, which provides the basis for allocating and managing resource revenues at the local level. In addition to the 1/MPD-MF/2013 circular, which sets out the broad principles of the resource-transfer system, the government should consider using a community-driven development approach for allocating and managing the resource revenues at the subnational level.

70. **Local governments should work to improve budgetary transparency and accountability and strengthen mechanisms for participatory budgeting.** Local governments in areas affected by resource extraction should publish clear, accessible and detailed information on the receipt and use of resource revenues. Greater transparency would facilitate participatory decision-making and promote local accountability for the use of resource revenues. While online publication has become standard for reporting national-level financial information, at the local level community radio, public meetings and other communication channels may be more appropriate.

71. **Finally, the government should clarify its guidelines for the use of resource revenue transfers.** Certain elements of the transfer policy appear to be well defined and generally adhered to, such as the mandatory use of resource revenues for investment spending only. However, the central government's focus on investment in economic and social infrastructure is less consistently applied by local governments. Establishing more detailed expenditure priorities for resource revenue transfers would allow for greater coordination in the pursuit of national development goals. Balancing the interests of the national government with the ability of local authorities to determine their own investment agendas will be a continuous challenge in the management of resource revenue transfers in Mozambique. Offering explicit guidance as to which types of socioeconomic infrastructure are to be financed through resource-revenue transfers may help to coordinate investment decisions, but the government must be careful to ensure that local communities retain a meaningful degree of discretion over the use of transferred funds.

REFERENCES

Ahmad, E. and Singh, R. (2003). "Political Economy of Oil-Revenue Sharing in a Developing Country: Illustrations from Nigeria." IMF Working Paper. Washington DC: IMF.

Ahmad, E. and Mottu, E. (2002). "Oil Revenue Assignments: Country Experiences and Issues." IMF Working Paper. Washington DC: IMF.

Agustina, C. *et al*. (2012a). "Political Economy of Natural Resource Revenue Sharing in Indonesia." Asia Research Centre: Working Paper. Vol. 55, No. 6. Jakarta.

Agustina, C. *et al*. (2012b). "The Regional Effects of Indonesia's Oil and Gas Policy: Options for Reform." *Indonesian Economic Studies Bulletin.* V.48, No.3. Indonesia.

Aslam, G. *et al.* (2010). "A Framework for the Assessment of Fiscal Decentralization Systems." Washington, DC: The World Bank.

Bahl, R. (2002). "Revenue Sharing in Petroleum States." Oil, Gas, Mining and Chemicals Department of the WBG and ESMAP. Workshop on Petroleum Revenue Management. Washington, DC.

Bahl, R. and Tumennasan, B. (2002). "How Should Revenues from Natural Resources be Shared in Indonesia?" International Studies Program. Atlanta: Georgia State University.

Bahl, R. (2000). "Intergovernmental Transfers in Developing and Transition Countries: Principles and Practices." Washington, DC: The World Bank.

Barroso, C. and Araujo, T. (2013). "Intergovernmental Finance: Impact and Implications of Recent and Potential Changes to Brazil's Subnational Fiscal Framework." Washington, DC: The World Bank.

Brosio, G. and Singh, R.. (2013). "Revenue Sharing of Natural Resources: International Practices and Possible Options for Africa." Draft.

Brosio, G. and Jiménez, J. (2012). "Decentralization Reform in Latin America: Improving Intergovernmental Relations." New York: The United Nations.

Bauer, A. (2013). "Subnational Oil, Gas and Mineral Revenue Management." Briefing. Revenue Watch Institute.

Calvo-Gonzalez, O. (2010). "The Decentralization Process and Its Links with Public Expenditure Efficiency." Washington, DC: The World Bank.

Ernst & Young (2013). "Reconciliation Report of Payments Made by the Extractive Companies to the Malagasy State and Revenues Received by the State, Year 2011." Madagascar: Extractive Industry Transparency Initiative.

Fajnzylber, P. and Lederman, D. (2012). "Pre-Salt Oil Discoveries and the Long-Term Development of Brazil." Washington, DC: The World Bank.

Fischer, C. (2007). "International Experience with Benefit-Sharing Instruments for Extractive Resources." Resources for the Future.Washington.

Forquilha, S. (2010). "Governação Distrital no Contexto das Reformas de Descentralização Administrativa em Moçambique: Lógicas, Dinâmicas e Desafios." Maputo: IESE.

Government of Tete Province (2014). "Relatório Específico sobre o Impacto das Receitas Geradas na Exploração Mineira Destinada a Promoção do Desenvolvimento Comunitário." PowerPoint Presentation.

Guggenheim *et al*. (2004). "Indonesia's Kecamatam Development Program: A Large-Scale Use of Community Development to Reduce Poverty." Washington, DC: The World Bank.

Hartwick, J. (1977). "Intergenerational Equity and the Investment of Rents from Exhaustible Resources." *American Economic Review*. No. 67.

Kaiser, K. and Merhi, M. (2009). "Revenue and Expenditure Management in Resource Rich Countries: Managing Post-Commodity Boom Volatility in Intergovernmental Settings," Policy Note. Washington, DC: The World Bank

Loayza *et al*. (2011). "More Than You Can Handle: Decentralization and Spending Ability of Peruvian Municipalities." World Bank Policy Research Working Paper No. 5763. Washington, DC: The World Bank.

Loayza *et al*. (2013). "Poverty, Inequality, and the Local Natural Resource Curse." Washington, DC: The World Bank.

Morgandi, M. (2008). **"**Extractive Industries Revenues Distribution at the Sub-National Level: The Experience in Seven Resource-Rich Countries." New York: Revenue Watch Institute.

O'Faircheallaigh, C. and Ali, S. (2008). "Earth Matters: Indigenous People, the Extractive Industries and Corporate Responsibility." UK: Greenleaf Publishing.

Otto, J. (2001). "Fiscal Decentralization and Mining Taxation." Paper prepared for the World Bank Group Mining Department. Washington, DC: The World Bank.

Sefton, D. (2008). "EITI – Beyond The Basics." New York: Revenue Watch Institute.

Solow, M. (1974). "Intergenerational Equity and Exhaustible Resources." *Review of Economic Studies*. Symposium.

Stiglitz *et al*. (2007). "Escaping the Resource Curse." New York: Columbia University Press.

Schroeder, *et al*. "Intergovernmental Fiscal Transfers: Concepts, International Practices, and Policy Issues." http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.199.2360&rep=rep1&type=pdf. (Accessed August 13, 2013).

World Bank (2013). "Program Document for a Ninth Poverty Reduction Support Credit to the Republic of Mozambique." Washington DC: The World Bank.

World Bank and UNDP (2005). "Comparative Study on the Distribution of Oil Rents in Bolivia, Colombia, Equador, and Peru." Washington, DC: The World Bank.

ANNEX: RESOURCE REVENUE VOLATILITY

Natural resource revenue transfers to the sub-national levels will depend on royalties collected by the government (which in turn are determined by the price, production and royalty rates of coal and natural gas respectively) and the rate of transfer agreed upon to the districts. At the current rate of 2.75 percent, resource revenue transfers are expected to rise from US$1 million in 2014 to US$13 million in 2032 with cumulative flows over the 18 years reaching US$170 million. However these revenues are sensitive to price and production shocks in both coal as well as natural gas. In order to gauge the volatility in these revenue transfers, a number of shocks are introduced to the baseline revenue projections from natural resources. Price shocks are introduced by means of standard deviation in the historical prices of the two commodities, coal and natural gas. Production shock on the other hand is introduced in terms of percentage changes to the production figures in the baseline. The effects of price and production shocks in coal and natural gas are shown individually to see where revenues are more sensitive. In addition, the effects of price and production shock in both commodities together are also looked at. Finally, given the discretionary nature of allocations of the resources revenues, the rate of transfer is also considered an exogenous variable and is changed to see how it would impact revenue transfers.

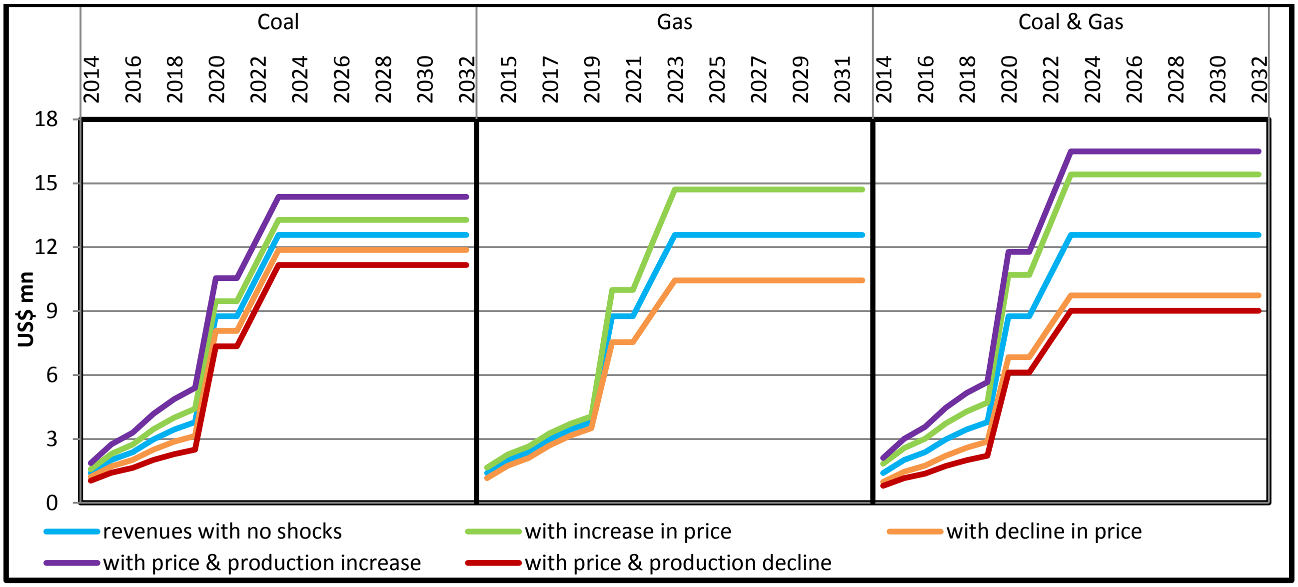
In order to show their sensitivity to price shocks in coal, one standard deviation change (both positive and negative) in coal prices is introduced. Moreover, production shocks are introduced so that the baseline production figures rise and fall by 25 percent each. No changes are assumed in the gas market at this point. Thus, the change in revenues is entirely due to shocks in the coal market.

Revenue volatility emanating from price shocks in natural gas is also shown in terms of one standard deviation change (positive and negative) to the baseline prices. Production levels for gas have been kept constant during this entire analysis, assuming that Mozambique would still want to produce gas at the installed capacity even if prices dropped given the high costs of installation. Coal prices and production levels have been maintained at the baseline level. Thus the changes to revenues in this case come only from a natural gas price shock.

The effect of price and production shocks coming from both coal as well as natural gas is also analysed. A price shock, as explained above, is introduced. A production shock is also introduced in coal production while keeping gas production constant. The change in revenues can therefore be attributed to both coal as well as natural gas shocks.

The graph below shows how the natural resource revenue transfers would vary with these price and production shocks. These revenue transfers include royalties from both coal and natural gas. The graph to the left shows changes to revenue transfers coming from price and production shocks in the coal market. The graph in the middle shows changes to revenues emanating from shocks in natural gas prices. The right graph shows revenues with price shocks in both coal and natural gas as well as production shock (only in coal). It can be seen that revenue transfers are more sensitive to natural gas prices than coal. These price and/or production shocks can significantly change the revenue transfers.

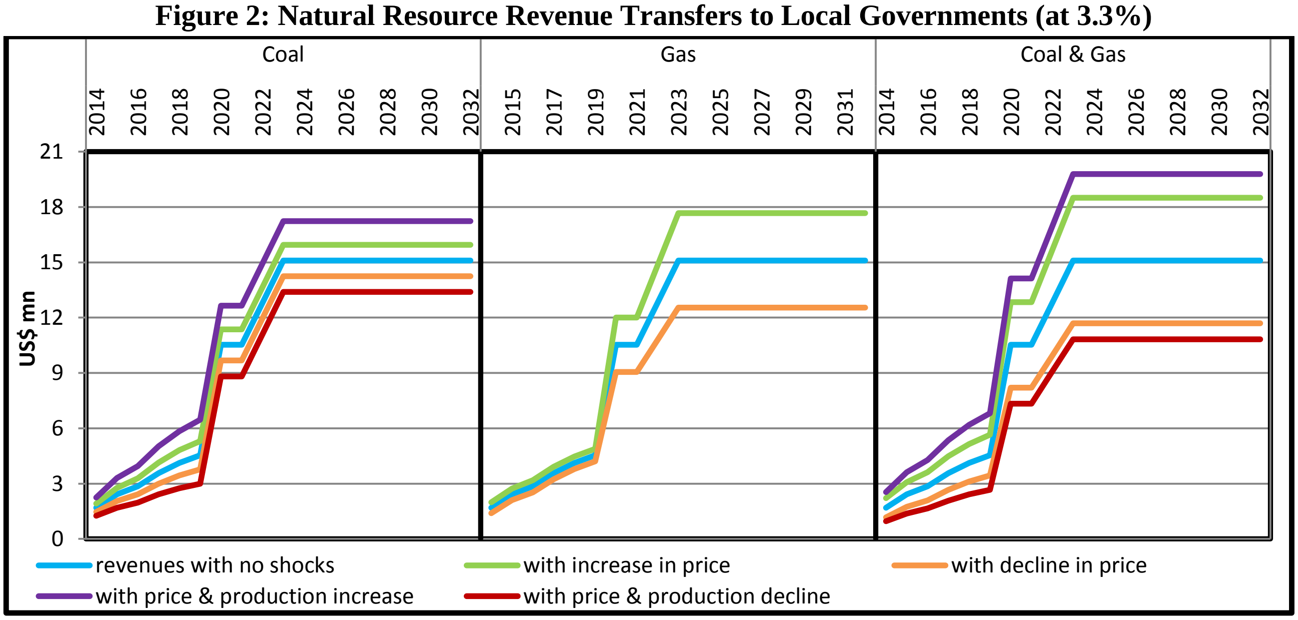
Figure 1: Natural Resource Revenue Transfers to Local Governments (at 2.75 %)



The figure above shows that revenue transfers are sensitive to price and production changes in the two commodities. Revenues are more sensitive to changes in natural gas prices than coal prices. This is because of the large quantity of gas that is expected to be exported, which also makes the change in price have a big impact on the royalties collected. A combined price and production shock in both the commodities has the biggest impact on the revenues.

It is also possible that the rate of transfer also changes thus affecting the sum of revenues being transferred. The figure below shows revenue transfers to the districts with a 20 percent rise in the rate of transfer, to 3.3 percent. Revenue transfers would rise from US$2 million in 2014 to US$15 million in 2032. Cumulative transfers between 2014 and 2032 would reach US$204 million. The changes in revenue due to price and production shocks from both coal and natural gas are also shown.

Figure 2: Natural Resource Revenue Transfers to Local Governments (at 3.3%)

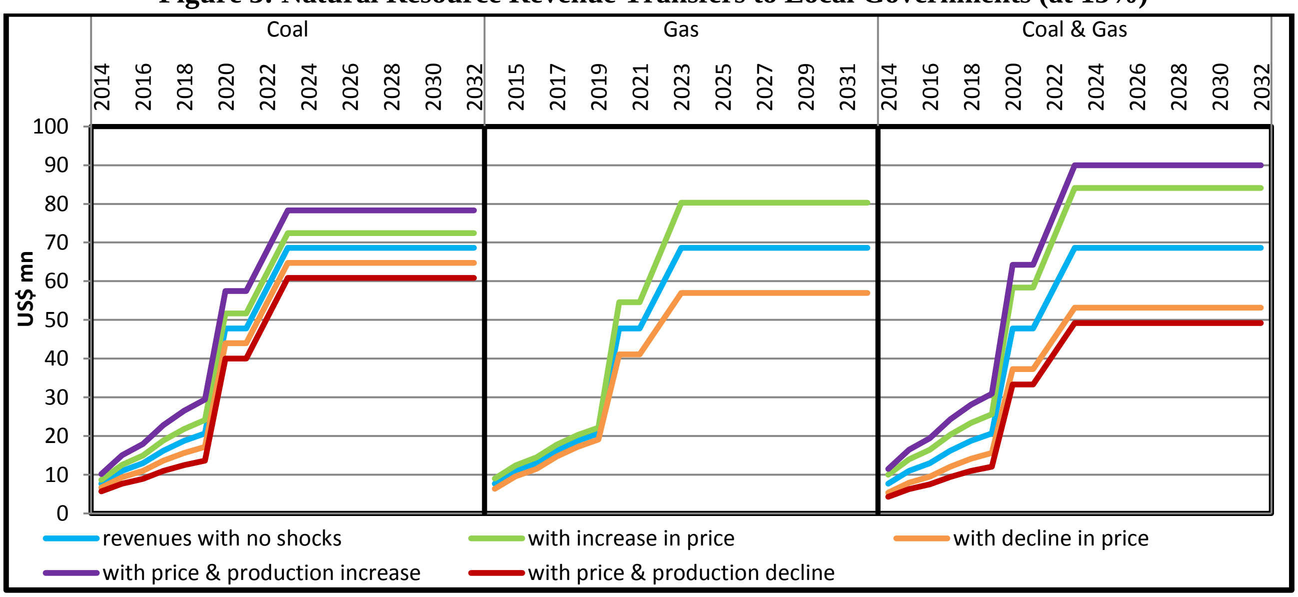


While these charts show that revenues are sensitive to price and production changes, they remain relatively small. In 2014, the revenue transfers at the current rate of 2.75 percent constitute no more than 5 percent of the total budget of the resources producing districts. Given the small sum being transferred, volatility emanating from these transfers will not have a very big impact on the fiscal management in these districts. Volatility would become a concern when the transfers are on a much higher scale.

Generally, most resource producing countries, including Sub-Saharan Africa, have resource revenue sharing arrangements with sharing rates at no less than 10 percent. Some countries like Cameroon go even higher to up to 25 percent. Thus, the transfer rate to Mozambique is very small compared to these countries. Since resource extraction and revenue sharing is relatively new in the country a small transfer rate in the first stages of the development of a sharing model may even be desirable. However with time there may be increasing demand and pressure to increase the transfer rate in order to meet the local infrastructure and other goals and objectives.

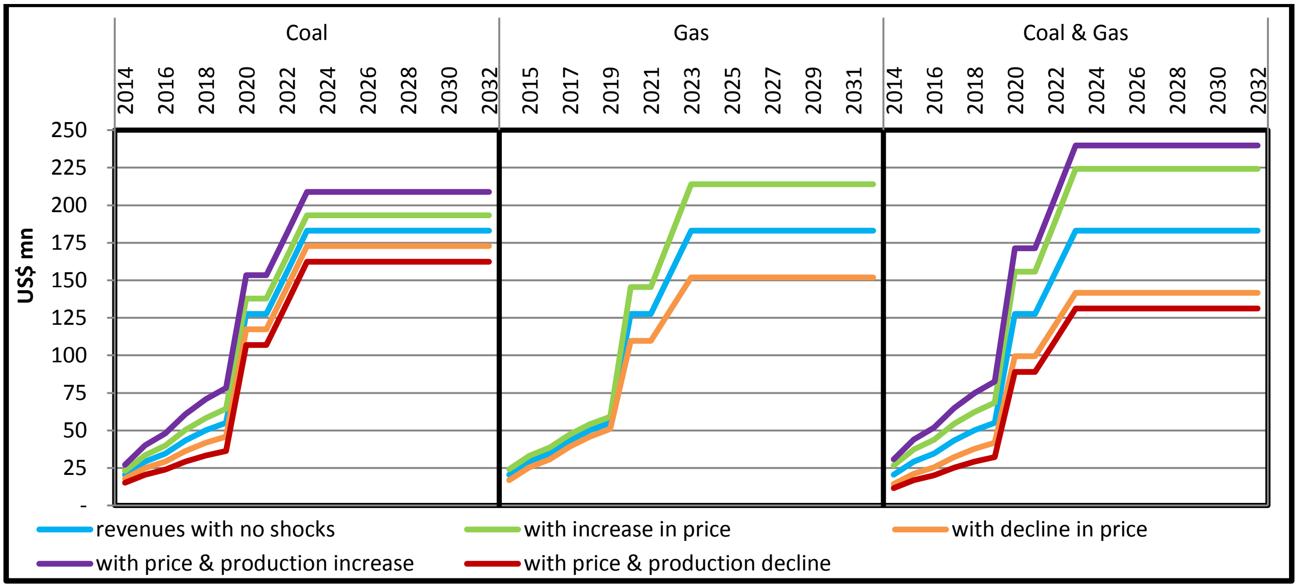
Figure 3 below looks at revenue transfers with a transfer rate of 15 percent, which will be in line with Mozambique's peer countries in Sub-Saharan Africa. At this rate, revenue transfers would rise significantly from US$8 million in 2014 to US$69 million in 2032. Cumulative transfers over the two decade would be almost US$1 billion. This is much higher compared to US$170 million that would accrue to the districts at the current rate. These revenue transfers would also form a significant proportion of the total budget of these districts. However, with an increased transfer rate for revenue sharing, revenues would also be more volatile. While the proportional change in revenues given these price and production shocks (as mentioned above) remain the same, the sum of transfers involved are much bigger now compared to the current rate of 2.75 percent. Thus effects of volatility in revenue transfers to the sub-national levels can be more severe at this sharing rate.

Figure 3: Natural Resource Revenue Transfers to Local Governments (at 15%)



Increasing the rate of transfer even further, would increase the revenue transfers to these districts but also expose them to greater volatility. For instance, if the rate of revenue transfers were to be fixed at 40 percent, natural resource revenues to the districts would rise to US$183 million by 2032. The revenue transfer in this one year alone would exceed the total revenue transfers over the two decades to these districts at the current transfer rate. Cumulative revenue transfers would be as high as US$2.5 billion. Such huge transfers would indeed raise concerns over the absorptive capacity in the districts. Moreover, price and production shocks as mentioned earlier would have a severe impact on the actual transfers. This is clear from figure 4.

Figure 4: Natural Resource Revenue Transfers to Local Governments (at 40%)



As figure 4, revenues could change dramatically with shocks from coal or natural gas or both. A coal price and production would make revenues vary between US$162 million and US$209 million by 2032 with cumulative revenues raging between US$2.1 billion and US$2.9 billion. A price shock in gas would have a bigger impact with revenues by 2032 ranging between US$151 million and US$215 million. In an extreme scenario of a combined shock from both markets, revenues could vary between US$131and US$240 million by 2032. Cumulative revenues in such a situation would vary between US$1.7 billion and US$3.3 billion.

This analysis shows that revenue transfers to the districts are sensitive to price and production change in coal and natural gas as the transfers depend on royalties collected by the government on the two commodities. However, given the current rate of transfer at 2.75 percent, the sum of transfers remains relatively small and hence volatility is not a big concern. Mozambique's transfer rate is relatively small compared to other countries and there may be greater need to increase this rate later. In such a case, the flow of natural resource revenue transfers would be much bigger than the current rate. This would mean improving the absorptive capacity in these districts so that to ensure efficiency. Moreover, higher revenue transfers would also expose the districts to more volatility.