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Opportunities and Challenges for the Extraction of Natural Gas in Tanzania: The Imperative of Adequate Preparedness.

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Abstract

This paper identifies areas which need adequate preparation in order to ensure that the extraction of natural gas becomes the main driver for inclusive and sustainable growth and development in Tanzania, including reduction in donor dependence. The preparedness package includes ensuring that: fiscal regime to capture rent is in place, requisite human resources are made available and developed, savings are invested in the domestic economy, ownership is on joint-venture basis to encourage high retention rates in the domestic economy, up-stream unfolding of industries is encouraged (value-addition), contract negotiation capacities are strengthened, the negotiation processes are transparent and consultative, local community benefit effectively from the resource, the investment in other non-gas sectors (e.g. agriculture and manufacturing) is scaled-up, and politicians rise above their party interests so that they contribute positively towards the development of the natural gas sector and policy making process.

Keywords: extraction of natural gas, challenges, opportunities, Tanzania

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1.0 Introduction

The discovery and production of natural gas on a commercial scale in Tanzania have both opportunities and challenges. This unprecedented opportunity requires adequate preparedness in order to ensure that these resources are effectively managed. The scope of effective management ranges from having the requisite policy and strategies in place, to appropriately saving and investing the revenues realized from this non-renewable resource. It needs to be underscored that revenues from resource extraction are intrinsically time limited; natural gas reserves will be depleted overtime. Hence, if the revenues are consumed but not invested, the resulting increase in living standards may not be sustained. On the contrary, if the revenues were to be harnessed for a sustained increase in living standards, they must be invested outside the resource sector in physical, human and environmental infrastructure, including education, health care, roads, railways and ports.

In a poverty-stricken and aid dependent country like Tanzania, natural gas revenues are likely to possess a wide range of opportunities to scale-up the rate of growth through enhanced domestic resource mobilization and investment. Further, if the realized growth is broad-based and propoor, jobs will be created and household incomes will likewise be boosted. Ultimately, these outcomes will in-turn result in sustainable poverty reduction and enhanced social spending.

These opportunities notwithstanding, a number of challenges have to be faced and addressed. These range from the instability of the revenues, destabilizing savings in public expenditure, real exchange rate appreciation, volatility of commodities, to unknowable path of future trend of commodities price. In order to effectively address these challenges and to grab the unfolding opportunities, adequate preparedness is unavoidable. The starting point for the preparedness path is to put in place an effective policy framework and the attendant implementation strategy, coupled with an in-built monitoring and evaluation strategy.

This paper identifies areas which need adequate preparation in order to ensure that the extraction of natural gas becomes the main driver for inclusive and sustainable growth and development in Tanzania, including reduction in donor dependence. The preparedness package includes ensuring that: fiscal regime to capture rent is in place, requisite human resources are made available and developed, savings are invested in the domestic economy, ownership is on joint-venture basis to encourage high retention rates in the domestic economy, up-stream unfolding of industries is encouraged (value-addition), contract negotiation capacities are strengthened, the negotiation processes are transparent and consultative, local community benefit effectively from the resource, the investment in other non-gas sectors (e.g. agriculture and manufacturing) is scaled-up, and politicians rise above their party interests so that they contribute positively towards the development of the natural gas sector and policy making process.

The rest of the paper is structured as follows. This section is followed by a discussion of eight issues which are areas of concern as far as resource-rich countries are concerned. This is also complemented by showing how the sector is unique when compared to other sectors of the economy. The third section focuses on the imperative of adequate preparedness, if a country is to benefit significantly from extraction of natural resources. The principles guiding the

preparedness process are also articulated. The last section concludes the paper with a number of recommendations.

2.0 Why Worry About Natural Resource Wealth

In this section we attempt to analyse the most cited problem areas associated with extraction of natural resources. There are eight areas of concern. Firstly, "the resource curses". This is the term used to describe the failure of resource-rich countries to benefit from their natural wealth (Auty, 1993). Experience shows that countries with large endowment of natural resource, such as oil and gas, often perform worse in terms of economic development and good governance than do countries with fewer resources. Paradoxically, despite the prospects of wealth and opportunity that accompany the discovery, and extraction of oil and other resources such endowments all too often impede rather than further balanced and sustainable development.

On the one hand, the lack of natural resources has not proven to be a significant binding constraint to economic development. Countries like the Asian Tigers (Hong Kong, South Korea, Singapore and Taiwan) are a testimony to this. On the other hand, many natural resource-rich countries have struggled to generate self-sustaining economic takeoff and growth and have even succumbed to deep economic crisis (Sachs and Warner, 1995). Indeed, if one were to control for structural attributes, resource-rich countries grew less rapidly than resource-poor countries during the last quarter of the twentieth century. Alongside these growth failures are strong associations between resource wealth and the likelihood of weak democratic development (Ross, 2001), corruption (Sala-i-Martin and Subramanian, 2003), and civil war (Humphreys, 2005).

This generally bleak picture among resource-rich countries nonetheless masks a greater degree of variation. Some natural resource-rich countries have performed far better than others in resource wealth management and long-term economic development. For example, some years ago, Indonesia and Nigeria had comparable per capita incomes and heavy dependencies on oil sales. Yet today, Indonesia's per capita income is four times that of Nigeria. A similar discrepancy can be found among countries rich in diamonds akin to oil and gas. For instance, in comparing the diamond-rich countries of Sierra Leone and Botswana, one sees that Botswana's economy has grown at an average of 7 percent over the past two decades, while Sierra Leone has plunged into civil strife, its gross domestic product (GDP) per capita dropped by 37 percent between 1971 and 1989 (Humphreys, Sachs and Stiglitz, 2007).

Secondly, natural resource wealth has specific features which distinguish it from other types of wealth. Two key differences stand out clearly. The first is that unlike other sources of wealth, natural resource wealth does not need to be produced. It simply needs to be extracted. Since it is not a result of a production process the generation of natural resource wealth can occur quite independently of other economic processes that take place in a country. That is, the enclave phenomenon. For example, it can take place without major linkages with other sectors of the economy, or without the generation of large number of jobs. Again, natural resource extraction can also take place quite independently of other political processes. This means a government

can often access natural resource wealth regardless of whether it commands the cooperation of its citizens or effectively controls institutions of state.

The second feature steams from the fact that many natural resources, oil and gas in particular – are non-renewable. In this regard, and from an economic perspective, they are less like a source of income and more like an asset. These two features give rise to a large array of political and economic processes that produce adverse effects on the economy. One of the greatest risks concerns the emergence of what political scientists call "rent-seeking behavior". In such cases, individuals, private sector actors and politicians have incentives to use political mechanism to capture these rents. Rampant opportunities for rent-seeking by corporations and collusion with government officials thereby compound the adverse economic and political consequences of natural wealth.

Thirdly, the unequal expertise (knowledge and information gap) between the government of the resource-intensive country and the multinational corporations is a big challenge. Governments face considerable challenges in their dealings with these corporations, which have great interest and expertise in the sector and extraordinary resources on which to draw. Since oil and gas exploration is both capital and increasingly technologically intensive, extracting oil and gas typically requires cooperation between country governments and experienced international private sector actors. In many cases, this can produce the unusual situation in which the buyer (corporations) knows more about the value of the good being sold than the seller (government). This asymmetrical relationship in terms of bargaining power tends to benefit the buyer more than the seller (Eurodad, 2011).

Apart from the information asymmetries, several governance problems are associated with the ownership operations of the international corporations. The presence of off-share registered companies in the ownership chain limits public disclosure requirements. Meanwhile, the involvement of subsidiaries and affiliates as conduits for intra-economy trade creates extensive opportunities for trade mispricing, aggressive tax planning and evasion, thus enabling companies to maximize their profits while encouraging illicit capital flight (ECA, 2011).

The above phenomena is compounded by the fact that many governments may have erred in providing excessive tax concessions to such companies as a way of attracting foreign investors. It is urged that taxation regimes designed during the 1990s, when demand for resources was more limited and Africa's economic environment less favourable, featured extensive exemptions; from corporation taxes, withholding taxes and import duties. In many cases royalty charges were reduced or waived. Many of these arrangements were continued even when the projects in question were highly profitable (Africa Progress Report 2013). In such circumstances the challenge for host countries is to find ways to contract with the international corporations in a manner that also gives than a fair deal.

Fourthly, once a contract has been negotiated and the financial flows are realized, new problems arise with regard to non-extractive sectors of a country's economy. This is the so called "Dutch Disease". Following the discovery of natural gas in the North Sea in the 1970's, the Dutch found

that their manufacturing sector suddenly started performing more poorly than anticipated. In the same vein, resource-rich countries that similarly experience a decline in preexisting domestic sectors of the economy are characterized by having caught the "Dutch Disease" (Ebrahim-Zadeh 2003).

The pattern of the disease can be described as follows. A sudden rise in the value of natural resource exports produces an appreciation in the exchange rate. This in turn, makes exporting non-natural resource commodities almost impossible (the spending effect). Foreign exchange from the natural resources may be used to purchase internationally traded goods, at the expense of domestic manufacturers of goods. Simultaneously, domestic resources such as labour and materials are shifted to the natural resource sector (resource pull effect). Consequently, the price of these resources rises on the domestic market, thereby increasing the costs to producers in other sectors. In a nutshell, extraction of natural resources sets in motion a dynamic that gives primacy to two domestic sectors, namely the natural resource sector and the non tradables sector, such as construction industry, at the expense of more traditional export sectors. In the case of Africa, this translates into neglect of agriculture.

The dynamics generated by the "Dutch Disease" have wider adverse effects on the economy through a number of transmission belts. These range from loss of jobs, readjustment of capital, slow down of innovations and inventions in the manufacturing sector, to enhanced inequalities due to skewness of the natural resource sector. The heightened inequality is informed by the fact that agriculture and manufacturing are the sectors which are critical for inclusive growth and poverty reduction. Therefore, if their growth is at risk, inequality will automatically widen.

Fifthly, prices of both oil and gas are highly volatile in global commodity markets. In order to understand this volatility aspect, one needs to recall that the Dutch Disease arises because of the quantity of oil money coming in; other problems arise because of the timing of the earnings. Earnings from these commodities, if viewed, as a source of income are highly volatile. The volatility of incomes comes from three sources: the variation over time in rates of extraction the variability in the timing of payments by corporations to the state, and fluctuations in the value of the natural resources.

The first variation over time is the rate of extraction. A typical pattern is to have a front-loading of extraction rates since production volumes tend to reach a peak within the first few years of production and then gradually descend until production stops. The second major source of volatility derives from the nature of the agreement between the producing companies and the government. For example, if the corporations are exempted from taxes during the first years of production, government earnings would be minimal (Johnson, 2003). However, the eventual introduction of taxes should boost governments' budget. The third major source of volatility arises from the highly volatile nature of oil and gas prices. Whereas the experience of the past twenty years shows that prices have been trending upwards, the variation around this trend is very great with week on week changes of plus or minus 5 to 10 percent (Humphreys, et.al 2007).

The most obvious implication of this volatility of prices is that longer term planning is rendered difficult due to uncertainty over future financing, especially as a result of fluctuations in the value of the commodity. In this regard, volatility in receipts often translates into volatility in expenditure. The result can be high levels of expenditure in good years followed by deep cuts in bad years. These in turn lead to "boom-burst cycles". It needs to be emphasized that, whereas benefits in the good years are transitory, problems generated during the bad years tend to endure. The problem is more compounded if the good years were accompanied by enhanced borrowing from abroad, which would have exacerbated the boom.

Sixthly, the tendency of governments "living offs your capital" while spending earnings from oil and gas. To the extent that the resources are nonrenewable, any consumption of revenue from sales should be viewed as consumption of capital rather than consumption of income. This means that if all revenues are consumed in each period, then the value of the country's total capital declines. In others words, a country is not wealthier as a result of resource extraction; it has just changed the composition of its asset base. The challenges associated with issues of income and expenditure by governments are those of designing or having an optimal strategy of converting most of the natural resource into financial assets, investing the assets in a diversified portfolio and treating the interest on the financial assets as income. Other challenges are those of resisting pressure from a diversified set of stakeholders to spend sooner rather than later. Furthermore, ensuring that government spending is guided by policies which neither lead to currency appreciation nor reduction of jobs.

Seventhly, the overconsumption in other sectors of the economy is usually accompanied with underinvestment in human development. Studies show that education as a form of investment is significantly neglected in resource-rich countries (Gylfason, 2001). When countries start exploiting natural resource wealth, they seem to down play the need for diversified and skilled workforce that can support other economic sectors once the resource wealth is depleted. As a consequence, the share of national income spent on education declines, alone with secondary enrollment and the expected years of schooling for girls. While the costs of such declines might not be felt in the short-term, as capital intensive activities take up a large share of national production, their effects are likely to become more significant on the longer run as soon as economies embark on a diversification path.

It needs to be emphasized that when a country's wealth depends on investments in manufacturing or other productive activities, human capital investment is an essential part of wealth creation. However, investment in a skilled workforce is not necessary for the realization of the current income. The caution therefore is that without a focus on wealth creation, insufficient attention will be accorded to investments in human capital.

Eighthly, apart from the above seven economic and financial concerns, a series of political dynamics associated with oil and gas dependence can exacerbate adverse economic effects. As already alluded to earlier, oil dependent economies are considerably more likely to have limited political freedoms, to be governed by nondemocratic regimes, to have higher levels of corruption, and to suffer from civil wars within their borders.

Higher levels of corruption present the most obvious political risk that can arise from extraction of natural resources. The availability of large financial resources increases the opportunity for the theft of such assets by political leaders. Those who control the assets can use that wealth to maintain themselves in power; either through legal means (e.g. spending in political campaigns) or coercive ones (e.g. funding militias). By some accounts, corruption is hallmark of the oil business itself (Leite and Weidman, 1999). Corruption related natural resources takes many forms. International mining and oil companies that seek to maximize profits find that they can lower the costs of obtaining resources more easily by securing the resources at below market value, by bribing government officials, than by figuring out how to extract the resources more efficiently.

In some instances, the international corporations, in collaboration with donors agencies, have captured the state through formulation of the rules of the game with a view to maximize gains in furthering their interests at the expense of the common good of the people (Jingu, 2013). In practice, therefore, the risks of corruption in resource-rich environment are very large and the costs of corruption to the national economy are enormous.

Another area of political risk is the fact that states that are able to generate revenue from the sale of oil and gas are less reliant on citizens, which can result in weak linkages between governments and citizens. This shows that states in resource-rich environments are not necessarily "stronger", to the contrary they are weaker" (Karl, 1997). When citizens are untaxed they sometimes have less information about state activities and in turn, they may demand less from states. As a result, states are less accountable to the citizens. This phenomenon is similar to a situation where a government is dependent on donor (external) financial resources and fails to develop an effective institutional framework for mobilization of local resources. This failure translates into being accountable to external forces and not to the populous. The ultimate effect is that the process of developing effective and accountable states in many resource-rich developing countries is inhibited (Moore, 1998; Ross, 2004; and Fearon and Laitin, 2003).

The adverse political effects associated with high levels of corruption and weak (unaccountable) states ultimately have consequences for the political system itself. Studies indicate that countries rich in natural resources, in particular oil and gas, are less likely to be have democratic political systems. Specifically, nondemocratic oil states are less likely to become democratic than states that do not export oil (Tsui, 2005). At least three features explain the relationship between natural resource dependence and the lack of democratization (Roos, 2001). First, government do not feel the same pressures to exchange political power for the rights to tax, since they can raise their revenue from other sources. Second, they can invest in coercive capacity that can be used to quell threats to their political power. Finally, citizens in these states are likely to undergo the transformative effects of industrializing countries that have been associated with demands for democratization elsewhere.

The last political risk is the scale-up of grievances in producing regions. The production of natural resources is liable to give rise to various types of political frustrations within a country

and especially in producing regions. The extraction process itself may result in forced outmigration, new in-migration and, with attendant population pressures, environmental pollution or degradation. Even if such changes to local conditions are minimal, resource-rich regions may feel that they have a particular claim on resource wealth and may be aggrieved if they see wealth leaving their region and benefiting others. The frequency of conflicts between corporations and the surrounding communities in Mara, Mwanza and Shinyanga; and between state apparatus and civilians in Mtwara, in the recent past, are a clear testimony to these grievances.

3.0 The Imperative of Adequate Preparedness

The foregoing section has enhanced our understanding on the eight concerns or burning issues with regard to extraction of oil and gas. This understanding is necessary in underscoring the importance of adequate preparedness on part of the government before a decision is made on whether or not to embark on the extraction process. The preparedness is basically aimed at undoing the resource curse by putting in place a policy, legal and institutional framework which ensures that the extraction of the commodities is not only undertaken in a transparent and inclusive manner, but also provides lasting benefits to the country and communities, while addressing adverse environmental impacts and avoiding extraction-associated conflicts.

Once a country, like Tanzania, shows the political will to exploit the natural resource potential, then the process of preparedness must start immediately. It needs to be underscored that preparedness is not a one-off event. It is basically a continuous process which accommodates and takes on board changes as they evolve. However, in order for the process to yield the requisite dividend of ensuring that the resources contribute significantly to economic growth and poverty reduction, it has to be guided by a set of principles as discussed in the next section.

3.1 Guiding Principles

3.1.1 Avoid Haste: Be Patient

The first and foremost principle is that of waiting if the fields have not been developed. The main argument here is that if states are not ready, that is, are not yet well prepared the best solution may well be to have the oil and gas in the ground. The fact is the commodities in the ground are a no wasting asset. They are neither tomatoes nor potatoes, hence they are not perishables. Indeed, although leaving them in the ground means that investment is forgone, the ground might be the safest place for the assets, especially if there exists the risk of resource curse. Another argument for avoiding haste is that the value of the assets beneath the ground grows overtime. Especially, in the cases where the costs of extraction are currently high, and might be lower over time with the progress of technology, the return to waiting may be higher than on any other investment the government might make.

3.1.2 Transparency

All activities associated with the extraction, from negotiation, terms of contracts, to signing of agreements should be open and transparent inasmuch as possible. The disclosure should also include information on volumes extracted and prices sold. Those corporations which fail to comply should be banned from operating in the country. The would be investors need to be reminded that business secrecy is too often a cover for bad behavior. In the same vein, when

there is adjustment to the terms of the contract, they should be made in an open and transparent manner.

3.1.3 Ownership

The resource-rich country should remain the ultimate owner of the resources. This means the residual rents and residual control rights should reside with the country. Of course, it may be in the interests of both parties to specify as clearly and extensively as possible what happens in various contingencies, but no contract can be fully complete.

3.1.4 Fairness

Natural resource rents belong to the country. Therefore, foreign corporations should get only a fair rate of return, commensurate with the risks they face. This being the case, provision by government of excessive tax concessions to corporations should be strictly avoided. Likewise, terms of contracts should be liable for re-negotiation when market conditions (windfall prices) change.

3.2 The Preparedness Process

In this section an attempt is made to analyze a sample of some actions which are part and parcel of the road to preparedness. It needs to be emphasized at the outset that the preparedness process is not a one-off event but a continuous process: adjusting and responding to the changing dynamics of the sector and those of the national, regional and global economy in general. While bearing this rule in mind, the first step on the road to preparedness is the need to put in place a comprehensive extractive sector policy. The adjective "comprehensive" is meant to point out that the sector is basically homogeneous in the sense that it has similar characteristics, which distinguishes it from other types of wealth as alluded to earlier.

This being the case, having sub-sectoral policies might not be very productive on the one hand, but may undermine strategies for developing or reforming the extractive sector on the other hand. For example, the mining sector seems not to contribute effectively to Tanzania's socio-economic development, not only because the corporations were provided with very generous concessions, but also because of the ownership structure of the big mines; which are basically hundred percent owned by foreign private sector. This structure results in low levels of retention of mineral revenues in the domestic economy. This in turn entails high levels of capital outflows. These negative aspects, to the domestic economy, are compounded farther by the weak sector's linkages to the rest of the economy which are again responsible for the modest contribution of the sector to both GDP growth and job creation.

In order to address these anomalies, a revised policy and legal framework might be necessary, including the renegotiation of the past contracts. However, this would have been tenable and much easier to achieve if the draft gas policy were to be embedded in a more comprehensive policy framework. If there are aspects unique to the oil and gas sub-sector, then they should feature as a sub-set of the "mother" policy.

Specially, with the Draft Gas Policy (2012), there is need to see how it informs the Mineral and the Revised Petroleum Policies. For example, in the case of Gas Policy, the role of government is much wider than in the case of the Mineral Policy. In fact, we are of the feeling that the role of state in mineral extraction should likewise be broaden as a means of mobilization of more domestic financial resources, as well as enhancing transparency of operations in the mining sector. In this regard, the on-going consultative process aimed at improving the draft policy should continue. However, there is no need to hasten the process and issuing of both gas and oil exploration and production licenses should stop for now until the two documents are finalized and endorsed by the government, as well as by the Parliament.

Since the processes of crafting the policy is yet to be completed, Tanzania does not have an implementation strategy as yet. This being the case, we raise some issues which need to be addressed in order to ensure that the country is well placed when it comes to extraction of these resources.

First, improving political, economic and corporate governance is critical to realizing the vision and mission embedded in Tanzania's draft gas policy. There is need, therefore, to revisit the anti-corruption strategy with a view to improve its effectiveness in combating corruption. The corporate governance of international corporations has to embrace the principle of transparency so that practices of tax evasion, cheating and the like, are done away with. In this regard, the international community has to create global environment that fosters greater transparency. In an effort to enhance transparency, adoption of a global common standard for extractive transparency is necessary. This requires a country to enforce the project-by-project disclosure standards embodied in the US Dodd-Frank Act and Comparable EU legislation (Moshi, 2013) Further, the adoption of the Africa Mining Vision's framework for "transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socioeconomic development" as the guiding principle for policy design is yet another crucial instrument for promoting transparency (ECA, 2012).

Second, the public spending of resource revenues should embrace the principle of equity. However, in order to realize this dream two actions are needed. One, on the revenue side, and the other on expenditure. On the revenue side, capacity of the revenue collecting authorities demands strengthening with a view to enable them to effectively audit the international corporations and to plug revenue leakage loopholes. This, however, should go hand in hand with broadening the domestic tax base. On the spending part, government should spend the revenue in a manner that ensures that social and economic transformation takes place, not only in terms of diversification of the economy, but also in terms of poverty and inequality reduction. Therefore, the generated revenues should be directed towards investments in health, education and social protection needed to expand opportunity, and towards the infrastructure needed to sustain dynamic growth.

Third, economic transformation issues should revolve around; boosting of linkages, value addition and diversification. In this regard, efforts need to be undertaken to add value by processing of natural resources before export. This has to be complemented by forging strong

links between extractive industries and domestic suppliers and markets to contribute towards value addition. Furthermore, a structure of incentives has to be adopted to favour foreign investors who build links with domestic suppliers or those who undertake local processing and support skills development. The focus of capacity building should be in geology, mining, mineral processing and extractive metallurgy. The development of such skills will help to localize the industry, as well as enhancing the linkages.

Fourth, strategies to conserve the environment have to be designed and implemented. Such interventions may include designating protected areas, enforcing impact assessment requirements for all projects, enforcing regulatory standard, enforcing public consultation and public participation, before project implementation and enhancing transparent access to information.

Fifth, extraction of natural resources has been a source of conflict in a number of communities. Mechanisms to address this problem have to be considered. Experience shows that they could range from strengthening governance capacity, transparency in revenue collection and sharing transparency in allocation of mining licenses, to security reform and regulation of multinational corporations. Other strategies include; forging constructive alliances (arrangements) between formal and informal extractive stakeholders by protecting the rights of artisanal miners. Furthermore, the contributions made by the corporations through corporate social responsibility (CSR) need to be weighed against the massive tax evasions practiced by the companies, coupled with the generous concessions awarded to them. Therefore, the contributions should not always be celebrated as if they were a blessing.

4.0 Concluding Remarks

In this paper we have argued that the discovery and production of natural gas on a commercial scale in a country, like Tanzania, have both opportunities and challenges. The challenges are basically those associated with resource-rich countries' failure to address the paradoxes of resource curse, Dutch disease, resource spending, and insufficient investment in education, unaccountable states, threats to democracy and grievances in producing regions. These economic, financial and political areas of concern demand that before a country embarks on extraction of natural resources it has to be adequately prepared so that it can effectively address these issues with a view to benefit significantly from the exploitation of such resources.

We did underscore the fact that the preparedness process is a continuous one and has to be guided by clearly stipulated principles which range from those of avoiding hasty, transparency of transactions, ownership, to those of fairness. Specifically on the preparedness roadmap emphasis is placed on the need for a comprehensive policy, which is informed by a wide range of stakeholders and one which gives a level playing field to all operators in the sector. Further, in order for the policy to work it has to be accompanied by an implementation strategy, inclusive of the requisite legal and institutional frameworks. Generally, the strategies and interventions should focus on five key areas. One, improving economic, political and corporate governance. Two, ensuring that public spending embraces the principle of equity. In this regard, efforts should be geared towards investing in health, education, and infrastructure. Three, transformation of the economy demands establishing and forging of strong linkages between the

extractive sector and other sectors of the economy, coupled with diversification of the economy. Four, ensuring that the extraction activities are environmentally sustainable. Five, to the extent that extraction fuels grievances in the regions concerned, effective prevention and management of the conflicts is necessary. Therefore, strategies to that effect range from enhanced transparency of operations of government and investors, forging alliances between actors in the informal and formal sector, to ensuring that Corporate Social Responsibility (CSR) schemes make significant contribution to communities' development efforts.

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