



Institute for Natural Resources in Africa

Adherence to and Reinforcement of 'Local Content' Policies in the Tanzania's Extractive Sector: Review of Key Strategy and Regulatory Requirements for the Transformation of Tanzania's Liquefied Natural Gas (LNG) Industry

by Dr. Cristina D'Alessandro and Prof. Franklyn Lisk

- 1. Dr. Cristina D'Alessandro Centre on Governance, University of Ottawa, Canada, UMR PRODIG (Université Paris 1- Panthéon Sorbonne) and Institute for Natural Resources and Sustainable Development.
- 2. Prof. Franklyn Lisk University of Warwick, UK and Centre for Research on Political Economy, Senegal

About the series: This policy brief is part of a project led by The United Nations University-Institute for Natural Resources in Africa (UNU-INRA) in collaboration with the University of Warwick's Centre for the Study of Globalization and Regionalization, University of Leiden-African Studies Centre, Universidade Eduardo Mondlane and University of Ottawa's Centre on Governance on "Engaging the Private Sector for Inclusive Extractive Industries and Sustainable Value Chains in Africa."

Disclaimer: The findings and views expressed in this paper are not necessarily that of the organisations affiliated.

I. Introduction: Background, Context and Approach

This policy brief presents and analyses recent developments in the extractive sector in Tanzania, following the discoveries of large quantities of natural gas. While significantly increasing the dependence on extractive resources with the risk of the 'resource curse' syndrome, this also provides new opportunities for utilising large capital investments in Liquefied Natural Gas (LNG) extraction and processing. The purpose is to stimulate much needed structural transformation and inclusive longer-term economic development. The policy brief makes use of a methodology from the World Bank Group to do a 'value-chain' analysis in order to assess the prospects – opportunities and challenges – of realising unprecedented gains from an expected LNG-led resource boom (World Bank Group, 2016). The role of local content legislation and policies is highlighted as the underlying legal and institutional frameworks required to bring about deep change in the basic structure of the Tanzanian economy. This will enable the country and its people to benefit significantly from large-scale investments in the LNG project (Achempong et al, 2016; Ramdoo, 2016).

From a policy perspective, the analysis will elaborate on issues pertaining to three objectives: the alignment of key stakeholders' (i.e. government, local private sector and foreign investment) expectations with regard to the development of local value chains; the encouragement of stakeholders' dialogue to inform with regard policy-making concerning the identification and the removal of key constraints in the local economy and market; and the enhancement of local content through policy and programme interventions designed to develop and sustain human and institutional capacities. These three objectives constitute the pillars that will support a strategy for leveraging large-scale investments in the Tanzanian LNG project to create jobs and business opportunities through value-chain formation.



In order to visualise how the large-scale extraction of natural gas will benefit the average Tanzanian in the near and longer term, it is useful to recap the basic economic facts about Tanzania's natural gas 'bonanza'. This has to be done against the background of the country's current economic situation. With a population estimated to be about 55 million in 2016 and a per capita GDP of about US\$867 (equivalent to US\$2583 when adjusted by Purchasing Power Parity), the Tanzanian economy grew by an average of 6-7 per cent during the past decade, establishing a long period of unprecedented sustainable growth that goes back to about 1997. This growth was associated with a mineral investment boom over a period during which the exports of gold overtook all of Tanzania's traditional exports combined, in order to become the largest source of foreign exchange earnings. Since about 2012, the importance of oil and gas, which has been produced in Tanzania on a relatively small scale for about 15 years, was given a big boost as a potential foreign exchange earner. This came about because of the discovery of large natural gas reserves that are now in the process of being to be developed. Although Tanzania's resource-based economic performance has contributed to bring its poverty rate down from 60 per cent in 2007 to an estimated 47 per cent in 2016, about 12 million Tanzanians still live in extreme poverty on earnings of less than US\$0.60 per day. This is based on the US\$1.90 per day global poverty line (World Bank Group, 2016b).

Tanzania's deposits of natural gas (in both offshore and onshore territorial waters) are currently estimated at about 57.30 trillion cubic feet (Tcf). Onshore gas fields (accounting for about 1.5 Tcf proven and 8–10 Tcf in place) are not fully exploited. Initially, most of the production from shallow onshore fields has been fed into a small pipeline that delivers gas mainly for power generation in or near Dar es Salaam. Since mid-2015, the production and delivery of gas from onshore sources have more than doubled with the construction of a new and much larger Chinese-financed pipeline. While new discoveries of vast reserves of offshore natural gas have radically changed the future perspective for oil and gas in Tanzania, exploitation of these offshore natural gas reserves (estimated at over 45 Tcf and located at a 2–3 km depth) will only be economical if exported via liquefied natural gas (LNG) processing. ExxonMobil, Shell, Statoil and Ophir are among the international companies that have shown interest in Tanzania's LNG project. Two consortia (led by Statoil and the Shell-owned BG Group) are planning construction of a joint LNG plant. Overall investments to develop Tanzania's offshore gas reserves are estimated to be in the range of US\$35-40 billion over the next 20 years, including US\$15-20 billion for the LNG facility. Production is not likely to start before 2025/26, and gas revenues (estimated at around US\$3 billion per year) will be earned only years later (Roe, 2016).

The question of what all of this may mean for the economy of Tanzania and its long-term development still needs to be analysed and clarified, considering the uncertainties with regard to various factors such as the volume of gas that will be developed; the future prices that production can command in a changing and volatile world market; and the actual dates when production might start. Nevertheless, on balance, if Tanzania's natural gas is managed well, it has the potential to contribute substantially to the long-term sustainable growth of the economy and the diversification into higher value-adding and local valuechain activities. This will ultimately improve the living standards and well-being of Tanzanians across the country. The challenge is to adopt a proper approach to resource management and governance and implement appropriate policies that will generate sustainable benefits for all segments of the economy and all strata of the Tanzanian population, especially for those living below the poverty line (World Bank Group 2016a).

According to the overall national development strategy and

goals outlined in the Tanzania Development Vision 2025 (Tanzania Planning Commission, 1999), and subsequent minerals and mining legislation and policies (The Mining Act 2010, The Petroleum Act 2015, and related Subsidiary Legislation 2017, and The Oil and Gas Revenues Management Act 2015), the approach for using resource wealth to stimulate and sustain impressive human and physical development achievements is to prioritise industrialisation. This is based on the diversification and strengthening of linkages between the extractive sector and other productive sectors of the economy with an emphasis on 'local content'. According to this approach, foreign investors in the oil and gas industry are required to give priority to and support value addition to economic activities (goods and services) through the participation and development of Tanzanians and local businesses. This includes labour, technology, capital and research capability. The development of local value chains is therefore central to this approach (ACET, 2015; APP, 2013).

II. Evidence and Analysis

How will natural gas benefit the average Tanzanian in the foreseeable future (i.e. within a decade)?

Realistically, this will mostly be through jobs and investment opportunities. With the assumption that upstream activities linked to the extraction of offshore natural gas discoveries, including the construction of the LNG plant, commence on schedule during the next 2–3 years, the production phase could be operational within the foreseeable future (Uongozi, 2013; World bank Group, 2016a).

Until the production and export of LNG commence, benefits for Tanzania from foreign direct investment (FDI) can be computed in terms of:

- value added linkages between the gas industry and the domestic private sector;
- employment directly and indirectly linked to the construction of facilities and infrastructure;
- technology transfer sub-contracting and collaboration with local firms.

After production and marketing operations commence, benefits form the LNG project will extend to:

- fiscal revenues taxes, royalties, etc. contributing to the public expenditure and capital investment needs of the state:
- opportunities for sustainable jobs within the LNG plant and operations, and also from the local procurement of goods and services and sub-contracts;
- domestic gas flow internal use for power generation and home consumer needs (cooking gas).

The significance of 'Local Content' for LNG value chain

Local content legislation and policies in oil and gas producing countries have become a key priority of host governments and industry players alike (Ramdoo, 2016; Warner, 2011). Increasingly, more resource-rich developing countries are enacting local content legislation which advances value creation and addition as a means of maximising the benefits to be gained from their oil and gas industries. Various Tanzanian minerals and mining legislation and related regulations and policies, enacted between 2010 and 2017, have specific local content provisions which outline the requirements and guidelines on implementation. Focusing on opportunities provided by existing local content legislation to leverage large capital investments in

https://inra.unu.edu

Tanzania's LNG for developing local value chains, an assessment of local content potential for different production phases, using a World Bank Group methodology (World Bank Group, 2016a), is presented below.

There will be limited potential for local content in the first few years when the production is centred on upstream activities – exploration, test drilling and extraction. However, investments undertaken during this initial phase will constitute the foundation for realising substantial local content potential within a long-term timeframe. This will ensure greater sustainability with respect to jobs and local business opportunities. But activities during this short-term phase will have an immediate and significant impact on both the availability and delivery costs of electric power in Tanzania. This is because more natural gas is piped for use in the domestic generation of electricity – thereby decreasing the dependence on expensive imported diesel fuel supply.

Investments in midstream activities associated with the processing and liquefaction of the natural gas through LNG facility operations is likely to yield a high potential for local content in a short and medium-term timeframe. For example, capital investments in the construction of the LNG plant would involve the employment of many thousands of local construction workers who, in addition to their wages and salaries, will also be contributing to the national revenue through pay-as-you-earn income tax. Midstream processing is also the phase when local value chains have the best opportunity of taking advantage of developments in the LNG industry. For example, the promulgation with regard to the provisions concerning 'local content' requires foreign investors to engage local suppliers and contractors as necessary for their operations.

The potential for local content in downstream activities (i.e. distribution and end-user marketing after production has commenced) will depend on a number of factors such as the uses of natural gas locally and in the region, the relative demand and industry prioritisation. But there will again be opportunities for local value and supply chains to emerge as suppliers of industry-linked goods and services and end-use distributers and sub-contractors.

A methodological approach for local value-chain analysis

In order to assess the potential of the 'local content' of value chains which are linked to investments in Tanzania's LNG industry, it is useful to adopt a methodology that first identifies and prioritises local businesses with greater local content prospect. Next, these identified local businesses should be analysed from the standpoint of its potential to create jobs, serve as a source for locally procured goods and act as local sub-contractors in a wide range of business activities and areas. Based on the experiences of other resource-rich countries at a similar level of development in the specific context of the LNG industry in Tanzania, these activities would encompass professional and technical activities; financial, legal and administrative support; the renting of equipment; building and construction activities; catering; transportation and storage; utility; waste management businesses; etc. At the same time, and with the future in mind, gaps and constraints need to be identified and addressed in order to increase the competitiveness of local businesses and upgrade the skills of the local workforce. This is to maximise local potential to create jobs and business opportunities.

III. Development Policy Implications and Recommendations

Success of local content policies: Under what conditions?

The collective experience of a number of resource-rich countries in and outside Africa suggests that the success or failure of local content legislation and policies remains a function of a country's institutional setting and development paradigm (Acheampong, Ashong and Svanikier, 2016; Natural Resource Governance Institute, 2016). From this experience, it can be summarised that successful local content legislation and policies should be anchored on the following principles: the focus of the law and its implementation should go beyond the mere generation of economic rents to include the development of linkages required for sustaining local value chains; the tools or methodologies developed to measure the agreed local content benchmarks must be clearly defined to find acceptance among all stakeholders in the industry; and the entrenchment of local content provisions must be grounded on the availability of a local industrial-supply base (enterprise, workforce and technical knowledge) that can act as growth levers (Besada, Lisk and Martin, 2015; Uongozi Institute, 2016).

Significant financial benefits and development possibilities could come from LNG: but there is a need for improved management (planning, coordination and regulation) and good governance. There are certainly good prospects for revenue and additional development benefits from the Tanzania LNG industry in the medium and longer term. According to a modelling exercise of investment and production estimates undertaken jointly by the Oxford Policy Management and the Uongozi Institute, 2013), it was reported that:

- inflows of FDI of approximately US\$5 billion annually during the construction phase is about six times the size of annual FDI receipts in most recent years;
- LNG would quickly become the country's largest single export activity, with exports rising to US\$5 billion per annum when fully operational;
- the net overall balance of payments (BoP) effects in most future years will be positive and significant, with a typical annual improvement of US\$2 billion;
- additional revenue to government could be as high as US\$2 billion in peak years, equivalent to about 3 per cent of the GDP.
- thousands of local jobs will be created in the four-year period of construction, although the direct employment impact of the LNG project is likely to be much less during the longer operational phase (perhaps 400–500 direct jobs), due to the highly capital-intensive nature of these types of investment projects;
- additional indirect employment gains associated with LNG extraction and processing from LNG could come from the (1) provision of ancillary facilities and services needed to support the project and workforce, such as roads, ports, bridges and housing and (2) downstream spin-off such as investments in manufacturing activities based on reliable and lower-cost energy supply.

The Tanzanian authorities themselves are in no doubt that in order to fully realise the resource and development benefits from natural resource extraction, it will be necessary to achieve improved levels of management and governance of natural resources overall (Uongozi Institute, 2016; TEITI, 2015).

In the specific case of LNG, it will firstly be necessary for the plethora of government ministries and agencies concerned with minerals and mining activities and resource wealth management

https://inra.unu.edu 3

to work together to deliver a coordinated and integrated 'allof-government' approach for planning and regulating the LNG project.

The following government ministries and agencies must be involved:

- The Office of the Vice-President
- The Ministry of Energy and Minerals
- The Tanzania Petroleum Development Corporation
- The Petroleum Upstream Regulatory Authority
- The Tanzania Mineral Audit Agency
- The Energy and Water Utilities Regulatory Authority
- The Tanzania Electric Supply Company
- The Ministry of Lands
- The State Mining Corporation
- The Ministry of Finance
- The Tanzania Investment Authority
- The Tanzania Investment Bank
- The Tanzania Revenue Authority
- The Attorney General's Office
- The National Environment Management Council

This means that government should seek to overcome the 'silo effect' of ministries, agencies or jurisdictions to which different laws pertain (Roe, 2017; Uongozi Institute, 2016).

Secondly, particular attention should be paid, through improved policies and programmes, to the integration of the LNG project into the domestic economy mainly through strengthening linkages between LNG investments and local businesses. In this regard, the key stakeholders -government, the LNG industry investors, and the domestic private sector - must adopt progressive and transformative development partnership roles, rather than confrontational, in order to achieve broader sustainable economic and social development objectives.

Thirdly, and in pursuit of good governance, strong and honest leadership characterised by transparency and accountability at all levels will be needed to tackle a variety of practical problems arising from political manoeuvrings and vested commercial interests that are associated with the industry (Fjeldstad and Johnson, 2017; TEITI, 2015). It may be necessary to enact or adopt bold governance reforms and introduce regulations designed to curb corruption by, for example, closing loopholes, clarifying vaguely worded provisions and resolving apparent contradictions in existing legislation governing the sector and resource wealth management. This is chiefly the case with regard to the Petroleum Act 2015, the Oil and Gas Revenue Management Act 2015, and the Extractive Industries (Transparency and Accountability) Act 2015.

IV. Conclusion

This policy brief has identified the status and challenges facing the Tanzanian authorities with respect to using the opportunities created by large-scale foreign investments in the country's oncoming LNG industry to develop and sustain local value chains. This will benefit the nation, both in terms of job creation and the development and expansion of a competitive domestic private sector (Roe, 2017; Warner, 2011). The analysis suggests that the effective implementation of local content legislation and policies and the adherence to principles of good governance of natural resources are crucial for the achievement of sustainable development objectives (Ramdoo, 2016; ACET, 2015). The analysis in this brief also highlights the various elements that are necessary to have successful policies, based on a common understanding of local content among key stakeholders and the functional monitoring and enforcement of governance mechanisms. Overall, the main areas of focus that emerged from the analysis with regard to the development of credible extractive industry-linked value chains are: policy, legislation and regulations which constitute the foundation for the rules and practices that ensure good management and robust governance of resource wealth; accountability and inclusiveness which concern the transparency and responsible practices of the relevant stakeholders and the extent to which the general public are involved in governance processes and benefit from LNG investments and resource wealth; and institutional capacity and effectiveness which denote the quality of governmental entities that underline the ability of the state to govern efficiently and to use resource wealth to grow the economy rapidly and inclusively.

References

- Acheampong, T., Ashong, M. and Svanikier, V. 2016. "An assessment of local-content policies in oil and gas producing countries". Journal of World Energy Law and Business, 9:4, 282-302
- African Centre for Economic Transformation (ACET) 2015. Local content and value addition in Ghana's mineral, oil and gas sectors: Is Ghana getting it right? Accra: ACET
- Africa Progress Panel (APP) 2013. Equity in extractive: Stewarding Africa's natural resources for all. Geneva: APP Besada, H., Lisk, F. and Martin, P. 2015. "Regulating extraction in Africa: Towards a framework for accountability in the global South". Governance in Africa, 2:1, 1-12
- Natural Resource Governance Institute 2016. "Tanzania's 2015 Extractive sector Legislation; Recommendations for effective implementation". Briefing November 2016
- Fjeldstad, O-H and Johnson, J. 2017. "Governance challenges in Tanzania's natural gas sector: Unregulated lobbyism and uncoordinated policy" 6. in Phillipe le Billon and David A. Williams, Corruption, natural resources and development: From resource curse to political ecology. London: Edward Elgar Publishing
- Ramdoo, I. 2016. "Local content policies in mineral-rich countries: An overview". ECDPM Discussion Paper No. 193, May 2016. Brussels: ECDPM Roe, A.R. 2016. "Tanzania: From mining to oil and gas". Working Paper 2016/79. Helsinki: UNU-WIDER
- Roe, A. R. 2017. "Tanzania -from mining to oil and gas: Structural change or just big numbers?" . Working Paper 2017/175. Helsinki: WUNU-
- Tanzania Planning Commission, 1999. The Tanzania Development Vision 2015. Dar es Salaam
- Tanzanian Extractive Industries Transparency Initiative (TEITI) 2015. Findings of the 6th report for the year ended 30th June 2014. Dar es Salaam
- Uongozi Institute, 2016. "Tanzania natural Resource Charter: Benchmarking Exercise Report". Final draft. Dar es Salaam: Uongozi Institute
- Ungozi Institute, 2013. "LNG in Tanzania: Likely impact and issues arising". Workshop Report. Dar es Salaam, Ungozi Institute
 Warner, M. 2011. Local content in procurement: Creating jobs and competitive domestic industries in supply chains. London: Green Leaf Publishing
- World Bank Group, 2016a. "Leveraging a large capital investment to develop local value chains: the case of LNG in Tanzania". Overview of the 15. Main Findings. Dar es Salaam: World Bank Country Office

World Bank Group, 2016b. Tanzania Overview. Dar es Salaam: World Bank Country Office.

https://inra.unu.edu 4





UNU-INRA

Institute for Natural Resources in Africa

About UNU-INRA

_

The United Nations University Institute for Natural Resources in Africa (UNU-INRA) is one of the 14 research and training centres of the United Nations University (UNU) and is the only one focusing predominantly on Africa. We provide cutting-edge solutions and knowledge outlets for natural resource planning and management from an African perspective.

UNU-INRA serves as a platform to amplify African voices and showcase made-in-Africa solutions. We harness the incredible talent on the continent and also strengthen and develop capabilities by equipping African researchers, entrepreneurs and policy actors with the requisite knowledge to sustainably manage natural resources. We deliver research, capacity development and policy advice, and we convene spaces for knowledge sharing.

Our operating units across 5 countries in Africa (Senegal, Ivory Coast, Cameroon, Zambia and Namibia) give us on-the-ground knowledge, while our global network of experts and the wider UNU group give us a comparative advantage in the production and export of knowledge.

It is our vision for Africa to realise the transformational potential of natural resources in the context of sustainable development and deliver a prosperous, fair and resilient future.

UNU-INRA United Nations University Institute For Natural Resources In Africa

For more information contact:

International House Annie Jiage Road University of Ghana, Legon Campus Accra, Ghana.

T: +233-302-500396 F: +233-302- 500792



Supported by:

