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White Paper

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Introduction: Three different models:

On May 1-2, 2018 Marak Alliance gathered a group of international experts in Houston to discuss local content policies in different petroleum producer countries. During the conference, basically three different cases were analyzed: First, the case of countries that are new in the hydrocarbon industry and have low levels of industrialization and economic development, such as Mozambique or Guyana. The second case represents middle income countries that achieved a certain level of industrialization and have a long history of petroleum production. This describes most of Latin American countries. The third case is about countries that have achieved high levels of wealth from its large petroleum production but are still highly dependent to oil revenues, such as Saudi Arabia.

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The challenge for new petroleum producers

During the last commodity boom several developing economies experienced high rates of growth, but not significant changes in their economic structures. They continued to be highly dependent on few commodities while a large share of the population relied on small farming, and increasingly on low productivity service sector activities for their livelihoods. The traditional structural allocation of labor from agriculture to manufacturing did not materialize or its occurrence was limited, and slow in catching up with agile technology needed by oil and gas industry. The commodity boom failed to provide enough sustainable jobs to a rapidly growing working age population. Moreover, when commodity prices collapsed, several Sub-Saharan and Latin American economies contracted and gains in poverty reduction started to reverse. Some scholars even considered this phase as a process of “premature de-industrialization”. It is with this troublesome background that commodity dependent economies need to re-think their strategies and policies to revive their industrialization efforts.

Thinking of an industrialization strategy based on the exploitation of natural resources is not new, and in fact, that was how countries such as Canada, Australia, New Zealand and the United States industrialized and achieved high levels of wealth. Notwithstanding the economic success of these countries, dependency on commodities by developing countries became often associated with the concept of the “resource curse” However, there is abundant literature showing that there is not a “natural” inevitability by commodity dependent economies to get stuck in poverty. Policies can be implemented, independently of the level of development, to avoid the “resource curse”.



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In the specific case of Mozambique, the country can enter a path of rapid growth driven by the exploitation of its vast offshore natural gas resources. Within that possibility, Mozambique has prioritized the use of local content as a key strategy for industrialization. However, the challenges are numerous. With a GDP per capita of less than US\$400, Mozambique is one of the poorest countries in Africa. Its infrastructure, albeit improving, is still deficient. Its governance is weak, and its institutions poorly equipped. There are also severe human capital limitations, particularly outside the main urban centers. On the other hand, the initial developments of the resource will focus on the exploitation and export of gas in its liquified form (LNG). This is a capital intensive, technologically complex venture.

To increase the opportunities for local value creation, the government should first focus on identifying the capabilities and limitations of the local business community through targeted surveys. Second, in coordination with operators, GAP analysis should be performed. Many of these activities have been completed by the oil operators. However, these activities must also be done by the government since their focus is not on cost minimization but on economic development. Incentive programs, encouraging operators to utilize local content, and focusing the government on addressing governance issues is important, but not sufficient. Without a regulatory framework that clearly identifies local content goals, metrics, and expected outcomes, it is unlikely that the country will be able to fully benefit from the value creation of its gas resources.

Of course, as with any policy, there are numerous challenges and concerns around the adoption of local content requirements. Instead of promoting economic diversification and industrialization local content policies can lead to elites' rent capture through frontage firms. Criticism from the oil industry to rule based regulations such as those developed by



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Nigeria or Angola resulted on water down versions of local content requirements in countries such as Uganda, Tanzania and Kenya; opting instead for more amenable regulations to oil companies' preferences. (Ovadia 2015).

The challenge for late industrialization in countries such as Mozambique or Guyana when designing local content policies is to find the right balance between expected corporate profits and local economic benefits. Focusing too much on rule-based regulations, without a proper assessment of the gap between oil project requirements and local capabilities can results into costly delays, weaken transparency and lower productivity. On the other hand, allowing an exclusively non-binding approach, in which operators decide according to market principles their local content framework is unlikely to generate the linkages expected by society, prolongating the “enclave nature” of the oil industry.

A closer look at Nigeria

During the event, attention was given to Nigeria. Like new petroleum producers, Nigeria's oil industry started as an “enclave activity” with negligible linkages to the rest of the economy. “At the discovery of oil in Nigeria in 1956, the country was not yet independent and almost the whole venture into the oil and gas business was carried out by foreigners. The technology, equipment, personnel and risk were their own both in exploration, exploitation, processing and management of product” (Monday, 2014). The Nigerian government benefited directly from the industry through royalty payments and taxes while investments in the industry were mostly owned by foreigners. Due to its governance limitations and political instability, Nigeria's oil revenues were often misallocated, stolen and/or squandered.



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H.E. Dr Goodluck described, during his keynote speech at the conference, how when he became president of Nigeria, and after 60 years of petroleum production, the oil industry had achieved very modest linkages with the rest of the economy. Dr Goodluck referred to how he was impacted by a trip to Daqing, known as the petroleum capital of China, in the year 2000. By the time of his visit, little had changed in Nigeria's oil industry. In contrast, China, which started producing oil only two years after Nigeria, produced most of the equipment, facilities and activities in-country. Influenced by the Daqing trip, Dr Goodluck approved the Nigerian Oil and Gas Industry Content Development (NOGICD) Act of 2010.

The Act provided some specific preferences to the use of Nigerian companies, requiring oil operators to comply with a minimum level of Nigerian content in any oil and gas project. It also allowed Nigerian suppliers a 10% price advantage when submitting bids. Finally, the act required operators to support technology transfer through the establishment of joint ventures, strategic alliances/partnerships between international and local companies. A key component of the act was the creation of a Nigerian Content Development and Monitoring Board with responsibility of implementing the provisions of the act. (Dr. Goodluck keynote speech 2018).

Since the act was passed the results have been palpable. "With the presence of the Local Content policy, there has been an increase in the human resources profile of the indigenous companies. Moreover, linkages between the domestic oil companies and multinational oil companies is appreciable" (Monday 2014). Dr Goodluck mentioned the thousands of Nigerians trained in technical areas such as geosciences, oil spill management, underwater welding, pipe mill operation, etc. resulting in an appreciable progress in skill acquisition. Before the law was passed, the expected level of spending



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locally by the industry was less than 5%, almost a decade later that level is near 32%. Today more than 38% of registered marine vessels belong to Nigerians. Of course, these results pale when looking at the challenges of creating enough jobs for a country of 186 million people. Still, as modest as it might be, Nigeria today has a thriving private sector oil industry that is increasingly looking into new markets outside Nigeria for investment and market opportunities.

The key challenge to new petroleum producers – as experienced by Nigeria – is to ensure the development of other economic activities that are more labor intensive – are not dwarfed as oil rents enter the economy. The focus of a localization strategy, as such, should not only be on the ability of local companies to supply the oil industry, but in developing opportunities for labor intensive activities to prosper because of the oil or mineral investments.

As explained by Mr. Charles Nyirahuku the African Natural Resource Center (ANRC) of the African Development Bank, a good Local Content policy is one that aims at optimizing the economic value derived from the development of natural resources through domestic linkages while giving regard to: Country's vision for the sector, Country's development goals, Trade competitiveness, economics of the natural resource projects, project commercial viability and management expectations. Both approaches – imposing quantitative requirements on operators or soft regulation based on incentives and qualitative requirements provide different results, both good and bad. The key issue is on enforcement of the policy.

The Middle-Income countries

Latin America also experienced a process of de-industrialization and increasing dependency on natural resources. However, only few countries, led by Brazil and Trinidad and Tobago, have developed comprehensive “local content legislation”. Instead, Latin American countries have preferred to support strategies aimed at improving the local entrepreneurial ability to compete.

An important difference between local content efforts between Africa and Latin America is their focus. While in Africa local content efforts emphasize the hiring of locals in oil related activities, in Latin American countries where local content policies have been adopted, preference was given to the strengthening of business opportunities to local firms. Latin America’s long presence of National Oil Companies (NOC) and strong unions permitted the development of a local technocratic workforce able to operate in almost all areas of the petroleum sector. In Africa, on the other hand, the existence of NOC is relatively new and access to large human resource expertise is limited. Access to jobs within the oil industry is seen as key knowledge transfer mechanism, even if it benefits a smaller group of the population.

In Latin American, the NOCs were essential in the development of a local supply service industry, part of its industrialization strategy of import substitution adopted during the 1950’s until the 1970’s. When Latin American countries adopted economic adjustment policies in the 1990’s, opening their industries to foreign competition, and coinciding with lower oil prices environment, NOC were severely limited in their ability to invest. New foreign entrants used local supplier



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base from their country of origin, limiting market access to local suppliers. As a result, and in an effort to revert de-industrialization, countries such as Argentina adopted local supplier development programs,

As explained by Professor Marcelo Neuman, the success of the supply program in Argentina's oil industry was due to the level of coordination between different stakeholders, particularly YPF (Argentina's largest oil company), different federal ministries, local government authorities, and local suppliers. The program was led by a close partnership between the public and private sector. A strong political support and adequate budget was given to the program, securing its implementation and follow up during a long period of time.

Brazil, on the other hand, presents a case where "too much of a good thing" can result in costly mistakes. Having adopted a local content policy following Brazil opening of its oil industry, the government increased its requirements at the time of rapidly expanding activity, particularly for Petrobras, Brazil's NOC. Mr. Narciso Filho (former Director of ANP, Brazilian's petroleum regulatory agency) discussed some of the challenges of the Brazilian local content strategy: "the policy execution lacked a central strategic plan to gradually implement the reforms in accordance with the country's supply chain reality". The policy's general objectives were quickly imposed without focused targets, and from the beginning it lacked advanced metrics or indicators that could accurately measure results, apart from higher investments (which mainly came from government subsidies)."

In recent years, and because of large cost overrun and the corruption scandal that impacted several large Brazilian companies and Petrobras, the policy has experienced several changes and revisions. Overall requirements became more flexible and more incentive based. In fact, this led to the introduction of PEDEFOR (Program to encourage supply



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chain competitiveness and the development and improvement of suppliers in the oil and natural gas sector) which “is designed to stimulate the domestic supply chain and provide incentives for operators and service companies that invest large sums of money toward developing the industry in Brazil” (Narciso Filho 2017)

Interestingly in Mexico, a country that have been able to develop key industrial sectors such as automobile manufacturing while opening its economy to a free trade agreement (NAFTA), decided to adopt local content requirements for its oil industry. This occurred even though Mexico not only has a long history of oil production, but also adopted in the early 1930’s a very nationalistic policy, restricting foreign access to the exploration, production, processing and distribution of oil and oil products in the country.

During the nationalization period Mexico was able to develop a service oil industry that was completely dependent on Pemex, the NOC. However, following Mexico’s energy reform in 2016, more activity and opportunities for oil suppliers are expected as new entrants in the exploration and production of oil in Mexico started operations. The challenge for Mexico’s local content strategy, as described by Ms. Grunstein during the event, “is to guarantee a balance between fostering local companies bids and contracts, including bidders to shift from a possible inertial lump-sum procurement strategy in order to include those local providers who offer competitive terms and conditions, while at the same time avoiding patronizing attitudes or decisions that do not strengthen local capacities but benefit local interest groups and offer higher costs to those businesses operating in the country. ”



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Ms. Grunstein mentioned that according to studies by the Ministry of Trade, the expected demand in the upstream value chain are at least 399 goods and 177 services to be hired from Mexican companies during the exploration, evaluation, development, extraction and abandonment stages. The key uncertainties, and one that could lead to similar challenges as in Brazil, are whether these numbers are too optimistic and if the local companies are in fact ready to supply them.

In mid- level economies the priority has not been as much as new petroleum producers to develop the basic human resource capabilities for locals to work in the oil industry, but to find linkages between the extractive industry and the existing industrial infrastructure. In short, to reduce the “product space” concept as developed by Hidalgo (2007), “the product space is a network representation of all the products exported in the world. Central to the construction of the product space are two ideas: i) that the ability of a country to export a new product is dependent on its ability to export similar products; and ii) that commodities requiring similar capabilities are more likely to be exported together. Since oil activities tend to be outside of the core of the product space it offers limited options for connectivity with other activities of higher value-added activities.

The Wealthy Rentier State: Saudi case

A special case of local content development is Saudi Arabia, a country with vast petroleum resources and a technically sophisticated oil industry. In addition to its vast daily petroleum production of around 10 million barrels, the Kingdom has developed significant forward linkages between its oil output and the refining and petrochemical industries.

Contrary to many other oil dependent economies, Saudi Arabia has been able to achieve high levels of economic and social development, mostly through generous transfers in the form of subsidized services, education and health care. However, those achievements have been obtained on the back of its prolific oil industry, which is the main source of revenues and exports.

A key characteristic of the Kingdom is its dual labor sector. Most of the Saudi population tend to work in the public sector while most of the private sector relies on a migrant population that tends to be compensated at lower rates. Saudi unemployment is high at around 10%.

The high economic dependency of the Kingdom to oil prompted the government, after the oil price collapse of 2016, to redirect its economy. Untenable fiscal deficits and high levels of unemployment must have weighted heavily in the Kingdom's decision to embark in a series of economic reforms known as Vision 2030.

Under Vision 2030, the government expects to increase private sector contribution to GDP from 40% in 2015 to 65% by 2030, increase the export contribution to non-oil GDP from 16% to 50% and increase the localization in the oil and gas



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sector from 40% to 75%. Central to the vision is the development of local content strategies. Almost all large crown corporations are in process of implementing their own strategies.

During the conference, SABIC presented their strategy to support the Kingdom's Vision 2030. SABIC is today a world petrochemical leader, with presence in 50 countries, an annual revenue of US\$39.9 bn and around 34,000 employees. Due to its vast reach in multiple business activities, SABIC is well positioned to support the Kingdom's localization strategies.

SABIC local content efforts are centered around five key concepts: Nusaned, Entema, DAEM, Access to Finance, and Muahal.

Nusaned (support) is an integrated localization engine where local suppliers can find information on SABIC procurement opportunities, advice on support to financing, etc. Entema is an opportunity gate where investor opportunities are received and analyzed. DAEM provides support packages (product offering, technical support, shared services) to enable investor opportunities. Access to finance is available through SABIC's partners or shareholder investment arms, and Muahal which focuses on workforce capabilities development.

A key component of the localization strategy is the ability to bring new foreign investors who will process their products in the Kingdom. Also, stringent rules for expat visas will expand job opportunities to locals. However, a key challenge in the efforts of limiting foreign work force is the impact on labor costs, particularly to small and medium enterprises, which rely on low cost foreign migrant workers.

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Conclusion

The local content conference included numerous discussions and exchange of ideas, including the views and comments from financial institutions such as the African Development Bank, oil companies, service suppliers, etc. This briefing does not incorporate all of the comments presented during the two-day session. It highlights what we think are key messages emerging from the discussion:

- Local content policies must adapt to the economic characteristics of the country.
- New petroleum producers should pay special attention to the development of other – more labor intensive – activities that can be leveraged from the exploitation of oil, gas and minerals.
- The right balance between incentive regulation and mandatory requirements must be achieved using statistically sound tools to measure local business capabilities, needs and opportunities.
- Middle income countries must pay special attention to the development of linkages between their existing industrial base and the oil, gas and mineral activities
- Rich oil producers such as Saudi Arabia must pay attention to the formation of their local workforce and the existing incentives offered to locals in order to encourage a more risk taking attitude, and preference for activities in the private sector.



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References:

Dani Rodrick (2015). "Premature de-industrialization" IAS School of Social Science Economic Working Papers. Paper 107.

<https://www.sss.ias.edu/files/pdfs/Rodrik/Research/premature-deindustrialization.pdf>

Unam, Monday. (2015). Local Content Policy, Human Capital Development and Sustainable Business Performance in the Nigerian Oil and Gas Industry. Journal of Management and Sustainability. 5. 10.5539/jms.v5n1p75.

Mushemeza Elijah Dickens, Okiira John, Morales Marcela, Herrera Juan Jose. (2017). Local Content in Latin America and African Oil Sector: A comparative analysis of Selected Countries." Global Journal of Human Social Science. Economics.

https://globaljournals.org/GJHSS_Volume17/5-Local-Content-in-Latin-American.pdf

Filho Narciso Nelson. (2017) Brazil Oil & Gas Local Content Policy: lessons learned. Institute of the Americas. Report.

https://www.iamericas.org/documents/energy/reports/Brazil_Oil_Gas_Local_Policy.pdf

Grunstein Miriam, Wionczek Cybele Dias: (2017) Local Content in the Petroleum Industry: Mexico. Rice University Baker Institute of Public Policy. <https://www.bakerinstitute.org/media/files/files/c43bd724/MEX-pub-LocalContent-020817.pdf>

Ovadia Jesse Salah (2015) "The Role of Local Content Policies in Natural Resource Based Development". ÖSTERREICHISCHE ENTWICKLUNGSPOLITIK 2015. ROHSTOFFE UND ENTWICKLUNG.

https://www.oefse.at/fileadmin/content/Downloads/Publikationen/Oepol/Artikel2015/Teil1_03_Ovadia.pdf