# STRATEGIC CONSIDERATIONS FOR LOCAL CONTENT REQUIREMENTS IN GUYANA'S OIL SECTOR


**Jerry Haar, Ph.D.**
**Professor of International Business**
**Florida International University**

**Siddharth Upadhyay, Research Consultant**

**November 8, 2021**

## Executive Summary

According to the government of Guyana, the goal of their local content policy is to "maximize the level, quality, and benefits of participation in the petroleum sector value chain by Guyanese." [1]

Guyana's dynamic and rapidly progressing oil and gas development can create boundless opportunities for all, which is the intent of local content policy (LCP). However, there has been an information vacuum related to local content policy (LCP)—its rationale, structure, and pathway to implementation.

Fortunately, the government of Guyana has addressed this shortcoming and produced a draft Local Content Policy. While the document has produced a reasonable policy framework, the LCP is jeopardized by a rigid compendium of local content targets that are questionable in their derivation or may be exceedingly difficult to attain.

It is urgent, therefore, that the government address and remedy the shortcomings of its LCP. After all there are many positive features of the LCP including: preferred access and opportunities for Guyanese; the need for good governance in order for the LCP to succeed; the need for appropriate legislative support for successful policy implementation; and engagement of the Guyanese diaspora as a vitally important resource.

To help remedy the situation, in part, the government in going forward should consider the following:

1. Acknowledge that their goals and those of foreign oil companies need not be incompatible; however, it must be communicated and agreed to by all parties.

2. Conduct a SWOT analysis of the national economy and identify the specific education, training and skill development needs not only of the oil sector but of those sectors that have the potential to operate as competitive ones of the entire economy. It would be foolish to try to develop industries where other nations, enjoying first mover advantage, had the scale and scope to dominate the marketplace. Guyana's great asset is not oil but human capital.

3. For the oil sector, both the government and the oil companies should increase both short- and longer-term education and training opportunities abroad as institutions to enhance the likelihood that more and more high tier petroleum engineering and other technical jobs are taken by Guyanese nationals.

4. The services sector can be developed to serve the needs of extractive industries but also for other ones, including IT services, graphic design, and business processing outsourcing.

[1] https://nre.gov.gy/wp-content/uploads/2021/02/LCP-for-the-Development-of-Guyanas-Petroleum-Economy- Revised-Draft-02.11.2021-updated.pdf

5. Explore strategies through public investment, tax incentives and improved security to bring back Guyanese in the diaspora or at least incentivize them to invest in their homeland.

6. Expand investment in infrastructure (roadways, broadband, port facilities) along with improved public services and an administrative and judicial system that is transparent, efficient and effective.

7. The implementation of anti-corruption policies and specific measures should be one of the government's highest priorities.

8. The government of Guyana should discard the current percentage target levels in Local Content Bill 2021, especially since the draft document lacks an appendix that explains in detail the research design and methodology from which the percentages are derived and which can be independently validated, as the present targets in the LCP were not based on data gathered from an independent gap analysis.[2] Instead, the government, in collaboration with the private sector (local and foreign) and civil society should identify and select a consortium of three (3) independent consulting firms to assess the present capabilities and high priority needs for local personnel and local sourcing. Employing a five-year rather than ten-year+ time horizon, the government and private sector should assist local companies in meeting the technical requirements for oil services and equipment.

9. If the government is adamant about mandating percentage targets over a ten-year period, it should explicitly state the nature, size, and cost of penalties to be exacted upon the private sector for failing to achieve those targets, mindful that financial penalties would impact not only large multinational companies but their local suppliers, as well—not to mention the negative signal local content policies, in general, send to other foreign investors contemplating doing business in Guyana.

Finally, any honest discussion of local content policy must recognize that it is useless to argue the merits and demerits of LCRs—they are here to stay, and they are not going away. The key question is how to design, plan, implement and adjust local content policies when and where needed.

---

[2] The sliding scale targets used by the Natural Resources Ministry were plagiarized in many parts from Ghana's regulations. The plagiarism was so extensive that even a mistake in Ghana's regulations was copied. See: https://www.kaieteurnewsonline.com/2021/02/28/natural-resources-ministry-plagiarized-targets-from-ghanas-local-content-regulations/#:~:text=Natural%20Resources%20Ministry%20plagiarized%20targets%20from%20Ghana's%20local%20content%20regulations,-Feb%2028%2C%202021&text=A%20diver%20and%20a%20Remote,from%20an%20independent%20gap%20anal ysis.

Given Guyana's oil and gas development, it is critical that the Government and the population at large have access to a clear-eyed and fact-based expert evaluation of the challenges and opportunities Guyana faces in this sector.

With that in mind, we provide a brief, qualitative assessment encompassing Guyana's current situation, options available, and presenting concise and actionable recommendations on that basis. The report is composed of the following sections: (1) the global economy, emerging markets and oil; Guyana's macroeconomy; (2) Guyana's economy; (3) the role and objectives of Local Content Requirements (LCRs); (4) the issue of LCRs in Guyana; (5) suggestions for a sensible and realistic path forward; (6) conclusion.

## The Global Economy: The World, Emerging Markets, and Oil

### *The World*

In their latest assessment and outlook for the world economy, the International Monetary Fund asserts that overall, risks to economic prospects have increased, and policy trade-offs have become more complex.[3] The global growth projection for 2021 has been revised down from the IMF's 5.9% July estimate to 4.9% for 2022. The outlook for the low-income developing country group has deteriorated significantly due to worsening pandemic dynamics. The downgrade also reflects more difficult near-term prospects for the advanced economy group, in part due to supply disruptions.

On the other hand, commodity exporters have been boosted by rising prices. All in all, however, there continues to be a huge divergence in economic prospects across countries. Aggregate output for the advanced economy group is expected to regain its pre-pandemic trend path in 2022 and exceed it by 0.9% in 2024. By contrast, aggregate output for the emerging market and developing economy group (excluding China) is expected to remain 5.5% below the pre-pandemic forecast in 2024, resulting in a larger setback to improvements in their living standards.[4]

Of particular concern are supply shortages, alongside the release of pent-up demand and the rebound in commodity prices, that have caused consumer price inflation to increase rapidly in, for example, the United States, Germany, and many emerging market and developing economies.

[3] https://www.imf.org/en/Publications/WEO
[4] https://www.imf.org/en/Publications/WEO

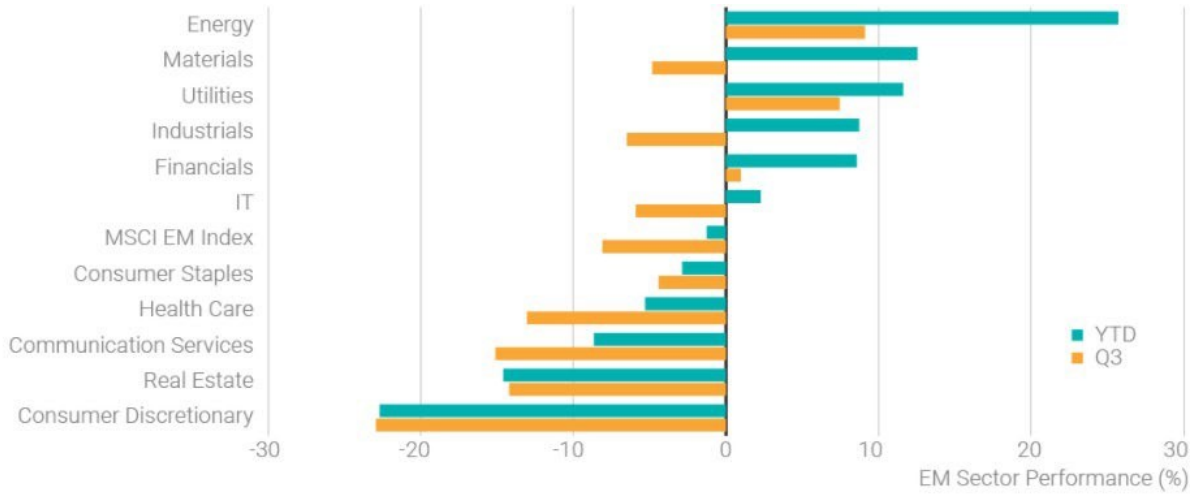
Food prices have increased the most in low-income countries where food insecurity is most acute, adding to the burdens of poorer households and raising the risk of social unrest.

***Emerging Markets***

While growth estimates for emerging markets have fallen for this year, the outlook is brighter in 2022, which should be positive for emerging markets. GDP estimates are predicted to come in at 4.8%-5.2%.[5] China led the decline in emerging markets assets, the reason being unexpected regulatory action, concerns over the debt restructuring of its second-largest property developer, and the lingering effects of COVID-19. Better growth prospects for emerging markets countries point to low volatility and outperformance of risk assets.

As indicated in the chart below, the energy sector performed best among emerging market equities.

**Emerging Markets Equities Performance**




As of 30 September 2021
Source: MSCI

[5] https://www.spglobal.com/ratings/en/research/articles/210927-economic-outlook-emerging-markets-q4-2021- vaccination-progress-and-policy-decisions-remain-key-to-growth-12122390; https://www.lazardassetmanagement.com/us/en_us/research-insights/outlooks/emerging-markets

Even with a more moderate global growth outlook, emerging markets are still expected to lead the world recovery. Growth rates this year are expected to top that of advanced economies, with the exception of the United States, and next year emerging markets growth should even exceed that of the United States. If these forecasts prove to be correct, the recovery will merely have been delayed.

***Oil***

In its Monthly Oil Report, OPEC said it expected oil demand to average 100.8 million barrels per day in 2022, compared with just over 100 million in 2019, before the pandemic took hold.[6]

The forecast is evidence that the world economy is still heavily dependent on emissions-causing fossil fuels, even with increasing concerns about climate change and a steep fall in oil demand during the pandemic.

While it is true that the sales of electric cars have grown strongly, and investment in wind and solar energy has done well during the pandemic, the growth in demand for energy, especially in China and India, will offset such gains, according to OPEC forecasts. China, for instance, is expected to consume almost 15 million barrels a day in oil next year, 1.5 million barrels a day more than it burned in 2019.

Turning to another assessment, the Short-Term Energy Outlook published by the U.S. Energy Information Administration assumes U.S. GDP will grow by 6.0% in 2021 and 4.4% in 2022. Their forecast assumes continuing economic growth and increasing mobility. They point out that any developments that would cause deviations from those assumptions would likely cause energy consumption and prices to deviate from their forecast.[7]

In the short-term up to 2025, oil demand is expected to take two to four years to return to 2019 levels, depending on the length of the lockdowns and the rate of GDP recovery. OPEC plus intervention, as deemed necessary, will keep the market in balance. The International Monetary Fund, in its latest release of the *World Economic Outlook*, predicts a similar recovery scenario, with Brent oil prices rising to US$59.74 per barrel in 2021 and then to $56.23 in 2022. Projected Brent crude prices will average $68 per barrel in 2023, $70 per barrel in 2024 and $73 per barrel in 2025.[8]

---

[6] https://www.nytimes.com/2021/09/13/business/opec-oil-demand-2022.html
[7] https://www.eia.gov/outlooks/steo/pdf/steo_full.pdf
[8] https://www.rigzone.com/news/standard_chartered_raises_oil_price_forecasts-07-oct-2021-166651-article/
[9]https://www.mckinsey.com/~/media/mckinsey/industries/oil%20and%20gas/our%20insights/global%20oil%20supply%20and%20demand%20outlook%20to%202040/global-oil-supply-and-demand-outlook-to-2040-online-summary.pdf

In a McKinsey study on the global oil outlook to 2040, the research team concluded five key findings. These are: (1) liquid demand is likely to return to 2019 levels by late 2021 or early 2022; (2) investment in oil capital expenditures is expected to gradually recover but remain below the pre-Covid-19 outlook; (3) oil demand growth slows in the late 2020s and peaks in 2029; new oil drilling is needed to meet demand by 2040; and (4) the sector will still require new production of nearly 23 MM/bd to meet demand by 2040.[9]

## Guyana's Economy

### *Macroeconomy*

The Guyanese economy exhibited moderate economic growth in recent years, prior to 2019-2020 when the oil trajectory accelerated, and is based largely on agriculture and extractive industries. The economy is heavily dependent upon the export of six commodities -- sugar, gold, bauxite, shrimp, timber, and rice--which represent nearly 60% of the country's GDP and are highly susceptible to adverse weather conditions and fluctuations in commodity prices. Guyana closed or consolidated several sugar estates in 2017, reducing production of sugar to a forecasted 147,000 tons in 2018, less than half of 2017 production. Going forward, the government will preside over windfall oil earnings, higher public investment and rapid growth.

Growth projected for Guyana will most likely approach 21% this year, the highest for Latin America and the Caribbean. This is a decline from 43.5% in 2020 and the projections are for 26% in 2022 and 23% in 2023.[9] In terms of trade, over one-third of exports are destined for Trinidad & Tobago with the other two-thirds going to Canada, Portugal, Ghana and Norway. The nation's major import partners are the U.S. (30% of total), Singapore, Trinidad & Tobago, Libera and the UK.

The ongoing expansion of the local energy sector paved the way for a robust performance in 2020, despite the collapse in oil prices and delays in the production chronogram. Since ExxonMobil discovered an offshore oil field off the coast of Guyana in 2015, explorations have revealed higher quantities of oil (surpassing 10 billion barrels). Consequently, oil production was initiated in December 2019 and the country registered its first oil shipment in February 2020. However, the agricultural sector contracted, reflecting lower output in forestry, fishing and livestock, while sugar and rice experienced growth. Regarding the mining and quarrying sector, output of gold increased while that of bauxite and diamond decreased. In 2021, GDP is continuing to outperform the regional average thanks to the progress of local energy activity. Moreover, this windfall will also prompt positive spillover effects on gross fixed investments, household consumption and government expenditures (allowing for more social services). Regarding the external contribution, while the recovering global economy and rising oil production will foster exports, imports are also

[9] https://www.imf.org/en/Publications/WEO/Issues/2021/07/27/world-economic-outlook-update-july-2021

expected to increase due to higher purchase of capital goods. Downside risks are related to the global evolution of the COVID-19 pandemic and the behavior of oil prices.[10]

The current account deficit narrowed in 2020, mainly on the back of a trade balance surplus (higher oil exports and lower imports). Meanwhile, FDI increased marginally and could cover the current account deficit. Besides, foreign exchange reserves amounted to $573 million as of Q2 2020 (equivalent to only 1.7 months of import). In 2021, the current account should continue to benefit from a stronger trade balance and remittances (11% of GDP in 2019), in line with a gradual recovery of the U.S. job market. Finally, FDI in the local oil sector are expected to remain robust in the upcoming years. Regarding the fiscal account, the new government revamped a stronger policy response to the COVID-19 shock. In September 2020, it presented its emergency budget, including funds to combat the health crisis, as well as revitalizing productive and infrastructure sectors. Higher tax revenues and royalties coming from the oil sector should help curbing the fiscal deficit in 2021, despite the accommodative policy.[11]

Oil is the proverbial goose that lays the golden egg. The nation expects to produce 1mm b/d of crude by 2027, transforming the nation into one of the leading Western Hemisphere supplier. ExxonMobil intends to have five FPSOs operating in Guyana by 2026 and sees potential for up to 10 soon after. The second phase of the Liza project is scheduled to start up in 2022, delivering 220,000 b/d.[12] This will be followed by the $9bn Payara project –also on Stabroek--that will be commissioned in 2024 and will deliver another 220,000 b/d. Guyana anticipates its oil income to reach "over" $1bn/yr by 2025, according to vice president Jagdeo Bharrat.[13]

On October 7, 2021, ExxonMobil announced a new discovery at the Cataback-1 well and increased its estimate of the discovered recoverable resource for the Stabroek Block offshore Guyana to approximately 10 billion oil-equivalent barrels.[14]

While the World Bank's latest country assessment for Guyana projects a GDP per capita rise to nearly $17,000 by 2030—more than two and a half times its current size—both the Bank and the IMF have routinely over-estimated revenues from new oil and gas discoveries.[15] Additionally, elevating the importance of revenue generation from fossil fuels conflicts with global climate goals. In fact, the *Net Zero Report* published by the International Energy Agency (IEA) calls for "no new oil and gas being approved for development." They assert that oil revenues will not cover Guyana's annual budget deficit over the next three years and meet its pledge to build a strong Sovereign Wealth Fund. Moreover, they maintain that the aggregate five-year annual cash deficit is likely to be $160 million. Finally, the IEA cautions that new, long-term global market and

---

[10] https://www.cofacecentraleurope.com/Economic-analysis/Guyana

[11] https://www.cofacecentraleurope.com/Economic-analysis/Guyana

[12] Some projections are for 340,000 barrels. https://oilprice.com/Energy/Crude-Oil/Will-South-Americas-Latest-Oil- Boom-Spark-A-Military-Clash.html,

[13] https://www.argusmedia.com/en/news/2204942-guyana-projects-1mn-bd-of-oil-production-by-2027

[14] https://oilnow.gy/featured/breaking-exxon-makes-new-guyana-discovery-increases-resource-to-10-billion-barrels/I

[15] https://documents1.worldbank.org/curated/en/274381599578080257/pdf/How-Did-Africas-Prospective- Petroleum-Producers-Fall-Victim-to-the-Presource-Curse.pdf

political forces have created a permanent oversupply of oil and gas, low prices and new competitors that will keep markets unstable.[16]

***Business Climate***

A review of various assessments of Guyana's business climate presents a mixed picture. On the one hand, great prospects in oil and gas, mining, agriculture and hydroelectric power are attracting both attention and investment from the Western Hemisphere, Europe and Asia. On the other, the reliance on natural resources, shortcomings in infrastructure (transport, education, health), a low-skilled labor force, crime, corruption and climatic events are negative features of the business environment.[17]

Examining the Heritage Foundation's *Index of Economic Freedom,* Guyana's score is 57.4, making its economy the 116th freest in the 2021 Index. Its overall score has increased by 1.2 points, primarily because of an increase in the government spending score. Guyana is ranked 22nd among 32 countries in the Americas region, and its overall score is below the regional and world

averages.

Although Guyana's economy has been considered mostly unfree since 2012, its rise within that category this year is welcome. Unfortunately, any return to an excessively state-led development model could risk creating opportunities for corruption and could further weaken the rule of law, especially judicial effectiveness and government integrity.[18] For natural resource-rich economies, too much easy money flowing through the economy has the potential to incentivize private companies and individuals to pay off government officials, including police and judges and for those parties to solicit (or at least accept) bribes.

Turning to the World Bank's *Doing Business 2020* report that compares business regulations in 190 countries, Guyana registers a ranking of 134—a poor performance, to say the least. The nation's score on doing business, based on qualitative and quantitative criteria but not ranked comparatively, uses a scale of 1-100, 100 being tops. By this measure only with "Starting a Business" does Guyana score high—85.6. On the other 9 indicators, the nation scores in the mid-50's; and in "Enforcing Contracts" Guyana scores 22.4.[19]

In the preceding two years, Guyana was ranked at 134 in the World Bank's *Ease of Doing Business Index*, which highlighted that it could take up to 208 days to get a construction permit, 82 days to get electricity, and 46 to register a property.[20]

---

[16] Ibid.

[17] https://globaledge.msu.edu/countries/guyana/risk

[18] https://www.heritage.org/index/country/guyana

[19] https://www.doingbusiness.org/content/dam/doingBusiness/country/g/guyana/GUY.pdf

[20] https://data.worldbank.org/indicator/IC.BUS.EASE.XQ

Anecdotal evidence is equally compelling. Foreign companies complain that the environment is not "business-friendly". They cite lengthy timelines for permits, uncertain approval processes, and concerns about procurement procedures even when they follow the submission guidelines to the letter. Then there are also the traditional barriers to growth like high energy costs, aging roads, bridges, and other critical infrastructure that require much larger investment and modernization.

While the government's Office for Foreign and Local Investment (GO-Invest) strives to cut red tape and institute other measures to ease the operating environment for business, much more needs to be done. For as Jennapher Lunde Seefeldt of Augustana University points out, the major concern for potential foreign investors is *policy uncertainty*, arguing that the state should provide clear and stable policies to help streamline the permitting and approval processes; and while investors will adhere to rules and regulations, the government needs to be transparent about what those rules are.[21]

***Human Capital and Workforce***

The quality of a nation's human capital and workforce is an essential component of a nation's ability to advance both socially and economically, providing infinite opportunities for its citizens. In evaluating Guyana's human capital position, a good place to start is the Human Capital Index (HCI). First launched in 2018, the HCI measures the amount of human capital that a child born today can expect to attain by age 18. A child born in Guyana today will be 50 percent as productive when she grows up as she could be if she enjoyed complete education and full health. This is lower than the average for Latin America and the Caribbean region and Upper middle- income countries.[22]

Guyana has a diverse network, public and private, of education and training institutions as well as company-based learning for workers. Guyana has a reading literacy rate at 92% of the population over age 15.[23] Despite this high level of reading literacy, significant portions of the Guyanese population have functional literacy difficulties resulting in a lack of employability and other socio-economic disadvantages; this has caused government and charitable agencies to push education as a tool in poverty reduction.

The government is investing heavily in early childhood education, universal primary and secondary education, and improving access to and quality of tertiary education.[25]

The higher education system of Guyana consists of 9 universities with 65 programs of study. Additionally, there are offerings of 44 bachelor's degree programs at 7 universities, 17 master's degree programs at 9 and 4 doctoral programs at 4 universities.[24] The three most popular programs of study are medicine, nursing and pharmacy. Surprisingly, for a country keen on boosting

---

[21] "Is Bureaucracy Holding Back Guyana's Oil Sector," *Energy Advisor*, Inter-American Dialogue, October 1, 2021.
[22] https://databank.worldbank.org/data/download/hci/HCI_2pager_GUY.pdf
[23] https://countrymeters.info/en/Guyana#:~:text=Literacy%20of%20population,33%2C893%20are%20illiterate.
[25] https://www.inewsguyana.com/finance-minister-outlines-plan-to-develop-human-capital-during-world-bank-forum/
[24] https://www.scholaro.com/pro/Countries/Guyana/Education-System

economic growth and competitiveness management ranks 5th and engineering 10th. Additionally, the nation possesses over a half-dozen trade schools.

Turning to non-university education—specifically vocational-technical—this is an area of priority for both the government and the private sector. The Council for Technical & Vocational Education and Training has an important role to play in providing for a Guyanese workforce with the necessary knowledge, skills and attitudes contributing to increased productivity and economic development.[25]

Among the objectives of the Council are: (1) advise the Minister on the measures required to ensure a comprehensive system of technical and vocational education and training that is suited to the development needs of Guyana; to develop a national system of Competency Based Modularized Training and initiate its implementation, and (2) expand the scope of industrial training in industry.[26]

In light of pending legislation on local content requirements, Guyana must satisfy the need for indigenous human capital that can improve the country's workforce. In fact, the overwhelming number of infrastructure work which is being handled by foreign-owned companies. Additionally, the GCCI notes the high volume of trucking, logistical and other support services which are being operated by foreign-owned companies, particularly as it relates to the oil and gas sector.[27]

In terms of workforce, the 2020 Guyana Labor Force Survey (GLFS)[28] highlights major interest indicators in Guyana's labor force participation, with the total population aged fifteen and above residing in Guyana equaling 602,765 persons. A little more than 70 percent of the Guyanese population lives in rural areas, and men represent 60 percent of the workforce actively engaged. Underemployed workers are close to 4 percent, and the unemployment rate is near 13%. The majority of the Guyanese working population works in three sectors, namely: (1) agriculture, forestry, and fishing; (2) wholesale and retail trade; and (3) public administration and defense.[29]

The latest projections from the World Bank indicate that the oil sector is expected to create 3,850 direct jobs and 23,100 indirect ones by 2025, employing 0.7 and 3.9 percent of the workforce, respectively. While the government is keen on ensuring significant local content, the job-creating potential of the oil sector is limited by its capital- and skill-intensive nature; and Guyana's small and undiversified manufacturing base is not capable of producing many of the specific inputs the

---

[25] http://www.ctvet.org.gy/

[26] http://www.ctvet.org.gy/index.php/about-us/tvet-institutions.

[27] https://www.bnamericas.com/en/news/statement-by-the-gcci-on-the-tabling-of-local-content-legislation

[28] https://statisticsguyana.gov.gy/surveys/

[29] https://www.caribbeannewsglobal.com/critical-variables-in-guyanas-workforce-development-equation/ [32] https://www.caribbeannewsglobal.com/the-challenge-of-human-capital-and-economic-development-in-guyana/ [33] This cuts both ways. On the one hand the skilled labor pool will gravitate in high numbers to the oil sector, depleting the other sectors of talent; on the other hand, increased opportunities for skilled labor in some of the other sectors of the economy will draw workers away from the oil sector.

sector requires.[32] This makes setting percentage targets for the scores of occupations, equipment, and services cited in the government's local content policy exceedingly challenging.

At present the nation's workforce skills profile and labor market structure are poorly aligned with the needs of the oil sector. As the World Bank has ascertained, workers with technical skills that can be employed in the oil sector are currently engaged in construction, transportation, and agro-processing, which are closely linked to agriculture.[33]

An encouraging development along these lines is the recent announcement that the government will offer 20,000 online scholarships to prepare Guyanese for the energy sector. The training is intended to be very practical, tied to industry, and aimed at local human capital development, since petroleum-related jobs are presently staffed by foreigners. Scholarship recipients have a choice of more than 80 programs offered via GOAL (Guyana Online Academy of Learning), including the University of the West Indies.[30]

To be sure, foreign oil and oil services companies are actively engaged in supporting education and training in the energy sector. SBM Offshore N.V. is a Dutch-based global group of companies selling systems and services to the offshore oil and gas industry. They send graduate engineers to the Netherlands for training. ExxonMobil is the primary operator and has funded capacity development programs including the Centre for Local Business Development (CLBD). 63 women entrepreneurs will also benefit from training through the ExxonMobil Foundation.[31]

ExxonMobil said as of June 2021, 2,865 Guyanese were supporting the company's overall activities, representing 53% of the total workforce. According to the firm, the Guyanese workforce grew by 38% to 2,865 at the end of June 2021 up from 2,070 in June 2020 – and includes 568 women. More than 82,000 hours of training were provided to Guyanese staff working on ExxonMobil Guyana activities, over 85% of which were in Professional, Technical and Craft, and Trade training areas.

Additionally, the company said during the first half of 2021, combined with its contractors, nearly GY$19B was spent – with more than 750 Guyanese vendors of goods and services ranging from foodstuff to engineering benefiting.[32]

During a visit to the Guyana Shore Base Inc's (GYSBI's) career fair held at the Uitvlugt Community Centre Ground, WCD on October 9, 2021, Finance Minister Dr Ashni Singh urged Guyanese persons to capitalize on job opportunities being offered in the oil & gas sector.[33] One can expect more career fairs sponsored by the both the public and private sectors going forward.

---

[30] https://www.caribbeannewsglobal.com/the-challenge-of-human-capital-and-economic-development-in-guyana/

[31] https://oilnow.gy/featured/63-women-entrepreneurs-to-benefit-from-training-through-exxonmobil-foundation- centre-for-local-business-development/

[32] https://www.ogv.energy/news-item/guyanese-now-make-up-53-of-exxon-guyana-workforce-over-19b-spent-with- local-contractors-in-first-half-of-2021

[33] https://guyanatimesgy.com/gysbis-career-fair-at-uitvlugt-finance-minister-urges-guyanese-to-capitalise-on-job-opportunities-offered-in-oil-gas-sector/

Outreach to local businesses continued through the Centre for Local Business Development with 141 electronic tender notifications being issued to over 3,000 Guyanese companies and mentoring seven Guyanese companies to be compliant in ISO9001. The Centre was launched to assist Guyanese companies to better understand and access opportunities, primarily in the oil and gas sector, by improving their overall competitiveness

For Guyana, the human capital and workforce development challenge is three-fold. First, provide the local human resources—at all levels—required for a productive, efficient and high-quality oil and gas sector. Second, do the very same for non-energy sectors where Guyana has the potential to compete in global as well as regional markets. However, one should note that there is the risk of pulling away high skilled human capital from other important sectors before training can catch up. Third, provide the educational infrastructure—primary, secondary, tertiary and vocational-technical—for the skill development required for a competitive 21st-century workforce.

The most daunting challenge for Guyana is to look beyond oil and ride the wave of higher value-added service industries such as business process outsourcing, IT and software, design, and communications/media. Hospitality and tourism, renewable energy and the commercialization of agriculture and natural resources also have great potential; and even light manufacturing, such as wood-based home accessories, providing small producers can form a cooperative to produce the volume and scale necessary to compete effectively.

***The Diaspora as a Resource***

Diaspora communities cover the globe. They have been around since time immemorial. Diasporas usually involve sociopolitical formations created as a result of either voluntary or forced migration. Nevertheless, the concept of diaspora covers multiple realities that differ from country to country: people settled in a host country on a permanent basis, labor migrants based abroad for a period of time, dual citizens, ethnic diasporas, citizens of the host country, or second-generation groups.[34] Therefore, diaspora members in a given country are not necessarily migrants.

In the case of Guyana, expatriates cover the gamut, from service workers (including many who work in the informal economy), professionals and entrepreneurs. The U.S., U.K., and Canada are the prime destinations for the Guyanese diaspora, some who come for a short-term, some for a long-term, and others, like their neighbors from Trinidad and Jamaica, divide their time between their homeland and their new destination.[35]

An interesting phenomenon related to diasporas is Diaspora Direct Investment (DDI). This refers to direct investments from companies connected to diasporas in productive activities in the home country of such diasporas. Diaspora members can foster those investments in two ways: (i) those who are top executives of firms abroad and use their managerial experience and technical know-how to persuade their respective companies to invest in their countries of origin; (ii) those who are managers or owners of firms whose parent companies are in their countries of destination work

[34] https://publications.iadb.org/publications/english/document/Diaspora-Direct-Investment-Policy-Options-for-Development.pdf

[35] A. Chander, "Diaspora Bonds," New York University Law Review, 7, 2001.

with start-ups in their countries of origin to help them develop and finance commercially viable projects.[36]

**The Potential Benefits of DDI**

| Type of Benefit | Description |
|---|---|
| Brain Gain | When educated workers leave a country, that country faces a brain "drain" because it is losing skills relevant for its economy. In general, such countries invested in the education of those emigrants. This problem is particularly big in Africa. A brain "gain" occurs when talented migrants return to their home countries and bring knowledge, capital, and access to advanced markets in developed countries. Moreover, they can give advice to domestic entrepreneurs. |
| Technology Transfer | DDI is expected to bring better business practices and technology to suppliers and distributors (particularly because diasporas know better the technological needs of the home country). Unlike FDI, in which foreign entrepreneurs may be unwilling to share their technology with local workers (Javorcik and Spatareanu 2005), DDI may be less subject to this because diaspora investors may be less profit-driven (Nielsen and Riddle 2009; in the TRstudy of remittances, altruism is one of the important drivers). This is a hypothesis that has to be analyzed empirically. |
| Stable Financial Investments | Diaspora investors are less averse to political risk and economic shocks than other foreign investors. They are not only driven by altruism but also by other non-pecuniary reasons such as cultural affinities and market knowledge (Nielsen and Riddle 2009). They are more likely to invest and less likely to pull out in the face of risk (Gillespie et al. 1999). This is a hypothesis that has to be analyzed empirically for LAC. |
| DDI Attracting FDI | Diaspora investors and entrepreneurs can play a critical role in attracting non-resident FDI by setting up joint ventures and promoting export for domestic companies. |

Source: Eduardo Rodriguez-Montemayor, *Diaspora Direct Investment: Policy Options for Development,* Washington, D.C.: Inter-American Development Bank, 2012.

An excellent example of diaspora investment in the homeland comes from Africa. In a bid to encourage investment and foster formality, the Kenyan government recently introduced a Diaspora Investment Fund which enables Kenyans living overseas to invest in developmental projects in their home country. An investment firm, African Diaspora Asset Managers (ADAM), has been granted the first license of its kind for the fund by the Kenyan Capital Markets Authority.

The primary objective of the fund is to create a safe and regulated investing body for Kenyans living abroad. Diaspora payments would also be facilitated using Kenya's mobile money platform M-Pesa, allowing Kenyans to make investments from as little as $5.[37]

[36] https://publications.iadb.org/publications/english/document/Diaspora-Direct-Investment-Policy-Options-for-Development.pdf

[37] Stephannie Adinde, "Quick Facts—Kenya Launches First Diaspora Investment Fund," *Economics Blog,* October 8, 2020.

In the case of Guyana, the Ministry of Foreign Affairs' Diaspora Unit is developing a strong network to aid investors seeking to plug capital into the country. Admittedly, however, many investors complain about the difficulty in trying to meet with the relevant authorities to obtain timely and accurate information to guide their investment planning and execution.[38]

Be that as it may, it is the expatriate Guyanese workforce, estimated at 550,000 according to the International Organization on Migration (IOM) that possess the skill set (and in many cases) mobility to return to drive the nation forward. The report states: "If Guyana were to harness all of its unemployed, underemployed and discouraged workers, the potential supply of labour would be only 63,500 the medium-term. It is estimated that Guyana will need approximately 160,000 workers. It can be concluded that there will be the need for, at minimum, 100,000 workers in Guyana to realise its full growth potential."[39] With this in mind, the International Organization for Migration (IOM) said it is crucial that Guyana understands that it needs to tap into its Diaspora potential and urgently produce a structured migration policy, informed by evidence-based analysis.[40]

## The Role and Objectives of Local Content Requirements (LCRs)

Local content requirements (LCRs) have a long history. They have been introduced by developed as well as developing countries – in a variety of sectors including automotive, oil and gas, information and communication technology (ICT) and energy. Following the 2008 financial crisis the world experienced a rapid increase in the use of LCRs. The main purpose of nations implementing LCRs is to benefit domestic firms at the expense of foreign competitors. This practice is quite common among public procurement policies.

So, in essence, local content policies aim to increase participation in the national industry, create job opportunities for nationals, and increase the level of local skills and capabilities. However, these policies can have downsides if they are not adapted to specific national contexts, including slow procurement; higher industrial concentration in the extractive sector; hindering of production targets and competitiveness. They can also foster corruption, lack of transparency and more bureaucracy, amongst other things.[41]

While LCRs have existed for several decades already, especially for the extractive industries,[42] and they are growing, irrespective of the trend to further liberalized trade. One major goal, beyond revenue and employment generation, is to produce benefits to the economy beyond the direct

---

[38] https://oilnow.gy/featured/diaspora-unit-developing-robust-network-for-investors-looking-to-tap-into-guyana-opportunities/

[39] https://www.programamesoamerica.iom.int/sites/default/files/whp.ls_.info5_.pdf.

[40] https://www.kaieteurnewsonline.com/2021/10/04/with-small-population-and-rapid-oil-developmentguyana-may- be-facing-local-content-crisis-of-massive-proportions/

[41] https://openknowledge.worldbank.org/handle/10986/15930

[42] It should be worth noting that Guyana does have at least some history with extractive industries (mining) which has existed largely without a local content structure for decades. However, there is currently a plan in place from the last government, but the government is working now on a second draft of a new one.

contribution of its value-added, as through links to other sectors.[43] These links are created when the oil and gas industry, because of its operations, purchases inputs that are supplied domestically instead of importing them. In this sense, local content seeks to expand the share of nationally produced goods and services that are needed for oil and gas exploration, development, and extraction.[44] The aim of a local content policy is to expand the benefits beyond revenues of oil and gas activities for the national economy through the achievement of certain outcomes.

Local employment, skills development and national industry participation are at the core of LCRs.[45] Local employment and national industry participation are promoted when companies related to the oil and gas sector are required to hire national workforce and to purchase goods and services from national companies for the development of its operations. On the other hand, skills development is incentivized due to the fact that, to comply with the previous requirements, companies and government have to build skills and capacities in the national industry that provides goods and services as well as in the national workforce.

As for the current use of LCRs, the currently biggest activity in LCRs is in Argentina, Brazil, China, India, Indonesia, Russia, Saudi Arabia and the USA.[46] India is by far the most prominent user of LCRs, accounting alone for more than a quarter of global LCR use. However, Brazil has introduced more LCRs than any other country after 2008 and can be found in most major industries like ICT, energy, health, media, reinsurance, textiles and machinery and equipment, oil and gas and financing.[47][48] However, Brazil has twice had to relax its own local content standards over the past few years due to systemic inabilities to meet industry needs locally and corresponding slowdowns in development. And that is in a much bigger country than Guyana.

Ghana's local content law provides a prime example. The law requires that a "contractor, sub-contractor, licensee, the corporation or other allied entity carrying out a petroleum activity shall ensure that local content is a component of the petroleum activities engaged in by that contractor, sub-contractor and licensee, the corporation or allied entity"; and that "an indigenous Ghanaian company shall be given first preference in the grant of a petroleum agreement or a licence with respect to petroleum activities subject to the fulfilment of the conditions specified in the regulations".[52]

The bill also requires that "there shall be at least a five percent equity participation of an indigenous Ghanaian company other than the corporation to be qualified to enter into petroleum agreement or

[43] https://openknowledge.worldbank.org/handle/10986/15930
[44] http://ella.practicalaction.org/wp-content/uploads/files/Local%20Content%20Frameworks.pdf
[45] http://ella.practicalaction.org/wp-content/uploads/files/Local%20Content%20Frameworks.pdf
[46] https://ecipe.org/publications/the-economic-impact-of-local-content-requirements/
[47] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2370612
[48] https://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=301693

a petroleum license". Ghana is an interesting case study to use, but it is worth noting that anecdotally companies there have struggled to actually meet local content rules due to capacity constraints.

Brazil, Angola, and Nigeria are countries from Latin America and Africa that have established an official local content policy and have been implementing it for many years. Beside these cases, there are also oil and gas producing countries in Latin America and Africa that have established frameworks to promote employment, national industry participation and skills development. For instance, in countries such as Bolivia, Colombia and Ecuador there is no specific legislation for local content in the oil and gas sector. Nonetheless, there are regulations contained in different frameworks that seek to promote national employment and local sourcing practices. In the case of Ecuador, there are regulations that promote local labor. For example, Article 75 of the Mining Law establishes that 80% of the companies' workforce must be Ecuadorian. Likewise, Article 31 of the Hydrocarbons Law contains a regulation for companies that provides services to national oil company (NOC) EP Petroecuador that establishes that these companies must hire 90% of Ecuadorian citizens for technical positions and 100% for administrative ones.[49]

Despite the negative evidence of the impact of LCRs on economic development and trade, they continue to occupy a major role in policy formation. Since the global financial crisis a decade ago, more than 340 localization measures, including over 145 new local content requirements, have been put in place by governments largely in an effort to improve domestic employment and industrial performance. Analysis by the OECD has shown that for select measures, 80% of disrupted trade is in intermediate goods, disproportionately affecting global value chains.[50]

Be that as it may, an honest discussion of local content policy must recognize that it is useless to argue the merits and demerits of LCRs—they are here to stay, and they are not doing away. The key question is how to design, plan, implement and adjust (when and where needed) local content policies. Going forward the government should:

## LCRs and The Case of Guyana

The proposed Local Content Policy (LCP) identifies both the challenges and opportunities arising from the offshore hydrocarbon finds and cites the ripple effect on other sectors by clearly identifying the forward, lateral and backward linkages and taking a "shared value" approach[51] for all agents involved.

While the government, private sector (local and foreign) and civil society genuinely hope that the successful implementation of the LCP will result in tremendous advantage for Guyana, one must

[49] https://grupofaro.org/

[50] https://www.oecd-ilibrary.org/trade/emerging-policy-issues_5js1m6v5qd5j-en

[51] Shared values are those that create a win-win situation for both the company and the community at large, be it economic, social or environmental.

recognize that the policy is ambitious and pitfalls do exist, especially the achievement of over 150 measurable targets over the next ten years.

***Goals and objectives of the government's proposed policy***

While the government's policy document very articulately describes 8 major focus points in section 2 ("Purpose of the Policy Guidance of the LCP"), the overall goals can be summarized as follows:

1. Assure optimal exploitation of the current and newly discovered Guyanese oil reserves.

2. Create an efficient and sustainable value chain mechanism right from the resource extraction to refinement, final product creation, local consumption and exports.

3. Contribute to local economy through skilled and unskilled employment creation with encouragement of Guyanese nationals to participate, along with equity investment opportunities, developing supply chain for the oil sector and use the same to support other sectors such as agriculture, mining, manufacturing, ITC, infrastructure, and such industries, covering all types of goods and services.

The policy also rightly recognizes the limitations in the form of the human resource availability in the country, especially skilled labor and limited business and finance capital. Unfortunately, however, the targets do not. For example, 10-20% Guyanese steel and high voltage cable on day 1, the same for front-end engineering and design for offshore structures, and 20% local content for 3D seismic assessments. These are not reflective of Guyana's present situation. Targets aside, the government will have to maintain accountability to ensure that both public and private contractors do their part while self-monitoring within the government itself. For this to occur, it is imperative that the plan sets measurable, quantifiable and realistic goals within a specific period of time. In essence progress has to be empirically measurable in order to maintain accountability, transparency and identify issues whenever the goals are not met.

***Positive and negative features of the specific components of the policy***

We wish to emphasize that the government's LCP is well written in its current state but, as with most policy proposals, it does have certain positives and negatives. Besides the questionable and likely unrealistic local content percentage targets, the LCP does have a number of positive as well as other negative features. To highlight the most important:

**Pros –**

1. The LCP clearly identifies lateral, forward and backward linkages in the value chain process.

2. The consequent effects on the other sectors such as agriculture, manufacturing, infrastructure, education, etc., hopefully have been taken into account. For the cost to the country through lost

revenues or losses to other sectors is also something that the Guyanese people would experience, including the larger number who do not work in the sector

3. Clearly sets the strategy to increase Guyanese participation in terms of preferred access and opportunities. The local participation intends to uplift the overall economy, infusing more fiscal power to its citizens and producing skilled and unskilled employment that hopefully will add to the opportunities available within the country.
4. Recognizes the need for good governance in order for LCP to succeed. It also strives for balance between the government role and responsibilities of the private sector and independent contractors by forming long-term, sustainable collaborative partnerships.

5. Understands the need for appropriate legislative support for successful policy implementation and setting up regulatory bodies for supervision and accountability. The same bodies should be responsible for sharing information with local Guyanese population whenever needed. Such transparency will indeed encourage Guyanese participation.

6. Realizes the potential of using Guyanese diaspora as a resource, as highlighted in this document above.

**Cons –**

1. While the policy recognizes the need for collaboration with local businesses and primary contractors or sub-contractors, the policy still remains contingent on the cooperation of the private sector and the said contractors. As the LCP notes, local content is only successfully implemented if these private contractors hire from the local population and contribute to the community that they operate in. The policy has to clearly identify the regulatory bodies that will hold the private contractors accountable and assure that they follow the guidelines provided by the government. Additionally, the contract agreement itself needs to include clauses that assure transparency between the contractors and the government and the contractors and its citizens. These measures need to be strongly established in the LCP itself.

2. The LCP needs to detail the measures to assure the safety and protection of the assets invested in Guyana by foreign investors and enlist security resources to be utilized for the same. The crime rate remains a concern for foreign investor; therefore, this needs to be addressed in the LCP as well.

3. Tax base considerations need to be elaborated. Of course, the need for generating public revenue and using the same for further benefit of the Guyanese population is clear. Allocating financial resources for social services, education and infrastructure is essential. However, the tax structure for both local and foreign businesses investing in Guyana should be such that the business would be attracted and would consider it to be “fair”. Otherwise, investors are likely to seek

destinations where tax benefits are higher, resulting in Guyana can losing potential business to other competitive economies with better tax incentives.

4. The LCP also acknowledges the limited human resource capacity in the country and hopes that the implementation of the LCP itself will address that issue. This is a circular argument; for in order to create a sustainable oil sector, Guyana needs to have the required initial human capital. Under the current circumstances, Guyana faces a severe shortage of human resources, especially specialized, skilled resources. Therefore, the policy needs to have a gradual, temporal plan to address this challenge—and a huge challenge it is.

5. The LCP lacks a risk evaluation section that needs to discuss possible factors that would instigate a need for change in the policy implementation as well as have contingency plans in place in case of underestimation of oil resources, shortages in tangible resources (steel, iron, etc.), transportation failures or infusion of required capital. The threats need to be identified and addressed with clear distribution of responsibilities among the government bodies, local contractors and foreign investors.

6. The current energy reserves that the policy intends to exploit are exhaustible, non-renewable, and high carbon emission resources. The policy also needs to address how local content creation will continue post-usage of current resources. The policy must provide a plan for smooth transition from an oil dependent economy to a sustainable resource economy without losing the employment and wasting infrastructure.

## Overall Assessment of the Proposed Policy

According to the government of Guyana, the goal of their local content policy is to "maximize the level, quality, and benefits of participation in the petroleum sector value chain by Guyanese." [52] Having reviewed an extensive array of reports and statistical information regarding local content as it pertains to the oil sector and having interviewed both Guyanese and non-Guyanese experts on the topic, the following conclusions are presented to help frame further discussion on Guyana's local content policy.

In general, the policy covers a wide range of features and categories of local content. It establishes the most important feature necessary for successful implementation—namely, collaboration among non-profits, private contractors, foreign investors, operating businesses from other industrial sectors and the local community. The policy aims to implement a shared value model, by assuring a value creation for every stakeholder involved.

Be that as it may, we find Guyana's Local Content Policy to consist of a reasonable policy framework that struggles under the excessive weight of targets that are questionable in their derivation, difficult to attain, or not reflective of current realities.

[52] https://nre.gov.gy/wp-content/uploads/2021/02/LCP-for-the-Development-of-Guyanas-Petroleum-Economy-Revised-Draft-02.11.2021-updated.pdf

The gap between rhetoric and reality along with the LCP's inconsistencies risks disappointing and disillusioning investors, operators, suppliers, workers and the public at large. It will also send a negative signal to those foreign investors contemplating an investment in Guyana.

To help remedy the situation, in part, the government in going forward should consider a path forward that is both sensible and realistic.

## Suggestions for a Sensible and Realistic Path Forward

### *Technical assistance and Small and Medium-size Businesses (SMEs)*

The Small Business Act of 2004 enabled the government to help establish a good foundation for entrepreneurship within the country. The Small Business Bureau (SBB) and the Centre for Local Business Development have played a vital role in developing the SMEs in Guyana over the years; but many issues still need to be addressed.

To gain a better insight in the role of SMEs, we can take the example of Nigeria which initially made the critical mistake of undervaluing the contribution of SMEs in the LCR creation despite achieving the status of major oil producer as early as 1970s[53]. This neglect resulted in under-development of the local population and, thus, the country's population still suffers from poverty. However, recently Nigeria attempted to mitigate its past errors and now SMEs account for more than 90% of the businesses in the country that employ about 50% of the country's labor population and contributes more than 50% to the country's industrial output[54]. On the other hand, more than 70% SMEs in Guyana failed from 2015 to 2020, with the year 2015 showing highest numbers[55]. It is important to note that SMEs can also serve as "storefronts" or pass-throughs for corrupt businesses if the targets are poorly calibrated.

In order to achieve the LCP vision for local SME development and employment creation, the Guyanese government through the SBB needs to provide financial and technical support to entrepreneurs, new ventures, and stagnant SMEs that need an injection of new capital to grow. For this, the government needs to create collaborations through the Memorandum of Understanding (MoUs) vehicle among the domestic banks, insurance companies and new ventures or SMEs seeking capital. Additionally, the executives in organizations that show potential for significant contribution to the oil sector supply chain (in the initial stages and then any major industry in the later stages of LCPs) should be provided training in strategic and financial management.

Therefore, more funding should be provided to SBB so that it can help to: (1) act as a surrogate venture capital firm and/or incubator to identify the SMEs with highest potential as a long-term component in the oil sector value chain and provide them with required financial and technical assistance, which can consequently be expanded to SMEs associated with other industries and (2) extend technical support by having technical support teams that help Guyanese entrepreneurs and

---

[53] https://www.mona.uwi.edu/msbm/news/critical-role-small-and-medium-sized-enterprises-oil-economy

[54] https://www.stabroeknews.com/2020/01/17/business/small-businesses-in-developing-countries-a-glimpse-at-the- guyana-situation/

[55] https://www.mona.uwi.edu/msbm/news/critical-role-small-and-medium-sized-enterprises-oil-economy

small business owners related to financial and/or technical managerial decisions, especially in the early stages.

By providing such technical support, the government can mitigate the impact of limited skilled human resources in the country, as citizens without formal advanced education can also successfully undergo training and gain hands-on experience with the technical assist of the SBB.

***The role of human capital—current state: positive and negative aspects and required changes to achieve greater self-reliance***

As the LCP itself acknowledges multiple times, the biggest challenge for the country in developing its oil sector to the envisioned standards is the availability of skilled and unskilled human resources. To put things in perspective, ExxonMobil employs about 72,000 people in the United States in order to operate as efficiently as it does with the infrastructure and support of a developed country's economy[56]. On the other hand, out of Guyana's total population of 791,545 the labor force is comprised of 291,832[57]. Drawing from the expected attainment in local levels as shown from tables 7-1 to 7-11, we can assume that approximately 25,000 to 30,000 human resource is expected to be sourced locally. These numbers beg two questions: (1) when a country employs more than 10% of its working population in a single sector, what is the impact on the other sectors? and (2) while unskilled labor may be readily available, does Guyana have enough skilled labor to meet the initial goals before moving to later years in the LCP plan?

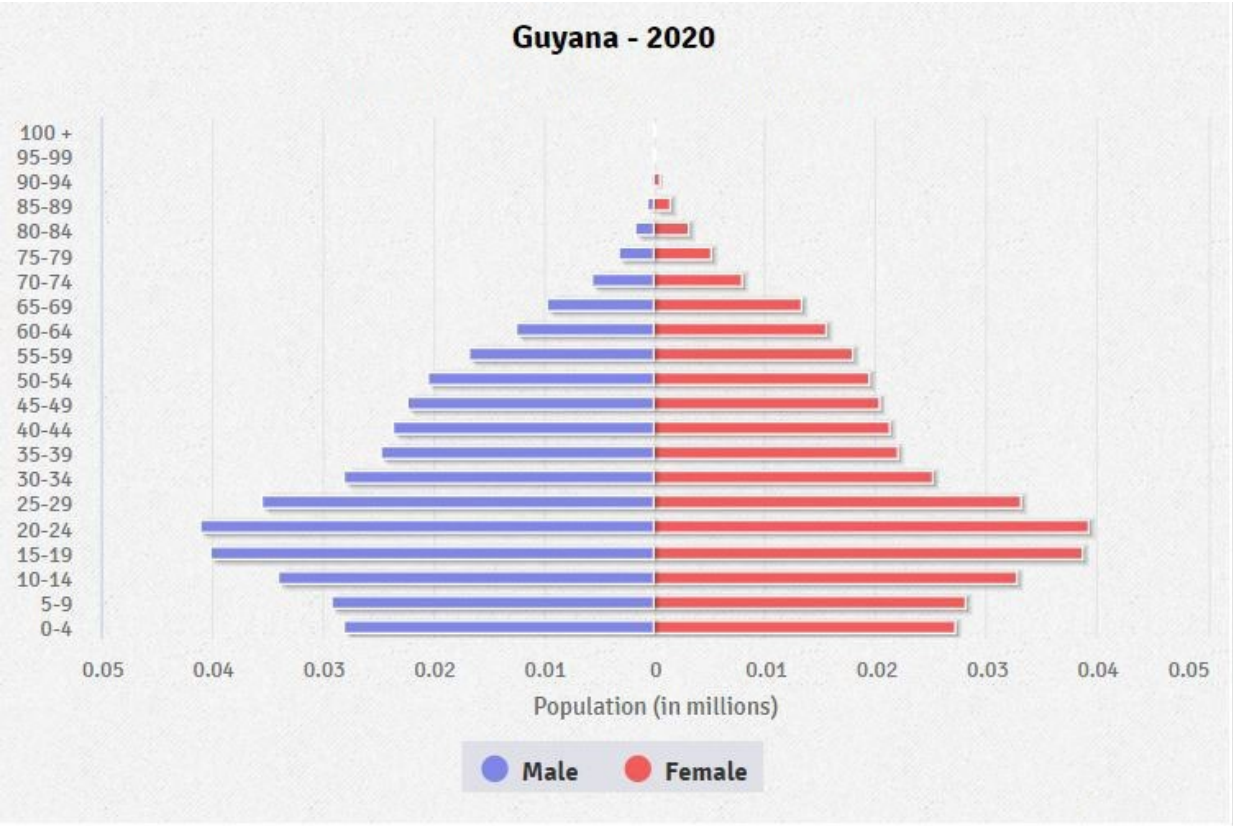
The answer to both these questions, however, would be speculative at best. At this early stage of development current available data are not sufficient to draw accurate predictions. However, the broad plan that has been laid out so far does give a blueprint to launch the LCR initiative.

But on the brighter side, we can see that the current Guyanese population is not on the aging side – that is, as can be seen from the figure below, a little over 84% of the population is below the age of 55 years, and on top of that, more than 45% of the population is younger than 25 years. This shows that the country has a lot of potential to groom the next generation of workers to meet the human capital requirements. However, in order to cultivate this resource, a focus on improving the educational system and related policies is imperative, leading us to the next part of addressing the human resource challenge.

---

[56] https://www.macrotrends.net/stocks/charts/XOM/exxon/number-of-employees

[57] https://tradingeconomics.com/guyana/labor-force-total-wb-data.html#:~:text=Labor%20force%2C%20total%20in%20Guyana,compiled%20from%20officially%20recognized%20sources.




Source: Indexmundi.com[58]

***Education system improvement and STEM courses for constant supply of skilled labor (educational plans in Saudi Arabia as example)***

There are about 5 major universities in the country covering undergraduate and graduate level education including doctoral studies[59]. Consequently, the availability of STEM (Science, Technology, Engineering and Mathematics) courses is also very limited. With only 4 Universities providing doctoral degrees, research and innovation are also very constrained. This begs another question – how will the Guyanese government produce skilled individuals that can operate at top management levels in a corporation? The LCP addresses this, very optimistically, by suggesting redirection of funding obtained from the development of oil sector into education. There are two underlying assumptions for this proposal: (1) the profits obtained from the oil sector will be large enough that after the necessary expenses on infrastructure, transportation, governance, regulations, contract payments, etc., will have amounts available for education sector funding enough to make a significant difference over a shorter period of time, and (2) all the stakeholders will have the same goals for the country's development, including private sector operators, foreign investors and independent suppliers.

[58] https://www.indexmundi.com/guyana/age_structure.html
[59] https://ceoworld.biz/2020/11/12/best-colleges-and-universities-in-guyana-2021/

Admittedly, in the beginning a major portion of the skilled labor for higher levels of management will have to be outsourced from developed countries, which will incur significant costs in itself. The bottom line is that proper planning for education funding needs to be in place, with a new education policy in force. For instance, Saudi Arabia undertook a major reassessment of its educational system two decades ago. Once the nation realized its potential through the sheer presence of energy resources, the school system, right from the primary education to graduate level, was gradually overhauled. In 2020, through education reforms and oil wealth, Saudi Arabia's education is hardly recognizable from the 2001 version.[60]

Today, the education system focuses solely on creating highly skilled human resources by boasting possession of some of the best universities in the Middle East that offer advanced courses in science and technology while producing high quality research and innovation. This was possible with a bottom-up approach whereby a network of publics schools for primary education was established, giving easy access to education for children of all ages[61]. Using the strong human capital produced locally, the country was able to independently develop all sectors of the economy.

Similarly, the Guyanese government must start building a pipeline of human resources from early levels of education with easier access for its citizens and gradually begin offering higher levels of STEM courses that will create a sustainable supply of skilled human resources for efficient operation of its industries.

***Controlling corruption at the upper, mid and lower management levels***

Another issue that the Guyanese government has to recognize is possible corruption in both the public and private sectors. Transparency International ranks Guyana 81/180 countries in the Corruption Perception Index with a score of 41/100. Guyana has reported a significant jump (13 places) in ranking since 2012.[66] The government has indeed taken significant measures for a crackdown on corruption, and credit goes to the new transparency, accountability and good governance practices.[62] However, much more needs to be done to battle corruption at all levels and in all communities of the country. As new players come into the picture--both internal and external- the chances of self-benefactory behavior increase. It is also important to mention that there are risks in the draft policy related to government lists of approved contractors. The government will need to be vigilant to guard against patronage arrangements. Regulatory bodies and oversight committees will help mitigate the impact of corruption, but caution has to be exercised to avoid unnecessary interference and exertion of power. A balance needs to be maintained so that foreign investors, private institutions and independent contractors can freely operate without bureaucracy and red tape while maintain the integrity of their individual responsibilities in creating local content requirements.

---

[60] https://www.financialexpress.com/world-news/education-system-in-saudi-arabia/2281177/

[61] https://www.financialexpress.com/world-news/education-system-in-saudi-arabia/2281177/

[66] https://www.transparency.org/en/countries/guyana

[62] https://www.stabroeknews.com/2021/06/08/news/guyana/singh-tells-un-forum-govt-bolstering-anti-corruption-institutions/

***Engagement of government, the local private sector, foreign businesses and governments, NGOs, multilateral institutions and the Guyanese diaspora***

One of the easiest ways to strike this balance is by creating a win-win situation for every stakeholder involved – from the government, local private sector, foreign businesses, NGOs, multilateral organizations and the Guyanese diaspora. This is possible by implementing the shared value model as sought by the LCP, whereby each stakeholder gains something from some part of the value chain. But we can also make the case that LCR will not be possible with any one of the actors missing – the forward, backward and lateral linkages all have to be a part of the value chain and for this, enough emphasis cannot be placed on MoUs, collaborative contracts and accountability of individual responsibility.

***Assessment of crime in the geographical locations for production plants, refineries and transportation pipelines.***

A major lesson from Nigeria that the government of Guyana can learn is evaluating regional crime before accelerating its development initiatives. As a case in point, the biggest threat to Nigeria's oil sector is the theft of oil, pipelines and vandalism or refineries and plants. According to the 2019 audit report of Nigeria Extractive Industries Transparency Initiative (NEITI), the country lost 42.25 million barrels of crude oil valued at $2.77 billion throughout the year.[63] This startling data is backed up by the federal government reporting a loss of 400,000 bpd, making Nigeria the most notorious center for oil theft in the world. [64] The issue is so severe that requests to create a special legal task force solely for the protection and security of oil pipelines and prosecution of criminals has been submitted to the government.[65]

Not only the oil itself, but the transportation pipelines are also under constant threat just for the value of the metal itself. Valuable steel and iron equipment have often been stolen from plants and refineries in Nigeria. Additionally, the high crime rate can also discourage skilled migration from other countries and affect opportunities of outsourcing manpower.

Unfortunately, Guyana is 7$^{th}$ in the list of top 10 crime ridden countries with a crime rate of 68.74 compared to Nigeria's 64.06 (rank 16$^{th}$)[66].

Therefore, one of things that the government must account for is the regional crime rates within the country and assure that the pipelines, transport and refineries are all in safer and well-protected regions. The government has to take steps and plan in advance for prevention of theft and vandalism in order to avoid a similar situation like Nigeria.

---

[63] https://www.vanguardngr.com/2021/07/nigeria-lost-2-77bn-to-crude-oil-theft-in-2019-neiti/

[64] https://allafrica.com/stories/202107060417.html

[65] https://www.reuters.com/article/us-nigeria-oil-theft/oil-theft-cost-nigeria-1-35-billion-group-urges-legal-task- force-idUSKBN1W4304

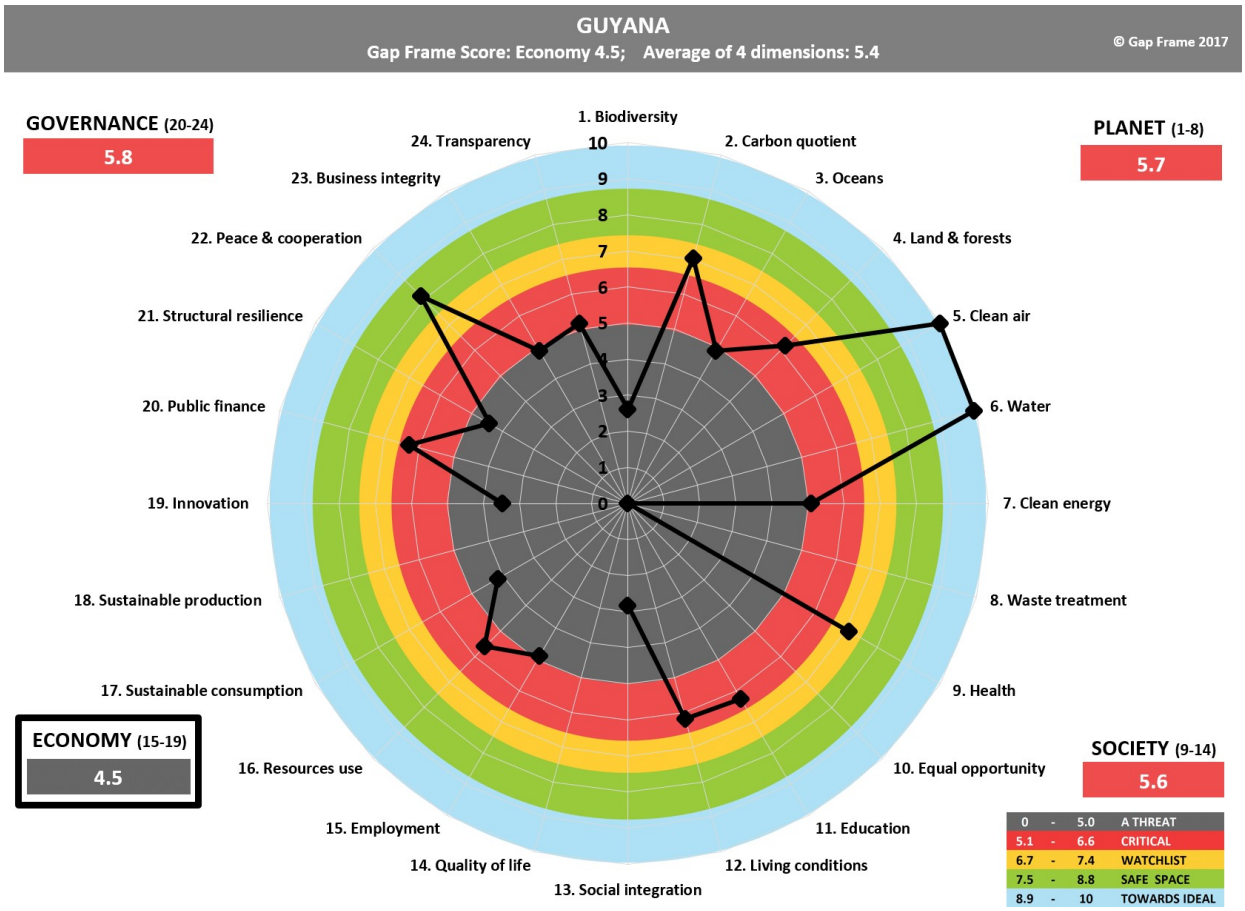
[66] https://worldpopulationreview.com/country-rankings/crime-rate-by-country

***Major goals for a successful strategy and plan going forward.***

As the main purpose of the LCP is to use the oil sector development for the overall benefit of the country and its populace through shared value creation, a successful strategy would show progress and development in not just the oil sector but also overall dimensions and industries of the country. For this we use the Gapframe framework which is explained as follows: "The GAPFRAME is a normative framework that translates the United Nations Sustainable Development Goals (SDGs) into nationally relevant issues and indicators for business. It provides a national assessment showing where a country is today as compared to where it should be in the future. The GAPFRAME is developed by translating the 17 SDGs into 24 issues relevant to all nations and business."[67] The figure shows the Gap Frame for Guyana with 4 main rated dimensions as Governance, Planet, Economy and Society. The rating is from 0 to 10 and covers all 24 issues.

Gapframe is a useful tool evaluate overall progress of a country through sustainable development which is at the heart of creating a sustainable shared value model. The framework can also be used to benchmark country level goals on the 24 issues and measure progress across all 4 dimensions over a period of time. This helps the government plan for short-term and long-term strategic management.

[67] https://gapframe.org/methodology/




Source: Gapframe.org – Guyana Gap scores[68]

For example, since Oil is a non-renewable finite resource, it should be used as the launchpad for Guyana's economy over 2 to 3 decades but not the primary source of economic development in the waning stages. Thus, the government could use the gains through oil sector to explore renewable sources of energy such as tidal or wind energy using the 459 km long coastline in which case, we can see from the GAPFRAME that current Clean Energy score is close to 6.5 (critical) and therefore, the country needs to eventually plan to raise that score to watchlist or safe space groups. The bottom line is that the government should be planning with both short-term and long-term goals in mind while using the hydrocarbon footprints as driving force in propelling Guyana towards its journey to become a developed nation.

## A Proposed Action Agenda

In order to help achieve the broad goals (as opposed to numerical targets) of a local content policy that is realistic, flexible, consultative, transparent and attuned to the interests of all parties—public,

[68] https://gapframe.org/by-region/south-america/guyana/

private, non-governmental and civil society--there are immediate actions the government can undertake. These are:

1. Acknowledge that their goals and those of foreign oil companies need not be incompatible; however, it must be communicated and agreed to by all parties. LCRs cannot achieve sustainable social economic goals without foreign investors and their in-country activities to enjoy profitable business performance.

2. Conduct a SWOT analysis of the national economy and identify the specific education, training and skill development needs not only of the oil sector but of those sectors that have the potential to operate as competitive ones of the entire economy. It would be foolish to try to develop industries where other nations, enjoying first mover advantage, had the scale and scope to dominate the marketplace. Guyana's great asset is not oil but human capital.

3. For the oil sector, both the government and the oil companies should increase both short- and longer-term education and training opportunities abroad as institutions such as the University of Calgary, University of Alberta, University of Texas at Austin, and Texas A&M University. Most of the high tier petroleum engineering and other technical jobs are taken by non-nationals as this country lacks the skillsets needed for these tasks. And while oil was discovered over five years ago, it is unclear when many of the technical jobs and specialist procurement opportunities will be taken up by locals.

4. The services sector can be developed to serve the needs of extractive industries but also for other ones, including IT services, graphic design, and business processing outsourcing. (This will have to be marketed aggressively once a critical mass is attained, such as half a dozen companies—satisfied ones—that are operating in Guyana.)

5. Explore strategies through public investment, tax incentives and improved security to bring back Guyanese in the diaspora or at least incentivize them to invest in their homeland.

6. Expand investment in infrastructure (roadways, broadband, port facilities) along with improved public services and an administrative and judicial system that is transparent, efficient and effective. This will go far not only in attracting FDI but maintaining and expanding that investment.

7. The implementation of anti-corruption policies and specific measures should be one of the government's highest priorities if it seeks to achieve all its goals including the benefits of a fair and effective local content policy.