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The Different Aspect of Local Content

2.1 Introduction

Local content policies entail that international firms producing any goods and services within a country are to acquire a given quantity or percentage of intermediate inputs domestically.¹ These policies aim to integrate the local population into the energy value chain and maximise the probable advantages of foreign direct investment. They are protectionist, similar to import quotas and tariffs on imported goods.² Local content policies advocate for the participation of local goods and services, local employment and use of local raw materials to retain value addition by the foreign investors and other market participants in the extractive industry value chain. The presence of oil and gas resources is perceived as an opportunity to boost a country’s economic advancement, and local content policies can play a pivotal role in making this a reality. These

¹Nwapi, C., 2015. Defining the “Local” in Local Content Requirements in the Oil and Gas and Mining Sectors in Developing Countries. Law and Development Review, 8(1), pp. 187–216.
²Ibid.
policies can also be considered as production development policies. For local content policies to thrive within a given economy, they need to be compatible with other policies such as procurement and industrial policies. The existence of local content policies has brought about economic development to economies that have a stable democracy, the rule of law, absorptive capacity, technological awareness, as well as a credible and stable economic climate. Most oil and gas are not found in such economies with such favourable characteristics for local content policies to thrive. Countries such as Norway and Brazil have adopted and implemented among the best local content policies in the world due to their supervening characteristics before finding the oil and gas. In contrast in Sub-Saharan African economies such as Kenya, Tanzania, Angola, Mozambique, Nigeria and Uganda should be able to adopt local content policies in an unconventional manner that is suitable and tailored to their local needs.

This chapter covers the history of local content policies, the policy tools that affect the design of local content policies will be covered in this chapter. Furthermore, the chapter will also cover the level of government intervention needed when implementing local content policies, the significant benefits and disadvantages of local content policies according to the literature reviewed.

2.2 The History of Local Content Policies

By the end of World War Two, most countries were emerging from economic turmoil. They established productive development policies, which were also known as import substitution policies (ISPs). ISPs encouraged the reallocation of resources from traditional industries onto the advanced industries. This facilitated higher productivity in the economy associated with clustering (also known as agglomeration

3Monge-González, R., Rivera, L. and Rosales-Tijerino, J., 2010. Productive Development Policies in Costa Rica: Market Failures, Government Failures, and Policy Outcomes.
4Rodriguez-Clare, A., 2007. Clusters and Comparative Advantage: Implications for Industrial Policy. Journal of Development Economics, 82(1), pp. 43–57.
5Ibid.
economies) in the given industry. ISPs were regarded as inefficient and placed difficulties in industries being competitive. ISPs became unpopular due to two main reasons. According to Rodriguez-Claire “advanced economies have already reaped the benefits of clustering in the advanced sector”.6 This lowers the prices of goods in the international market, due to high productivity in advanced economies associated with clustering of economies. Therefore exported goods from developing countries have no competitive advantage in the international market. The second reason is that ISPs lead to assumptions that the production made in advanced industries always leads to clustering.7

Lall clarifies the unpopularity of ISPs by stating that “the protection mechanism is not effective because ISPs are not aligned to other policies.8 To increase domestic competition and thereby avoid complacency among protected companies”.9 ISPs have primarily been abandoned, but most countries do maintain some characteristics similar to ISPs such as fiscal regimes being lenient on the exports of goods and services, foreign direct investments, tax incentives towards specific industries. This led to a new wave of production development policies known as local content policies. These policies were first implemented in the UK North Sea region in the 1970s.10 Local content policies apply to both the international oil companies (IOCs) and the local companies. They can be implemented to restrict imports as well as create national oil companies. Local content policies also advocate for the creation of both backward and forward linkages. These policies have recently been used to facilitate economic diversification.11

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6Rodriguez-Clare, A., 2007. Clusters and Comparative Advantage: Implications for Industrial Policy. *Journal of Development Economics*, 82(1), pp. 43–57.
7Hausmann, B.M., Moreira, M. and Rodrik, D., 2006. Coordination Failures, Clusters, and Microeconomic Interventions. *Andrés Velasco*, p. 1.
8Lall, S., 2013. Reinventing Industrial Strategy: The Role of Government Policy in Building Industrial Competitiveness. *Annals of Economics & Finance*, 14(2).
9Ibid.
10Heum, P., 2008. Local Content Development: Experiences from Oil and Gas Activities in Norway.
11Tordo, Silvana, Warner, Michael, Manzano, Osmel E. and Anouti, Yahya, 2013. *Local Content in the Oil and Gas Sector (English). A World Bank Study*. Washington, DC: World Bank.
China’s local content policies are regarded as successful in diversifying the Chinese economy. Rodrick argues that “the Chinese government emphasised policy interventions have facilitated the development of domestic capabilities in consumer electronics and other technologically advanced industries”. Hence local content policies help an economy look beyond a single industry. Local content policies are adopted and implemented due to numerous factors. Rent-seeking factions of a given country can adopt them. These factions adopt local content policies to “legalise” their conducts. Ovadia states that “the Angolanization policies of the oil and gas industry in Angola served multiple purposes giving the political elite the upper hand in influencing government policy for their benefit”.

For example, in Venezuela, a law was passed that forced all the international oil companies to refine oil in Venezuela. While in Brazil President Vargas in 1953 declared Petrobras must use local capital, local people and local know-how. Heum states that “in essence, the key to Norway’s industrial success has not adopted from a protectionist market, but to arrange for a dynamic industrial and technological development that involves competent actors within the domestic knowledge base and leading international competence”. Local content policies have frequently been argued to be against international trade measures that apply to the member states for the World Trade Organization (WTO). Particularly the agreement on Trade-Related Trade Organization, the General Agreement on Tariff and Trade (GATT), and the Agreement on Subsidies and Countervailing Measures (ASCM). This

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12 Rodrik, D., 2006. What’s So Special About China’s Exports? *China & World Economy*, 14(5), pp. 1–19.
13 Ovadia, J.S., 2012. The Dual Nature of Local Content in Angola’s Oil and Gas Industry: Development vs. Elite Accumulation. *Journal of Contemporary African Studies*, 30(3), pp. 395–417.
14 Tordo, Silvana, Warner, Michael, Manzano, Osmel E., and Anouti, Yahya, 2013. *Local Content in the Oil and Gas Sector (English)*. *A World Bank Study*. Washington, DC: World Bank.
15 Ibid.
16 Heum, P., 2008. Local Content Development: Experiences from Oil and Gas Activities in Norway.
17 Hufbauer, G.C., Schott, J.J. and Cimino-Isaacs, C., 2013. *Local Content Requirements: A Global Problem* (Vol. 102). Columbia University Press.
principle holds that a state should treat another state as they would treat their nationals. These agreements are applied differently to different nations since not all countries have the same economic development. They create exceptions for least developed and developing nations. The Agreement on Subsidies and Countervailing explicitly restrict the use of subsidies, if only they “adversely” cause adverse effects to another WTO member in their application. It is difficult for party bearing the onus of proof to prove how the subsidies “adversely” affect their domestic economy. This is because what is regarded as “adversely” affected in this agreement is narrow. Its concluded that due to the low economic development in developing and least developed countries, it would only be fair to create a “policy space” that allowed these countries to reach their economic goals. The principle of “reasonable accommodation” has allowed the use of these policies. This has made WTO rules regulating the use of local content policies not be stringent and strict in their application.

2.3 Local Content Policy Tools

As it has been mentioned earlier that local content policies just like agricultural policies, industrial policies and procurement policies are driven political policies. Government adopts and designs the local content policy according to what the government’s needs or “deems fit”. Local content policies are found in a country’s legal framework. The policy can be embedded in Acts of Parliament, and other provisions such as policy, regulations and contracts. For example, Article 50 of the Law on Subsoil Users in Kazakhstan states that “bids for new subsurface mineral rights include commitments to minimum levels of local content

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18Ibid.
19Ramdoo, I., 2015. Unpacking Local Content Requirements in the Extractive Sector: What Implications for the Global Trade and Investment Frameworks. By International Centre for Trade and Sustainable Development (ICTSD).
20Ibid.
21Ramdoo, I., 2015. Unpacking Local Content Requirements in the Extractive Sector: What Implications for the Global Trade and Investment Frameworks. By International Centre for Trade and Sustainable Development (ICTSD).
in goods, works and services, and the training of Kazakh personnel”.

Local content can also be found in secondary legislation, for example, in Angola. Ministerial Order No. 127/03 on the Contracting of local Services and local Goods from local Companies by international oil companies. These policies can also be in contractual obligations such as the 2008 model production sharing agreement (PSA) that was adopted in Tanzania sets local content requirements as part of the contractual obligations. The state can use various policy tools in implementing local content policies.

These tools include the following:

I. Contractual obligations that call for the inclusion of local goods and services
II. Contractual obligations that call for training of the local populace
III. Regulatory or contractual measures that foster the technological transfer
IV. The different bidding parameters that call for local content provisions as a prerequisite for being awarded a license
V. Attracting reinvestment of the profits from international oil companies into the local economy
VI. Regulations and contractual obligations on infrastructural and educational provisions
VII. Provisions for local ownership
VIII. The direct governmental intervention through state-owned enterprises (SOEs).

22Law on Subsoil and Subsoil Users in Kazakhstan, No. 291-IV, June 2010, Republic of Kazakhstan.
23General Regulator Framework for Hiring of Services and Goods from National Companies in the Oil Industry (“Decree 127/03”).
24http://www.tpd-tz.com/MPSA%202008.pdf Art. 18 of the PSA that calls for maximization of local goods and services where available on a competitive basis.
25Tordo, Silvana, Warner, Michael, Manzano, Osmel E. and Anouti, Yahya, 2013. Local Content in the Oil and Gas Sector (English). A World Bank Study. Washington, DC: World Bank.
2.3.1 Policy Tools Affecting Local Content Design

Policy tools determine the governance of local content policies. In the hierarchy of the legal framework, the policy tools may be implemented based on the contractual requirements, depletion policies, industrial policy, procurement policy, tax incentives and local industry participation capabilities. These policies are implemented to facilitate value creation in the local industry. But these policies can also have inefficiencies since they are purely politically driven. This can lead to corruption. Local content policies can also be ineffective due to “technological strangeness”. This is why the two local content forefront Sub-Saharan countries, namely Nigeria and Angola, implemented local content policies with little success. Countries like Nigeria and Angola do not possess the ability to meet the sophisticated necessities of the oil and gas industry. This makes it challenging for such countries to develop forward and horizontal linkages in their local economy. Hence the minimal value is being added in the local economy, due to such shortfalls. It is clear that to adopt and implement local content policies; there is a need for government intervention. Since developing countries do not have the market structure that automatically attracts local sourcing of goods and services as well as local participation at a competitive price, timeous delivery and adequate quality; there is a need for governmental intervention.

Tordo states that “governments must decide on how to explore the resources while maximising social welfare according to the resources available”. For example, Norway chose to develop its oil and gas resources slowly compared to the United Kingdom. The United Kingdom developed their resources faster than Norway. This was because

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26 Tordo, Silvana, Warner, Michael, Manzano, Osmel E., and Anouti, Yahya, 2013. *Local Content in the Oil and Gas Sector (English). A World Bank Study*. Washington, DC: World Bank.

27 Campos, J.E. and Pradhan, S. (Eds.), 2007. *The Many Faces of Corruption: Tracking Vulnerabilities at the Sector Level*. World Bank Publications.

28 Technological strangeness is defined as the ability of the rest of the economy to develop service capacity through backward linkages and the speed at which such capacity can be created.

29 Ramdoo, I., 2013. Fixing Broken Links.

30 Tordo, Silvana, Warner, Michael, Manzano, Osmel E. and Anouti, Yahya, 2013. *Local Content in the Oil and Gas Sector (English). A World Bank Study*. Washington, DC: World Bank.
Norway decided to develop its service industry slowly. This facilitated local inclusion, and as a result, the local service firms became internationally competitive. While the United Kingdom chose to attract American service companies and expertise. In Sub-Saharan economies, governments do not have the luxury to slowly develop their resources, since most of these countries are developing countries. They need funds in their government coffers to provide social services to their population. The design of local content policies is fundamentally based on the design of their depletion policies and how these principles are intertwined with the local content design within any given economy.

2.4 Impact of Depletion Policies on Local Content Design

2.4.1 Introduction

Depletion policies are policies that regulate the pace at which the oil and gas resources will be explored, produced and developed. These policies affect the whole design of local content policies since a country can choose what type of policies to implement whether the policies should be hard strict policies based on steep qualitative targets or soft value-based local content policies.

I. Good oilfield practise: reservoirs may be damaged if the oil fields are not properly maintained.

II. Politics: The country may enter international agreements that affect productive capacity and output. Hence affecting the decision making with regard to a government’s resources. This has been

31Al-Kasim, F., 2006. Managing Petroleum Resources: The “Norwegian Model” in A Broad Perspective (Vol. 30). Oxford Institute for Energy Studies.

32Al-Kasim, F., 2006. Managing Petroleum Resources: The “Norwegian Model” in A Broad Perspective (Vol. 30). Oxford Institute for Energy Studies.

33Stiglitz, J.E. and Dasgupta, P., 1981. Resource Depletion Under Technological Uncertainty.
evident in the current OPEC and Russia agreed to cut down oil production.

III. State budget: The need for public finances may speed up the production schedule.

IV. Political pressure on public spending: an increment in public income can lead to increased public spending, without regarding the appropriate reinvestment opportunities.

V. Domestic economy: The domestic economy must have the absorptive capacity for reinvestment opportunities. Otherwise, this might lead to hyper-inflation and rapid changes in foreign exchange rates (Dutch disease). The domestic economy may also not be able to foster linkages to the local economy.

VI. Institutional structure and national governance: the unavailability of transparency in the institutional structure, proper checks and balances leads to the inappropriate implementation of policies. In jurisdictions with low transparency, weak bureaucracy it is better if the resources were left in the ground.

VII. Resource curse: this links both the local economy and the institutional structure of a country. This is the failure to propel the oil and gas resources into a driver of sustainable economic development.

VIII. Price expectations: the volatility of resource prices affect the speed at which a government may choose to develop their oil and gas resources.

IX. Cost expectations: when costs of developing oil and gas resources are high. Most governments tend to wait for technological advancements that will decrease the costs.

X. Time value of money: Victor states that “the earlier the extraction date, the higher the potential gains, ceteris paribus”.34 The un-proven reserves do not automatically gain an income. This is dictated by the potential return in the investments thereof.

34Victor, N.M., 2007. On Measuring the Performance of National Oil Companies (NOCs). Program on Energy and Sustainable Development working papers, WP64, Stanford University.
The factors mentioned above affect the way a government adopts local content policies. In the 1950s, the service and supply industries of Brazil could not meet the demands of the oil and gas industry. The government required North American services and supply companies to set up operations in Brazil. Nordas state that “most of the designs and equipment used in refining or petrochemical processing, pipelines and oil field production came from these North American companies”. This helped the adopted local content policy foster forward and horizontal linkages quickly rather than concentrating only on backward linkages. The presence of political and ethnic civil unrest in Indonesia decreased foreign direct investments. This led to minimal linkages, minimal spillovers, and minimal transfer of technology. The result was that Indonesia adopted an untraditional local content policy. The policy only concentrated on the fact that the production should take place in the domestic territory, regardless of whether the company was controlled and owned by foreign investors or not.

The state-budget, pressure for public spending and the domestic economy also affect the design of local content policies. Nigeria in the oil boom period had an increase in foreign exchange earnings. The oil proceeds financed the steel mills in the 1970s this accelerated government revenue brought about large infrastructural projects. The Nigerian economy did not have the absorptive capacity to contain the revenue streams and benefits from the oil and gas industry. The Nigerian government created steel mills in excess capacity compared to the local demand. The policy concentrated on local ownership of oil and gas reserves rather than developing local capabilities that could

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35 Mendonça, R.W. and de Oliveira, L.G., 2013. Local Content Policy in the Brazilian Oil and Gas Sectoral System of Innovation. *Latin American Business Review*, 14(3–4), pp. 271–287.
36 Nordás, H.K., Vatne, E. and Heum, P., 2003. The Upstream Petroleum Industry and Local Industrial Development: A Comparative Study.
37 Tordo, S., 2011. *National Oil Companies and Value Creation*. The World Bank.
38 Gidado, M.M., 1999. Petroleum Development Contracts with Multinational Oil Firms: The Nigerian Experience. Ed-Linform Services.
39 Ibid.
create sustainable development in Nigeria. The capability of the local market participants to be involved in the oil and gas industry is essential, especially for the domestic economy. The local market participants are either state-owned entities that have no external participation as well as competing market participants with no governmental intervention. Local content policy requirements are met differently by the two different types of entities. Hansen states that “in the 1990s and 2000s African economies had minimal interventions in the oil and gas industry. This attracted FDI, privatisation and the development of a stable, transparent business-friendly environment”. The design and consideration of such government intervention are vital in this Covid-19, oil price shock era of 2020. COVID-19 has challenged extractive supply chains model for the sourcing of goods and labour. The current health crisis has brought trade and industry to an abrupt halt. It forces countries to develop novel and unconventional solutions on how to safeguard the supply of goods and services, both of which depend on a healthy workforce. Resource-rich countries need to start developing new approaches to supply chain management of oil, gas and mines that consider the challenges associated with new global economic threats like COVID-19—and other pandemics that are yet to be raised. Because of the oil price shock of 2020, government intervention could lead to the reconsideration of developing or improving a local supply chain—because insuring against global health risks. In other cases, the results may advise a sourcing strategy that aims to open up a more flexible supply of goods and services from multiple locations; it may be that multiple suppliers are now less expensive to manage and adapted to new global health risks than to streamline procurement through one major supplier.

On the other hand, Morris states that “international companies are depicted as large, integrated firms characterised by strong, centralised coordination from headquarters in western capitals”. This means that

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40 Hansen, M.W., 2014. From Enclave to Linkage Economies? A Review of the Literature on Linkages Between Extractive Multinational Corporations and Local Industry in Africa (No. 2014: 02). DIIS Working Paper.

41 Morris, M., Kaplinsky, R. and Kaplan, D., 2011. Commodities and Linkages: Industrialisation in Sub Saharan Africa. MMCP discussion paper; no. 13.
international companies operate in an enclave manner. Hence it is difficult for the local companies to integrate the oil and gas value chain. This triggered the need for governments to be stricter in dealing with foreign firms. This is what brings about the adoption of local content policies in an oil and gas industry. The integration can be both using public and private inputs. By government developing targeted programmes to enhance local supplier capacity, acquire market information. Governments can have a joint venture with an international company. To increase linkage potential, gain spill-overs and facilitate the technological transfer. The choice of the government to intervene in the oil and gas industry or have a passive attitude towards the industry is entailed in-state participation. Different governments embrace different forms of state participation due to their unique objectives and circumstances. These are known as full equity participation, carried equity participation and “free” equity participation.

**Full Equity Participation**

In full equity participation, the government invests through its own state-owned companies or small-medium enterprises, such as the national oil companies. The government can invest together with the private entity either by acquiring a majority or minority interest in a joint venture.

**Carried Equity Participation**

This may take numerous forms. There can be a partial carry of the state’s equity in a joint venture. The state may opt to be liable in the first stages of the oil and gas operations. Later the state’s equity can be transformed into full equity participation. “A full carried interest is when all

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42 Hoekman, B. and Martin, W., 2012. Reducing Distortions in International Commodity Markets: An Agenda for Multilateral Cooperation.

43 McPherson, C., 2010. 9 State Participation in the Natural Resource Sectors. The Taxation of Petroleum and Minerals: Principles, Problems and Practice, pp. 263–288.
the incurred costs are liable by the private entity”.\textsuperscript{44} The compensation is paid out of the project invested.

“Free” Equity Participation

This is the equity given to the state from the private entity without any obligations thereof. The state receives the equity interest in the oil and gas operators as a grant from the private entity.

2.5 Government Intervention

Government intervention in the oil and gas sector is necessary due to the distinctive economic nature and institutional requirements of the industry.\textsuperscript{45} Hausmann and Rodrick state that “governmental intervention in relevant industries entails choosing favourites or some would say picking winners”.\textsuperscript{46} In Norway during the petroleum authorisation process. The government awarded licenses to foreign companies that had established clear intentions and specified mechanisms for technology transfer and development of the local supply industry.\textsuperscript{47} Government intervention is meant to solve industrial bottlenecks. Though because it is “politically driven”, the intervention is vulnerable to some irregularities in some countries. This is evident in Angola how local content policies have been used to gain political support.\textsuperscript{48}

Government intervention is implementable in one of two ways. Either through market-based inputs or public inputs. Hausmann and Rodrick further state that “there are functions that markets cannot perform, such

\textsuperscript{44}McPherson, C., 2010. 9 State Participation in the Natural Resource Sectors. The Taxation of Petroleum and Minerals: Principles, Problems and Practice, pp. 263–288.

\textsuperscript{45}Hausmann, R. and Rodrik, D., 2006. Doomed to Choose: Industrial Policy as Predicament. John F. Kennedy School of Government, Harvard University, 9.

\textsuperscript{46}Ibid.

\textsuperscript{47}Nordås, H.K., Vatne, E. and Heum, P., 2003. The Upstream Petroleum Industry and Local Industrial Development: A Comparative Study.

\textsuperscript{48}Ovadia, J.S., 2014. Local Content and Natural Resource Governance: The Cases of Angola and Nigeria. The Extractive Industries and Society, 1(2), pp. 137–146.
as establishing company registries, setting corporate norms, reasonable access to procurement opportunities for local suppliers, import quotas, sector-specific benefits, enforcing contracts and laws, and providing infrastructure. But the failure of the state to deliver these public inputs affects the efficiency of local content policies. The type of intervention targeting the oil and gas sector must be aligned to other policies such as the industrial policy, the procurement policy and the depletion policy. This must be considered in line with the unique circumstances of a given country. Government intervention occurs throughout the energy lifecycle to facilitate local integration. Jenkins, McCauley and Forman state that such decisions of the government to intervene the energy lifecycle as well as “the design and construction of new facilities, the transport of materials, and their safety and security, as well as issues of common international concern” must all explicitly represent the principles of distributional justice, justice as recognition and procedural justice.

The importance of energy justice in government intervention is to use it as a tool that can facilitate cracking through the enclave of the extractive sector. To be “just and fair”, thus contributing to minimising injustices that are brought about by the extractive industry. Government intervention aims at maximising local content efficiency within its energy industry. This entails developing a well-defined local content policy approach while reaching a level of equitable supply of opportunities to the local population at a favourable cost. Energy justice, therefore, determines what should entail a well-defined local content policy. The development of the policy and the cost at which this development is being attained. Since the extractive industry is a capital-intensive industry that requires sophisticated goods, services and technology, such necessities of any industry make it hard for the impoverished local populations to integrate the extractive industry lifecycle thus creating an

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49Hausmann, R. and Rodrik, D., 2006. *Doomed to Choose: Industrial Policy as Predicament*. John F. Kennedy School of Government, Harvard University, 9.

50Jenkins, K., McCauley, D. and Forman, A., 2017. Energy Justice: A Policy Approach. *Energy Policy*, 105, pp. 631–634.

51Fuller, S. and McCauley, D., 2016. Framing Energy Justice: Perspectives from Activism and Advocacy. *Energy Research & Social Science*, 11, pp. 1–8.
enclave for the locals. Such hard ordained fact create negative sentiments from the local towards foreign investors. Energy justice has been used as a tool to guide the design of the local content policy to break through the enclave of the extractive sector. Hence energy justice repairs the harm committed by the energy industry as well as repairing the harm done. Energy justice has transformed its principles into policy and industry practice through Environmental Impact Assessments (EIA), Social License to Operate (SLO) as well as the Energy Finance Reserve Obligation (EFRO).  

2.6 Benefits of Local Content Policies

In reviewing the literature, there are five significant benefits of local content policies.

2.7 Introduction

Local content is a double-edged sword characterised by both advantages and disadvantages. The policy’s efficiency and functionality are dependent on the nature of the oil and gas industry as well as the governing structure of the industry within a particular country. In countries with weak governance associated with destructive patronage politics, corruption, low economic growth and an unstable business climate, local content policies cannot thrive. The following are the advantages and disadvantages of local content policies.

I. Facilitate Cluster Formation and Regional Trade Synergies:

Clusters can be created and facilitated by local content policies. Clusters encourage the transfer of technology which results in high rates

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52Heffron, R.J. and McCauley, D., 2017. The Concept of Energy Justice Across the Disciplines. *Energy Policy*, 105, pp. 658–667.

53Boldbaatar, D., Kunz, N.C. and Werker, E., 2019. Improved Resource Governance Through Transparency: Evidence from Mongolia. The Extractive Industries and Society.
of innovation by creating competent channels to public goods and other market determinants that would have been expensive to acquire. Norway established local supplier clusters that were involved in the oil and gas industry. These established clusters in Norway employed approximately 114,000 people in the local market and sales worth $32 billion in the local economy. Local content policies through cluster creation can reduce the expenditure margins on R&D and improve productivity. Some countries have brought about a regional cluster development. Whereby clusters function beyond the domestic market. This is by developing regional trade synergies through regional integration within a given geographical region. In its 2010 Economic Transformation Program, Malaysia established mechanisms to enable Malaysia into becoming a regional hub for the oil field services and equipment (OFSE) industry.

II. Diversify The Economy:

In many countries with natural resource wealth, there is low economic development. This is due to what is known as a resource curse. Economies with market failure can be negatively affected by the volatility of commodity prices. Humphreys states that “this could lead to an ineffective specialisation in non-tradable goods”. Local content policies facilitate the diversification of the economy. This is possible through public based and market-based inputs. That create development channels for other industries other than the oil and gas industry. For example, in Trinidad and Tobago the government through their local content policy. Chose to create incentives for inward investments and joint

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54 Sasson, A. and Blomgren, A., 2011. Knowledge Based Oil and Gas Industry. Research Report 3/2011. BI Norwegian Business School. Department of Strategy and Logistics.

55 Ibid.

56 Tordo, S. and Anouti, Y., 2013. Local Content Policies in the Oil and Gas Sector: Case Studies. World Bank Publications.

57 Economic Transformation Program, 2010 (“ETP”) The ETP Embodies the Government Project to Transform Malaysia into a High-Income Country by 2020. Malaysia Aims to Become a Regional Hub by 2017 and Private Sector Plays a Crucial Role.

58 Humphreys, M., et al., 2007. Introduction in “Escaping the Resource Curse”. Columbia University Press.
ventures between local and foreign market participants. This facilitated the capital-linkage from the oil and gas industry to other industries with limited domestic competitiveness. Equally, through their 2010 Economic Transformation Plan, Malaysia adopted local content policies in the same design, facilitating economic diversification.

III. Linkage Promotion in the Domestic Economy:

Linkages may take any of the channels such as upstream linkages, downstream linkages, horizontal linkages, consumption linkages, knowledge and technology linkages and spatial linkages. A country can adopt appropriate local content policies to foster linkages from the foreign direct investment to the domestic economy. These policies facilitate the financial inclusion of small-medium enterprises (SMEs). This helps SMEs gain from preferential supplier programmes. Local content policies can access opportunities beyond domestic borders. Uganda’s Local Content Bill of 2017 advocates for the procurement of goods and services in neighbouring countries. If the goods and services being procured cannot be attained within Uganda’s domestic economy. This will facilitate linkage spill-over between Uganda and the neighbouring countries.

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59IPIECA (International Petroleum Industry Environmental and Conservation Association), 2011. “Local Content Strategy: A Guidance Document for the Oil and Gas Industry.” Prepared by the International Petroleum Industry Environmental and Conservation Association.

60Linkages to the Resource Sector. The Role of Companies, Government and International Development Corporation. Upstream linkages are known as linkages that are related to the procurement of goods and services that the oil and gas industry needs. The downstream linkages, these are result from the further processing of the extracted commodity (also known as forward linkages). Downstream linkages are considered to be expensive and they are not emphasised in Sub-Saharan African local content policies. Consumption linkages are a result of the increased spending due to the earnings attained from the oil and gas industry. The knowledge and technological linkages, result from the transfer of knowledge and technical know-how from the foreign investor to the local companies. Spatial linkages are benefits from shared infrastructural projects.

61Uganda The Local Content Bill, 2017.
IV. Addressing Market Failure:

The discovery of natural resources increases government revenues. The industry develops into a large percentage of the domestic economy's GDP. Paul Collier states that “if the economy does not have the absorptive capacity to make efficient use of these revenues, the result can be inflation or exchange rate appreciation”. This brings about Dutch disease. Local content policies have been used to create the absorptive capacity of a domestic economy. In Norway, the government emphasised the development of the national oil company Statoil. The Norwegian government was of the assumption that Statoil would facilitate the development and inclusion of local suppliers as well as avail control of the local oil and gas industry. The government also created capacity through the country's expertise in shipbuilding and marine services. Foreign investors are predominantly big corporations that displace local companies from the local oil and gas market. Local content policies adopt minimum targets that “must” be met for the inclusion of local companies. This preferential inclusion brings about supplier development in the domestic industry.

V. Provision for Social Objectives:

The oil and gas industry calls for a sophisticated and highly skilled labour force. Resource-rich countries like Nigeria, Angola, Tanzania and Uganda do not have the required skills. Local content policies create mechanisms for local employment. In Brazil, local content policies involved the national oil company Petrobras in skills development. Petrobras created a human resource programme through the Agencia Nacional

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62 Humphreys, M., et al., 2007. *Introduction in “Escaping the Resource Curse”*. Columbia University Press.

63 Collier, Paul, and Venebles, Anthony, 2011. *Plundered Nations? Successes and Failures in Natural Resource Extraction*. Palgrave Macmillan.

64 Dutch disease is the negative impact on an economy of anything that gives rise to a sharp inflow of foreign currency, such as the discovery of large oil reserves. The currency inflows lead to currency appreciation, making the country's other products less price competitive on the export market.
do Petroleo in 1999. The programme encouraged training courses that met the demands of the oil and gas industry. Local content policies give international oil companies a “license to operate”.

2.8 Disadvantages of Local Content Policies

I. State Fragility:

Paul Collier states that “there are three main reasons why resource abundance can threaten the quality of governance and create an increased risk of state fragility. These are looting due to the increased incentives for corruption. Since the government has proceeded from the oil and gas industry. Reduction of accountability, since resource revenue may reduce citizen scrutiny of government. Presence of a difficult economic environment is due to the extreme volatility of the political climate”. Local content policies are a contributing factor to state fragility. Because powerful factions use these policies to gain political support. This is known as neopatrimonialism.

The two Presidents with the longest tenure in Africa are; President Obiang of Equatorial Guinea and President Dos Santos of Angola. These two Presidents have ruled their respective countries since 1979. By 2015 Angola was producing 1.8 million (BPD) making the country the biggest producer of crude oil in Sub-Saharan Africa. Equatorial Guinea follows from Angola as the third biggest producer of crude oil in the region, and the oil-rich country has more than 1.1 billion barrels in crude oil. McSherry states that “the neo-patrimonial nature of Equatorial Guinea’s regime, however, makes it likely that any attempts by Obiang to quell opposition will take the form of greater spending on clientelism,

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65 Mendonça, R.W. and de Oliveira, L.G., 2013. Local Content Policy in the Brazilian Oil and Gas Sectoral System of Innovation. *Latin American Business Review*, 14(3–4), pp. 271–287.
66 Collier, Paul, and Venables, Anthony, 2011. *Plundered Nations? Successes and Failures in Natural Resource Extraction*. Palgrave Macmillan.
67 McSherry, B., 2006. The Political Economy of Oil in Equatorial Guinea. *African Studies Quarterly*, 8(3).
68 Ibid.
patronage and granting of contracts, rather than widespread benefits to the masses”. Such political settlements, practise exclusionary politics in developing the oil and gas as well as hindering inclusive development. Researchers such as Tomas Frederiksen have found that even corporate responsibility practices can work hand in hand with local content policies to entrench clientelist political settlements like the one in Equatorial Guinea.

II. Lack of Clarity:

Local content policies have been noted to lack clarity in their definition. Developing countries that have adopted local content policies they do not ascertain what the policy entails and in which manner the policy will be implemented. When adopting local content policies, most policymakers do not tailor these policies according to the circumstances in the country. This makes the policy ineffective as it creates hugely unrealistic expectations. Lastly, the lack of monitoring and enforcement mechanism is also a significant detriment to the development of local content policies. Countries like Tanzania, Kenya and Uganda have numerous state agencies regulating, defining and setting local content requirements for the same companies in the country. This creates confusion on who has the mandate to enforce, to monitor and to facilitate the development of local content policies.

III. Redundancy:

The minimum targets placed by these policies would be undertaken even without the adoption of such policies. Foreign companies will “almost always” seek local suppliers because it gives them a social license to operate. In most occasions, this is included within a company’s corporate social responsibility. Local content policies can deter FDI into an economy. This is due to the strict local content requirements in the

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69Stephenson, Sherry, 2013. Addressing Local Content Requirements: Current Challenges and Future Opportunities. *Biore*, 7(3), 25 July.

70Frederiksen, T., 2019. Political Settlements, the Mining Industry and Corporate Social Responsibility in Developing Countries. *The Extractive Industries and Society*, 6(1), pp. 162–170.
domestic economy. Hufbauer, Schott and Cimino state that “the effect of local content policies on trade is to discourage imports and to stifle competition between domestic and foreign firms. The impact on trade of local content policies depends on the percentage of local content required and the efficiency of existing firms. In an economy with inefficient firms, a high degree of required local content thwarts competition”.  

Furthermore, Stephenson states “while proponents argue these policies are a short-term policy, put in place to protect infant industries and businesses. Opponents point out that once local content policies become a mainstay, withdrawal of government support will often be met with fierce resistance. It is also possible that the relevant manufacturing sectors will never attain the level of efficiency necessary to operate without government support, and instead require continuous government support”.  

IV. Rent-Seeking:

The oil and gas industry creates a large part of a country’s GDP in resource-rich countries. These policies bring the expectation for local inclusion. Hence the labour force of resource-rich countries seeks significant proceeds from the industry. Rent-seeking wastes competition for a given economic opportunity and in this case, the opportunity is the oil and gas industry.

2.9 Research Questions

I. Why can’t national content policies break through the enclave of the oil and gas industry in developing countries? Can energy justice be used as a tool for creating “just-mechanisms” in adopting local content policies?

II. How can regional integration be instrumental in the creation of local content policies?

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71 Hufbauer, G.C., Schott, J.J. and Cimino-Isaacs, C., 2013. Local Content Requirements: A Global Problem (Vol. 102). Columbia University Press.

72 Stephenson, Sherry, 2013. Addressing Local Content Requirements: Current Challenges and Future Opportunities. Biores, 7(3), 25 July.
The main objective of the research questions is to explore, study and avail solutions for the inefficiency of local content policies in developing countries such as Nigeria, Angola, Tanzania, Kenya and Uganda. The first question attempts to understand as to why national content policies cannot meet the demands of the oil and gas industry in developing countries, unlike in developed countries such as Norway, Brazil, and United Kingdom. For instance, in Norway and Brazil, the economies relied heavily on the shipping industry that could be leveraged to develop skills for the offshore oil and gas resources. But in Nigeria and Angola, the main driver of the economy was subsistence farming, the skills in this sector cannot even be adopted to service the oil and gas industry. Hence different attributes will be used to explore as to why national content policies fail. Whether the answer relies solely on politics (such as democracy, the rule of law, stable economic environment, etc.) Or technicalities of the demanding oil and gas industry.

Furthermore, the question brings in energy justice as a tool that can be used to create a just-mechanism in adopting and implementing local content policies in developing countries. Energy justice is used to construct innovative means to crack through the enclave of the extractive sector. Local content policies have fundamentally been adopted without any guiding mechanism. These policies have been implemented based on the desired outcome of integrating the local population within the oil and gas lifecycle. Energy justice, through its tenets, create a mechanism of adopting local content policies while recognising all affected and marginalised parties, while following the right procedures while ensuring the equitable distribution of ills and benefits accordingly? Since the oil and gas industry is a capital-intensive industry that calls for stringent prerequisites that may often not be readily available for the general local population

The last question mentions the role of regional integration in adopting local content policies. Literature shows that developing countries cannot efficiently reap the benefits of their oil and gas resources due to the numerous bottlenecks that tackle the capability to develop individually as a country. Thus countries that are near, within the same regional economic bloc, bearing similar natural resources such as Kenya, Tanzania and Uganda or Mozambique, Angola and Nigeria. Have a
unique opportunity as nascent oil and gas-rich countries to create a regional integration approach through the East African Community or the Economic Community of West African States and create a regional content approach for the regional economic blocs.

2.10 Contextual Aspect of Developing Local Content Policies

In Sub-Saharan rich extractive countries such as Uganda, Tanzania, Kenya, Angola and Nigeria, low levels of governance and accountability persist, which adversely perpetuates nepotism and partisan natural resource governance that creates an environment conducive for enclave development. This section of the book aims to highlight further the challenges of designing credible optimum local content policies in Sub-Saharan oil and gas-rich countries. One would ask if the plans undertaken by the oil and gas companies in designing local content policies materialise into meaningful action, or do they favour the few with no fruition for the local and direct community having resources exhausted in their backyard.\(^{73}\) Little is known about how the management of oil and gas operations comes about designing the local content policies that are mostly transplanted from developed economies such as Norway, Brazil and the United Kingdom. These policies that are often seen as “cutting edge” in local content reports, websites and company brochures, and more specifically how these oil and gas companies arrive at decisions on what programme to undertake, whom the programme targets for what reasons and how these initiatives are undertaken and in what setting.\(^{74}\) This is of paramount importance because oil and gas companies come to invest with intact linkages from foreign countries with financial and technical muscle to protect the enclave nature of the oil and gas industry. Furthermore, the compatibility of these local content

\(^{73}\) Alzina, Virginia et al., 2004. Enclave Projects? What Are They and What Can Be Done? Document of the Inter-American Development Bank.

\(^{74}\) Ackah-Baidoo, A., 2012. Enclave Development and ‘Offshore Corporate Social Responsibility’: Implications for Oil-Rich Sub-Saharan Africa. Resources Policy, 37(2), pp. 152–159.
plans and programmes that are embedded within the company’s budget books and modus operandi when it comes to local content. How far are they in line with the objectives and targets by the regulators and policymakers of a given oil and gas-rich developing country? This is why this book brings in the aspect of energy justice in local content design and development due to the enclave nature of the oil and gas industry. Most literature offers minimal guidance on this front.

Looking back at Ferguson, there is probably no industry in Sub-Saharan Africa that has developed more enclave-like fashion in its operation than the oil and gas sector. Nascent oil and gas regions like the East African region boast the possibility of East African economies gaining massive extractive FDI and profits from their natural resources, unlike their West African counterparts. All this presumptuous promise is dependent on the fact that the resources be managed appropriately. Furthermore, the revenues flowing from this nascent lucrative sector could mitigate some of the economic woes plaguing these oil and gas-rich East and West African countries. Most researchers have held that currently, the revenues obtained from royalties, fiscal frameworks, work programmes and cash-stimulus cheques are not being used positively for development, due to the enclave nature of the industry and the lack of synergy between the private and public sector. Foreign oil and gas companies and the local population find themselves dealing with local content policies that are mostly nationalistic, causing investor-flight as well as building a local elite capture of the industry through nepotism and clientelism. Given the uniqueness of this operating environment, it is clear that local content policies design must be dynamic and adopt an energy justice framework for these policies to be effective. The simple mechanisms of achieving local content targets that have been set by regulators without prior negotiations and consent of the different stakeholders within the oil and gas value chain. Can no longer function as a manner in which local content policies are designed and adopted.

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75 Ferguson, James, 2005. Seeing Like an Oil Company: Space, Security, and Global Capital in Neoliberal Africa. *American Anthropologist*, 107(3), pp. 377–382.

76 Ibid.

77 Ovadia, J.S., 2017. Local Content in Tanzania’s Gas and Minerals Sectors: Who Regulates? CMI Brief.
to gain any significant fruition from the policy and the investment as a whole. Oil and gas companies must go beyond what is promulgated in the local content regulations to attain a justified inclusive oil and gas industry in any region. The view is that it is hypocritical for an oil and gas company to agree to meet local content provisions that it knows will never materialise due to the nature of the host countries such as Kenya, Uganda, Tanzania and Nigeria. Countries that do not have the absorptive capacity and technical know-how in the population to meet the demands of the local content provisions.\textsuperscript{78} This breeds seeds of corruption and mal-practise while icing out the local community due to the enclave nature of the oil and gas industry.

The rapid increase in international interest in oil in African regions such as East and West Africa is part of growing excitement about the region's oil and gas resource. Hence a "new frontier" for industry and multinational corporations: it is being encouraged today by a range of business enthusiasts. Recent high-profile trips by US Presidents George Bush and Barack Obama to the African Continent have opened the investors “eyes to the region’s economic growth”. Former US vice president Dick Cheney noted that West Africa, in particular, could become one of America’s fastest-growing oil and gas sources. They are adding that Africa’s high-quality oil makes it an attractive alternative refinery to the East Coast of the United States.\textsuperscript{79} The fact that enclaves in the oil and gas industry are far more pronounced than those that have taken shape in most other sectors of the extractive industry in Sub-Saharan Africa.\textsuperscript{80} Has significant implications for the development of local content, affecting the ability of companies to function in any community and having an inclusive value chain.\textsuperscript{81} One of the biggest challenges for any oil and gas producer in this region that embraces local content policies is identifying who the community is. As the recent developments in oil production

\textsuperscript{78}Hilson, G. and Maconachie, R., 2009. Good Governance and the Extractive Industries in sub-Saharan Africa. \textit{Mineral Processing and Extractive Metallurgy Review}, 30(1), pp. 52–100.

\textsuperscript{79}Pegg, Scott, 2006. Can Policy Intervention Beat the Resource Curse? Evidence from the Chad–Cameroon Pipeline Project. \textit{African Affairs}, 105(418), pp. 1–25.

\textsuperscript{80}Hilson, G., 2012. Corporate Social Responsibility in the Extractive Industries: Experiences from Developing Countries. \textit{Resources Policy}, 37(2), pp. 131–137.

\textsuperscript{81}Ibid.
in Ghana have clearly illustrated, the majority of drilling activities take place offshore, and tankers load oil at seaports. Who, then, should be channelling revenues to? In theory, unlike other extractive activities such as gold mining (or perhaps even in onshore oil-producing environments such as those in the Niger Delta in Nigeria), a community blueprint needs to be developed and followed because activity takes typically place near human settlements. Such enclave developments are the main reason this book applies energy justice in local content development, as explained in later chapters.

2.11 Summary

This chapter provides a general overview of what local content policies are and what they entail in when adopted and implemented in any oil and gas country. The chapter further illustrates the historical perspective of local content policies. It is only through understanding the origins of local content policies may policymakers and regulators know the value of such policies through an in-depth comparative analysis as one done in this book. The chapter finds that local content policies have been developed from other policies such as import substitution policies of which they are all known as production development policies. As much as local content policies are favourable within an economy, the chapter finds that the policy is also susceptible to corruption, especially in weak democracies and countries with low accountability mechanisms due to poor institutions. They are also policies that favour local integration into an industry as well as the protection of local firms and entities. Such susceptibility of local content policies is what creates an enclave oil and gas industry primarily in countries like Angola, Tanzania, Kenya, Uganda and Mozambique. Having an enclave industry prohibits the development of linkages and growth of other key strategic sectors of the economy. The literature on local content policies always mentions the effects of

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82 Pegram, J., Falcone, G. and Kolios, A., 2020. Job Role Localisation in the Oil and Gas Industry: A Case Study of Ghana. *The Extractive Industries and Society*, 7(2), pp. 328–336.

83 Ackah-Baidoo, A., 2012. Enclave Development and ‘Offshore Corporate Social Responsibility’: Implications for Oil-Rich Sub-Saharan Africa. *Resources Policy*, 37(2), pp. 152–159.
governance of the oil and gas industry on the policy. But the chapter finds that local content policy is closely linked to depletion policies. In that, the adequate and appropriate synchronisation of local content policies and the tenets of energy justice such as procedural, recognition and distributive justice would yield favourable results regardless of the nature of the oil and gas industry in both developed and developing oil and gas countries.

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