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Zambia's industrialisation agenda: A case for local content in the mining industry

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Abstract
Zambia is undoubtedly one of the resource rich countries in the world, blessed with significant mineral endowments of great economic importance. Zambia is the second largest producer of copper in Africa, after Congo DR, and eighth in the world. Its annual production has, in the recent past, averaged around 750000 metric tonnes.
In addition the country has numerous other mineral resources, which include cobalt, manganese, precious and semi-precious stones. Further, the country has potential for oil and gas, particularly in the Western, North-Western and Northern regions where exploratory works are already underway or expected to start.
Paradoxically, with all these natural endowments in its fold, the country still ranks lowly in terms of development. In light of the socio-economic and political importance of the mining industry, its contribution to national development continues to attract immense interest and tends to be under scrutiny by Civil Society Organisations, stakeholders and the citizenry in general.
Understandably, Zambia has been seeking both fiscal and non-fiscal strategies to maximise returns from the mining industry, though with varying degrees of success.
This paper discusses the importance of the mining industry in Zambia and its apparent inability to impact the economy, and efforts successive governments have been exploring, in pursuit of diversification and industrialisation, in attempt to maximise benefits from the mining industry. There seems to be an apparent shift from the import substitution policy approach of yesteryears with the advent of globalisation. The quest to maximise benefits has seen many a country, including Zambia, explore a variety of avenues, from Import Substitution Industrialisation policies, which focus on protectionism to local content development.
The author argues that given the failures of import substitution industrialisation policies tried in many countries over the years, there was need to seek more innovative ways to make the extractive industry benefit local economies positively; local content development provides such an alternative for Zambia, which like many other resource rich countries suffers from a "resource curse" syndrome.

Keywords: industrialisation, local content, diversification, import substitution

1. Introduction
This paper discusses the concept of local content, one of the approaches the country is exploring, in pursuit of diversification, industrialisation and as important avenue for maximising benefits from the mining industry. Globally, there seems to be a growing shift from the import substitution policy approach of yesteryears with the advent of globalisation to trade friendly modes. However, before delving into the discussion, it is important to have a panoramic view of the Zambian mining industry; an overview of the business of mining, in Zambia, reveals the socio-economic and political intricacies, of the search for maximising benefits from the industry, a paradigm shift from Import Substitution Industrialisation policies to local content.
Zambia is undoubtedly one of the resource rich countries in the world; it is blessed with significant mineral endowments of great economic importance. According to current rankings, Zambia is the second largest producer of copper in Africa, after Congo DR, and eighth in the world. Its annual production has, in the recent past, averaged around 750000 metric tonnes; it hoped that this figure will hit 1 million tonnes in the near future. Congo DR churns out about a million tonnes per annum already.
In addition the country has numerous other mineral resources, which include cobalt, manganese, precious and semi-precious stones. It is reported that Zambia produces some of the world's finest emeralds and amethyst; it is home to one of the world's largest emerald producers, Gemfields, through its local operation called KAGEM, which it owns jointly with the Zambian government.
Further, the country has potential for oil and gas, particularly in the Western, North-Western and Northern regions where exploratory works are already underway or expected to start. Currently, there are at least 17 companies which were granted oil exploration rights, between 2013 and 2015; according to information obtained from the Zambia Extractive Industry Transparency Initiative (ZEITI), website.

2. Statement of the problem
Paradoxically, with all these natural endowments in its fold, the country still ranks lowly in terms of development. According to the Human Development Report of 2013, by the United Nations Population Division (UNDP), Zambia's Human Development Index (HDI) value for 2012 was 0.448,

placing the country in the "low human development category", with a ranking of 163 out of 187 countries and territories, http://hdr.undp.org/sites/default/files/Country-Profiles/ZMB.pdf date accessed 23/01/2018. The HDI value had marginally improved by a paltry 11% from the 1980 figure of 0.405, that is a rise of about 0.3% per year over a period of nearly three decades. In fact, as noted in the table below, the HDI value declined significantly from the 1980's through to about 2005; registering its worst performance in 2000 of about 0.376.

Table 1: Zambia's HDI trends based on consistent time series data, new component indicators and new methodology

Year	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2005 PPP$)	HDI value
1980	52	7.7	3.3	1,424	0.405
1985	51.2	7.7	4	1,185	0.405
1990	47.5	7.9	4.7	1,135	0.398
1995	43.5	7.9	6.1	959	0.385
2000	42	7.9	5.9	981	0.376
2005	44.4	7.9	6.4	1,060	0.399
2010	48.5	8.5	6.7	1,234	0.438
2011	49	8.5	6.7	1,307	0.443
2012	49.4	8.5	6.7	1,358	0.448

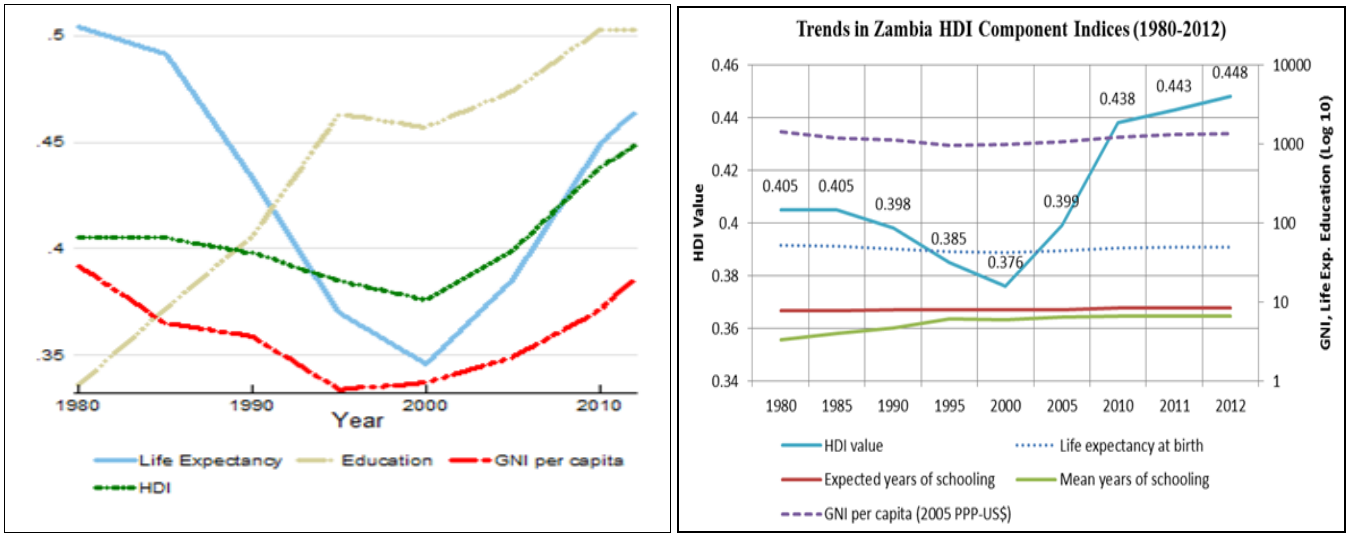


Fig 1: Trends in Zambia's HDI Component Indices 1980-2012

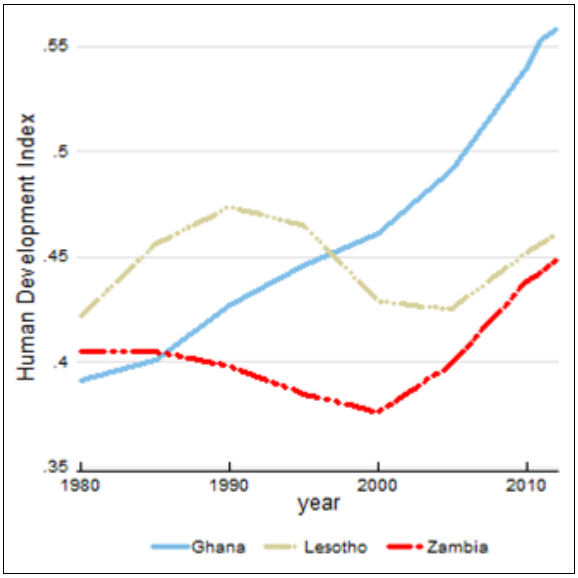
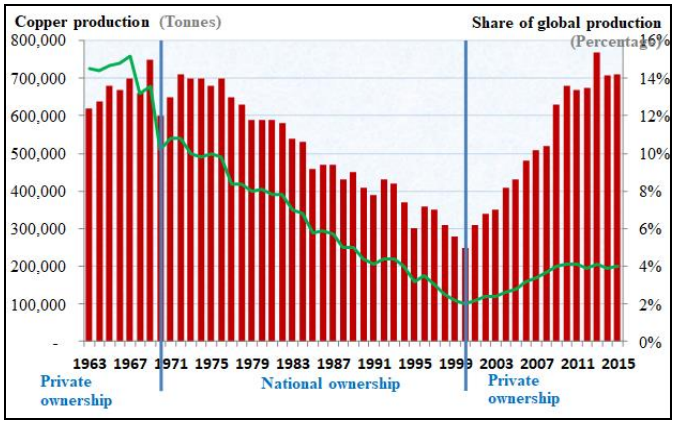


Fig 2: Comparative Trends in Zambia's HDI 1980-2012

Interestingly, there is some similarity in the trends of the HDI value and that of the performance of the country's mining industry; based on the annual copper production and global commodity prices. According to the 2014 ICMM report, titled "Enhancing Mining's Contribution to Zambian Economy and Society, the country's annual copper output began to decline continually from the late 1970s, onward, from a high of about 750,000, dropping by about 70% to about 250,000 tonnes per annum by 2000.

Similarly, the Gross Domestic Product (GDP) to some extent followed in this trend, the scenario is exemplified according to available data from the World Bank and the International Monetary Fund (IMF), the GDP per Capita for Zambia was largely negative and unstable between 1980 and 1998. In 2000, it moved out of the trough, to 1.2%, after which it began to rise steadily, reaching a high of 7.2% in 2010, before it dropped again in 2011 to 2.4% and 4.4% in 2012. The downward trend somewhat continued again in the subsequent years, posting 1.9% (2013), 1.9% (2014), -0.2% (2015), then it started to ebb upwards, posting 0.3% in 2016 and 0.8% (2017)- https://knoema.com/pjeqzh/gdp-per-capita-by-country-statistics-from-imf-1980-2022?country=Zambia date accessed 24/01/2018.

As observed and further illustrated in trend graphs below, the troughs in Zambia's GDP have tended to coincide with the lean periods of the mining industry, often associated with poor global metal commodity prices, compounded by subdued production levels; a situation which normally is triggered by global economic crises. This was true of the hard times running from the 1970s to about 2000, and so was the case for recent global economic downturn whose effects manifested prominently around 2015; the copper price plummeted to below US$5000 per tonne, from the high ranges of US$8,000-10,000 per tonne recorded in the boom period of 2010- 2011.



(***Source*:** International Council on Mining and Metals 2012 (Enhancing the Contribution of the Zambian Mining Sector to the Economy and Society) from 1963 – 2011, Courtesy of the Zambia Chamber of Mine)

Fig 3: Zambia Copper Production vs. GDP (1963-2015)

***Source*:** http://www.macrotrends.net/1476/copper-prices-historical-chart-data Date accessed 25/01/2018; adopted from the Interactive chart of historical daily COMEX copper prices dating back to 1970s, U.S. Dollars per pound.

Fig 4: Global Copper Price Trends: 1975-2015 (45Year period)

The price of copper as of January 24, 2018 was $3.1590 per pound orUS$6964.3 per Tonne, *(1 tonne is equal to 2,204.6 pounds-Wikipedia)*. It will be noted from the trend graphs above that the global copper price hit its highest of about US$10,000 per Tonne in January 2011.

Generally, the metal commodity prices tend to be cyclic in nature, going through peaks and troughs which repeat unpredictably over time. Thus the Global copper price has gone through three troughs in the last two decades. The first being during the period1999-2000, followed by the 2008-2009 crash, while the world is just emerging from yet another downturn which characterised the 2014-2016 period; and saw the price of copper drop from US$10,000/Tonne, in 2011 to about US$4410/Tonne.

An analysis of revenue flows from copper, by Prof Anyanwu J.C, a lead research economist at the African Development Bank, in presentation, titled, " Mining Taxation in Africa: Lessons from the Zambian Case", to the 3rd West and Central Africa Mining Summit, 1-2 November, 2010, Accra, Ghana, reveals that between 1994 and 2003 flows averaged just above US$500 million per annum but posted an increase from 2004, reaching a peak of above US$3.5 million in 2008, there after the trend took a plunge again, hitting about US$3 million in 2009; the time of a global down turn.

The phenomenal increase in revenue flows to government during the period 2007-2008 could be attributed to three factors, first there was an increase in production, and copper prices were good, coupled with the introduction of windfall tax by government which was aimed at cropping super profits.

(***Source*:** IMF World Economic Outlook-WEO, April 2017)

Fig 5: Zambia: Real GDP Growth, % (Percentage Change) 1980-2017

Annual Copper Production and GDP% Trends 1980-2017 *(Source: International Council on Mining and Metals 2012 (Enhancing the Contribution of the Zambian Mining Sector to the Economy and Society) from 1963 – 2011, Courtesy of the Zambia Chamber of Mines; Zambia Open Data for Africa* http://zambia.opendataforafrica.org/tbocwag/gdp-by-country-statistics-from-imf-1980-2022?country=Zambia, date accessed 24/01/2018)

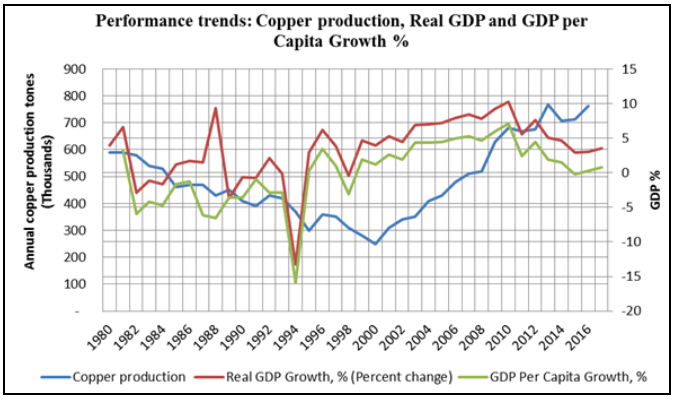


Fig 6

With a fast growing population, currently estimated at 16

million- rising by over 50% from about 10 million in 2010 (CSO), having grown exponentially from about 3 million at independence in 1964, the pressure to develop is genuinely high and ever increasing.

The country has a largely youthful population, about 80% are young people below 35 years *(CSO), Living Conditions Monitoring Report 2015)*; however, the Labour Force Participation rate is still low and not improving fast enough, it increased by 3.2% only between 2008 and 2014 as illustrated in the figure below

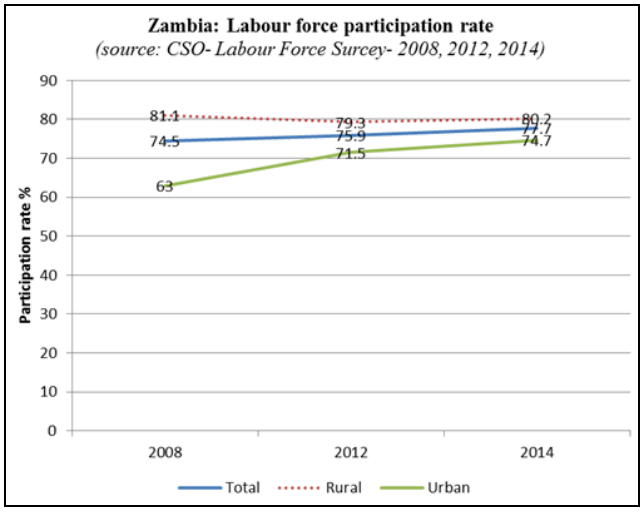


Fig 7

The need for employment creation, provision of proper social services and ensuring that conditions essential for general human development is critical and increasingly becoming ever more urgent. A situation which has raised concern even among civil society groups, recently the No-Governmental Organisations Coordinating Council (NGOCC), one of the main Civil Society Organisations (CSOs) in the country, was quoted in the national press, as having expressed worry that unemployment had remained a major challenge which was affecting youths, adding that Zambia had a huge proportion of young people under 30years, making it the fifth youngest nation in the world (Chila Namaiko, *Times of Zambia, Monday 29, 2018*). Concerns are justified as a large population of youths without meaningful opportunities for decent livelihoods, such as education and jobs, could be a time-bomb, waiting to explode.

3. Mining could serve as catalyst for broader socio-economic development

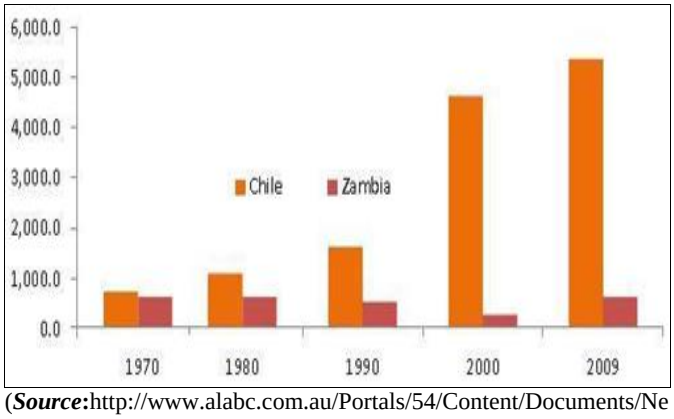
In light of the socio-economic and political importance of the mining industry, its contribution to national development continues to attract immense interest and tends to be under scrutiny by Civil Society Organisations, stakeholders and the citizenry in general.

Like is expected of any resource rich nation, Zambia's mining industry could serve as catalyst for the country's broader socio-economic development; a belief which holds strong even at continental level. The African Union (AU) has in this respect developed the African Mining Vision (AMV 2030), which seeks to create a "Transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development". The AMV is seen, among other things, as a vehicle for the creation of linkages, diversification and local content, as well as development of human and institutional capabilities, at country, regional, through to continental level. However, Dr Brigitte Bocoum (2012), of the World Bank's Sustainable Oil, Gas and Mining Division (SEGOM) in a presentation to the Mining Indaba, observes that "African countries endowed with abundant resources are characterised by issues of poor governance, less than optimal Extractive Industry Management, and untapped potential for mineral resources driven industrialisation"; Singling out Botswana, Morocco, Namibia and South Africa, as an exception.

Similarly, Zambia, through successive governments, has been making efforts to reposition itself in an attempt to foster sustainable development and diversify the economy; to mitigate historical risks of over reliance on copper which is a wasting asset. Other countries have made significant strides in maximising benefits from the exploitation of their mineral endowments. Chile and others in South America have been cited as good examples; where copper mining and the extractives in general were benefiting the respective national economies fairly well.

A cursory comparison between Zambia and Chile shows that the latter has been increasing its copper production from as far back as the 1970's, and by 2009 production had reached about 5.3 million tonnes per annum, it is the world's no.1 copper producer, accounting for over 1/3 of global production, even productivity is superior to that of Zambia. To emphasise just how important mining is for Chile, *It is estimated that each direct job in this industry generates 6.5 positions in the local economy, compared to the estimated 1-4 jobs, for Zambia*. The contribution of mining to GDP in Chile stood at +16% in 2009 (the average for the period 2006-2015, is 14.3%), compared to Zambia's +12%, about the same period.

Chile's population is comparable to that of Zambia, however it has better human development indicators; the GDP per capita improved from US$3000 to about US$15,000 as at 2010, while that of Zambia was US$1,500 the same year, Chile's Human Development Index (HDI) increased from 0.64 in 1980 to about 0.85 in 2015, well above that of Zambia's



(***Source*:**http://www.alabc.com.au/Portals/54/Content/Documents/News/Chile%20Presentation.pdf)

Fig 8: Chile vs. Zambia-Copper production tonnes per annum

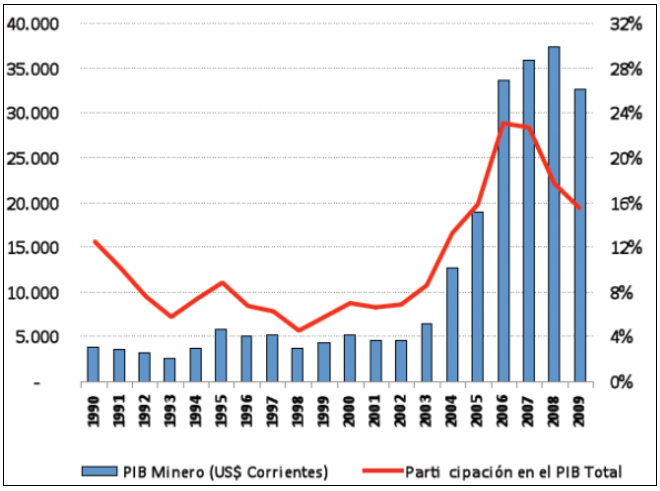


Fig 9: Chile: Revenues and Participation in GDP of mining

4. Zambia's efforts to maximise benefits from mining industry

Understandably, Zambia has been seeking both fiscal and non-fiscal strategies to maximise returns from the mining industry, though with varying degrees of success. Fiscal strategies by way of taxes have been more popular in the recent past, as evidenced by the fact that the government has had to revise the Mines and Minerals regulatory framework several times in the last few years, with the aim of capturing more and more revenues from mining. Mineral Royalty Taxes and a wide range of applicable taxes have been enhanced, to the consternation of the mining companies, government even introduced export tax on concentrates to compel companies to value add locally. In fact a similar tax was imposed on concentrates imported into the country, mostly from neighbouring Congo DR, in 2015, though this reversed later due to pressure from mining houses, led by the Zambia Chamber of Mines, arguing that the tax was tantamount to shooting oneself in the foot; it would starve local processing plants and decimate jobs in the affected companies, and deprive government of revenue streams.

The government has also attempted to use non-fiscal approaches, though not with as much ingenuity as that exercised in the fiscal space, particularly when it comes to the tax regime. Generally, non-fiscal strategies have tended to focus on value addition and beneficiation as well as supply chain aspects of the mining value chain.

4.1 Import substitution industrialisation policies

Early attempts, here leaned towards nationalistic approaches, focusing on state ownership and citizen empowerment to enable locals participate in economic activities. That is why during the post-independence era, 1964-1970s, the government embarked on an ambitious nationalisation programme in an effort to increase local control and participation in the national economy. The aim was to minimise foreign dominance in the stake of the economy and put a crump on imports, in the hope of preserving foreign exchange.

The government, among, other approaches, adopted Import Substitution Industrialisation Policies (ISI), a popular paradigm at the time, the period running from the early 1970's through to the late 1980's when free market concept was particularly not welcome by many a developing nation who dismissed it as a tool for neo-colonialism. Import substitution industrialisation (ISI) is a form of economic protectionism, it has been described by the Wikipedia, as a "trade and economic policy which advocates replacing foreign imports with domestic production" (source: https://en.wikipedia.org/wiki/Import_substitution_industrialization.)

This school of thought is based on the premise that a country should endeavour to reduce its foreign dependency through localisation of the production of industrialised products; it was pursued by a number of developing countries, particularly in South America, at the time.

However, most of the countries which shared this doctrine in Africa, Zambia included, were forced to abandon it in the 1980's following pressure from the World Bank and International Monetary Fund (IMF); these practices were deemed to be an embodiment of extreme economic protectionism and were blamed for the economic quagmire that ensued. The World Bank and IMF prescribed stringent Structural Adjustment Programmes (SAP) to all and sundry; the core message to the affected countries was to have a paradigm shift to free market economies.

In Zambia, these conditionalities went against the grain of the government's socialist policies on which the country was run since independence, such that the coming of SAP and the general economic hardships that ensued, a situation of things getting worse before they can hopefully get any better, contributed to regime change to a multi-party democratic governance system in 1991-with hallmarks of a revolution. The new crop of leaders rose to power on the promise of turning around the national economic fortunes for improved livelihoods, ridding on the efficiencies associated with a free market economy, some semblance of the western economies.

Unfortunately not all was rose, the uncensored liberalisation of the economy and privatisation of state owned enterprises led to the collapse of the local industrial capacity, particularly manufacturing. Though, foreign direct investment flows increased exponentially, this only meant increased foreign participation in economic activities, particularly in the mining sector's value and supply chain. The new investors tended to source products and services, and in some cases expertise, from countries of origin. According to the 2014 ICMM report, FDI in mining activities, between 2000 and 2011, stood at over US$10 billion, comprising about 86% of the national total. The investment included capital equipment, expansion works and green field projects, most of which required specialised expertise and resources, meaning that imports of products and services during this time was significant.

4.2 Call for improved local participation in the mining value and supply chain

Expectedly, the debate about increasing local participation in the economy and benefits in general from the extractive industry ensued within no time and has become topical, over the years, drawing critical thought from a range of quotas. Though, people are no longer talking about going back to Import Substitution Industrialisation Policies in the strictest sense, they still want something equivalent, policies which will ensure reduced dependency on foreign products and

services, commonly referred to as imports, and increased local participation in the mining value and supply chain. ISI policies are traditionally associated with protectionism, which has little room in light of globalisation. The narrative now is about promoting local content, which is somewhat broader and can be modelled to suit the globalisation dispensation.

5. Zambia's drive towards economic diversification-Vision 2030

5.1 Key features of the vision 2030

In the recent past, Zambia's developmental agenda took a long term view, when the government encapsulated its plans in the national vision 2030, which was developed in 2006, and has been used as basis for developing five year national development plans, since then. The vision 2030 is a legacy and futuristic strategic direction coined by Zambia's third President, the late Dr Levy Patrick Mwanawasa. The government then, through a consultative process, envisioned a Zambia which would be a *"Prosperous middle income country by 2030"*. The desire was for a strong industrial and dynamic middle income nation, with competitive, self-sustaining economy which is resilient to external shocks.

The vision 2030 is anchored on four strategic objectives; *to diversify and make the economic growth inclusive, enforce environmentally and socially sustainable development principles, improve competiveness and innovation, and strengthen governance mechanisms and institutional capacities for sustainable development.*

To achieve this, the objectives of the vision 2030 took on board critical elements, among them;

1. Economic integration in the sub-region and globally
2. Establishment of a diversified and strong industrial sector;
    a. Create modern agricultural sector and an efficient and productive service sector.
    b. Building a strong manufacturing and industrial base
    c. Promoting the graduation of Micro and Small to Medium scale Enterprises; by addressing challenges impeding growth of MSMEs, among them prohibiting interest rates, weak entrepreneurial culture, weak collaboration among indigenous business and weak policy environment to support MSMEs growth. Globally it is observed that there is positive correlation between growth of MSMEs and job creation.
3. Promotion of Technology and innovation through own human and natural resources
4. Creation of strong and cohesive industrial linkages in primary, secondary and tertiary sectors
5. Ensure sustained and increased productivity, by all factors of production.
6. Establishing strong entrepreneurial capabilities where nationals take advantage of the potential and available opportunities.
7. Facilitate a diversified education curriculum that are responsive to knowledge, values, attitudes and practical skills needs of individuals and society (including industry) at large.
8. Avail opportunities for all citizens to become resourceful and prosperous nationals.

5.2 Implementation of the Vision 2030

The vision 2030 has been cascaded into successive five year national development plans, starting with the Fifth National Development Plan through to the Seventh, which was recently launched.

5.2.1 Review of fifth and sixth national development plan

The previous National Development Plans were not devoid of implementation challenges. According to a review by the Ministry of National Development Planning, the major challenges include inadequate financial resources to support programmes, failure to implement the decentralisation policy, particularly fiscal decentralisation to facilitate meaningful planning and implementation of programmes at respective levels of governance. Other factors included poor Monitoring and Evaluation mechanisms in Ministries, Provinces and Spending Agencies, too many designated priority sectors resulting in thin spread of resources. Consequently, the country remained dependent on copper mining despite recording improved economic growth rates; 5.8% in 2000-2005 and 6.9% in the period 2006 to 2015. Further poverty levels remained high, with the extremely poor category standing at 40.8% in 2015, while those considered as moderately poor were reported at 13.6%, and the economy has been characterised by low employment creation. In addition the planning process followed the traditional top-down approach, compared to the bottom-up approach, starting with the communities through to national level where plans are consolidated.

5.2.2 The 7th national development plan

With lessons from the shortcomings of the past development plans abound, the 7th National Development Plan, adopted a an integrated or multi-sectoral approach, created a link between the vision 2030 and the United Nations' Sustainable Development Goals (SDGs), the African Union Agenda 2063, as well as regional and international cooperation protocols and development strategies.

Diversification, Job creation, value addition and industrialisation constitute the central message of the plan; aimed at reducing the country's dependence on copper mining and vulnerability to external shocks, particularly those arising from poor global metal commodity prices.

The 7th National Development Plan covers the period 2017 to 2021, under the theme, *"Accelerating Development efforts towards Vision 2030 without leaving Anyone Behind"*.

It is observed that diversification offers greatest opportunities for job creation and should support a strong manufacturing base.

Specific objectives of the 7th National Development plan focus on, among other things;

1. Improved production of technology and innovation (infrastructure-R&D, Learning Institutions); i.e. improve competitiveness and innovation.
2. Improved socio-economic physical infrastructure
3. Restructured, diversified export oriented economic sectors
4. Increased private sector engagement across sectors
5. Increased employment (both urban and rural) and
6. Sustainable development in general

6. Import substitution industrialisation vs. local content- Zambia's mining supply chain

6.1 Import substitution industrialisation

Literature review has revealed that many resource rich countries are engaged in the debate, revolving around how best they can leverage on opportunities presented by the extractive industries to drive wider economic development.

As far back as the late 1960s though to the 1980s, most developing countries, including Zambia, adopted Import Substitution Industrialisation Strategies, in a bid to increase productivity and economic gains from own natural resources (Gumboh s, 2012).

The Import Substitution Industrialisation strategies were founded on the *"infant industry proposition"* that local industries were too small and fragile, as such they needed protection from foreign competitors to allow them space to bud and grow.

Typically, this era was characterised by increased government participation in the local market, adoption of more protectionist measures and controls to limit foreign participation, and stem externalisation of profits by foreign investors. The governments in countries implementing ISI policies took significant control of industrial development and introduced relevant economic policies and institutions (Robinson, 1993).

Some of the measures they adopted include import controls through tariffs, price controls, prohibition of imports, and imposition of foreign exchange controls and many others which severely curtailed the freedoms that foreign investors previously enjoyed; thereby causing significant distortions in the business environment of these nations.

For Zambia, the Government's focus was on accelerating diversification, industrialisation, Zambianisation and capital localisation to maximise the reinvestment of profits generated within the country (Mudenda D, 2009).

To this end, the government during this period introduced a number of institutional arrangements to push its agenda. Among the key institutions established include the Industrial Development Corporation (INDECO) which was tasked to oversee the manufacturing subsector, Mining Development Corporation (MINDECO), for the mining and quarrying industry and the Zambia Industrial and Mining Corporation (ZIMCO), the group overseer. While, to direct the development of Small and Medium Enterprises (SMEs), the government formed the Small Industries Development Organisation (SIDO), control of these institutions rested with the President, who was responsible for hiring and firing key management teams.

Several state owned companies were established to service the mining industry; some operated as direct subsidiaries of ZCCM, such as Techpro Ltd and Mining Industry Technical Services (MITS) in Kitwe and Kalulushi respectively, which were established to provide engineering solutions to the mines. Techpro was involved in parts manufacturing and heavy duty engineering and fabrication works, while MITS provided various technical services, including condition monitoring and metallurgical and chemical tests.

Other support companies were operated by large state owned conglomerates, e.g. those engaged in manufacturing of cement, lime, explosives and other consumables. Thus the mining industry provided a strong hub for other industries to thrive around, most of which were state owned. Even, mine sites also had well established facilities, in terms of engineering workshops which attended to their immediate needs; specialisation was encouraged among divisions. All this was done to promote self-sufficiency, in line with the Import Substitution Industrialisation Policies of the government of the day.

Not surprisingly, though the ISI policies were modelled on the strategies used by Latin American countries, where to some extent they succeeded, due to "stronger structural domestic constraints and external pressures, particularly from Brentwood institutions such as the International Monetary Fund (IMF), the import Substitution Policy soon failed here, with dire socio-economic and political consequences as was the experience for most Sub-Saharan countries (Robinson Rojas Sandford, 1993).

For Zambia, the manufacturing sector which was heavily anchored on already weakening state enterprises crumbled from failure to stand the stiff competition that followed the liberalisation of the economy. Consequently even the ISI were no longer feasible hence forth.

6.2 Local content in the mining supply chain as a tool for industrialisation

Thus, following in global trends, the argument has now shifted from the dogma of the traditional Import Substitution Policies of the 1980s, to local content promotion, with focus increasingly moving towards export oriented approaches, in the recent past.

Why is the subject of local content drawing interest? One may ask. Is there a difference between the Import Substitution industrialisation school of thought of the yesteryears or it is an issue of semantics; the two approaches are essentially the same?

Literature review has shown that Local Content has been defined different ways by different countries, depending on the objectives and context of the host country. A number of countries, particularly resource rich developing ones have put in place measures aimed at developing local content in an attempt to maximise benefits from the exploitation of their natural endowments.

For example in Trinidad & Tobago, "Local content and participation" is collectively described as 'Local-Value-Added', through ownership, control and financing by the citizens (people of Trinidad & Tobago); utilising opportunities within the country and abroad (citizens are facilitated to develop enterprises that are able to compete in the regional and international market).

In the case of Nigeria, NWETE's assessment, provides an operating definition of local content as *the "utilization of local (the host country's) goods and services and workforce in the oil and gas value chain, to promote local industries, create economic linkages, build local capacity, in order to minimize capital flight in the industry";* drawing from the definition in the Nigerian Content Development Act of 2010, NCDA2010, which describes Nigerian Content as the "quantum of composite value added to or created in the economy by a systematic development of capacity and capabilities through the deliberate utilization of the country's human, material

resources and services in the Oil and Gas industry, Ovadia (2013).

Thus, the interest of parties concerned with local content is about ensuring meaningful participation and development of local capabilities along the value chain of the country's natural resources, copper in the case of Zambia. The main pathways commonly used to pursue local content objectives may be summarised under three key areas, namely; *Supply Chain, Capital and Employment. Still other authorities consider local content in terms Local Capabilities in particular procurement of local goods and services, Workforce development and Local Value Added (LVA).*

With regard to Supply Chain, the focus is on the level of participation of local suppliers and value addition, particularly of manufactured products demanded by the mining industry. Similarly participation of local financial institution and the capital market is critical to the issue of local content in the extractive industry, so are issues relating to employment, ownership and decision making in the running of companies in the mining value chain.

6.2.1 Challenges of implementing local content

It is not clear whether local content indeed can bring about economic development or lead to industrialisation as the concept has tended to receive mixed reactions amongst stakeholders in countries where it has been tried.

The major issues encountered include lack of capacity of local manufacturing sector and financial institutions, inadequate skills and technology, to meet the needs of the extractive industry. Inadequate quality of local products, fronting and collusion have also been cited as major challenges which present the downside risk of local content programmes; these constitute some of the reasons advanced for the industry's propensity to import products and services.

Hence, local content calls for collaborative approach among stakeholders to mitigate implementation challenges, and putting in place a supportive regulatory framework and innovation infrastructure; coupled with tenets of good governance and accountability, in the business and political space.

Regulatory frameworks governing local content may be binding or non-binding; often will outline procurement rules, roles of Actors, Monitoring & Evaluation mechanisms and other essential elements.

Thus, the local content approach, to a great extent, provides some flexibility in terms of what the country can do to maximise benefits from the extractive industry, depending on the prevailing internal and international considerations; such as national versus stakeholder interests, regional and international trade rules.

On the contrary, Import Substitution Industrialisation Policies tend to be in-ward focused, advocating for radical replacement of foreign imports with domestic production-protectionism becomes the norm.

7. Conclusion

The need to maximise benefits has lead countries to explore a variety of avenues, from Import Substitution Industrialisation policies, which focus on protectionism typically associated with closed economies, to local content development. The local content approach is concerned with the level of participation of local inputs in terms of materials and resources, both human and capital, as well as the degree of value addition along the value chain of the extractive industry. The local content school of thought advocates that higher levels of participation of local inputs and degree of value addition will inevitably lead to more benefits to accrue to local economies.

In this regard, given the failures of import substitution industrialisation policies in countries where they had been tried, including Zambia, there is need to seek more innovative ways to make the extractive industry impact local economies positively. Thus local content development provides such an alternative for Zambia, which like many other resource rich countries suffers from a "resource curse" or "Dutch disease syndrome" – a case for local content development in the mining industry in Zambia definitely exists.

However, even though the local content approach sounds more progressive than import substation industrialisation policies, caution needs to be taken when it comes to implementation. For example, host governments need to follow a consultative process, to secure buy in of key stakeholders, and the question as to whether to regulate or not, if to regulate, just how much regulation is workable? These and other questions require stakeholder involvement and collaboration to navigate.

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