

CONSTRAINTS ON INDUSTRIALISATION IN COLONIAL ZAMBIA, 1890-1964

BY

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ABSTRACT

This study examines the significant constraints on industrialisation (development of secondary industries) in colonial Zambia. The study argues that although a number of imperial scholars have attempted to identify the significant constraints on industrialisation during the colonial period, there are glaring gaps in these works which need to be filled up. It depicts the process of developing secondary industries in Northern Rhodesia as having been slow, painful and insignificant when compared to other countries in the region like Southern Rhodesia and South Africa. In addition, the study reveals that the origin and development of Northern Rhodesia's industrialisation process passed through three main stages. The first stage was during the early years of colonial rule when the territory was under the British South Africa Company (BSACo) administration. The second stage was from 1924 to 1952 under the Crown government administration and the last stage was from 1953 to 1964 under both the Federal and Crown government rule. However, the year 1964 signified the end of colonial rule in Northern Rhodesia and its retrogressive economic policies.

The other argument in this study is that the unfavourable and negative colonial economic policies which were enacted under the BSACo were perpetuated both under the Crown and the Federal governments. In addition, the study demonstrates that throughout the colonial period, the economic policies to which the country was subject undoubtedly limited the chances of developing local secondary industries. Even though there were numerous opportunities to set up local secondary industries in the form of import substitution industrialisation in Northern Rhodesia, they were not utilized. The successive governments in the country regarded industrial development as the endeavour of private enterprise. The steps taken by the government and industrial capital between 1953 and 1964 to tackle the constraints on industrialisation did not lead to the development of local secondary industries in the country. Lastly, this work argues that due to bad economic policies, Northern Rhodesia achieved independence in 1964 with an impoverished secondary industry sector.

DEDICATION

This dissertation is dedicated to my late father, Abton Chisulo Phiri who inspired me academically. It is also dedicated to my mother Alinala Emmanuel Phiri, a source of inspiration in my life. Lastly, I dedicate it to my lovely wife Yvone Zondwase Ziba Chisulo and our two children, Alice Jemimah Chisulo Phiri and Goodness Chisulo Phiri.

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ABBREVIATIONS AND ACRONYMS

ACID	Advisory Committee on Industrial Development
ACSC	African Concessions Syndicate Company
BSACo	British South Africa Company
CDC	Commonwealth Development Corporation
CDFA	Colonial Development Fund Act
CETCA	Consulting Engineers to the Crown Agents
FRN	Federation of Rhodesia and Nyasaland
GRZ	Government of the Republic of Zambia
ILB	Industrial Loans Board
INDECO	Industrial Development Corporation
INESOR	Institute of Economic and Social Research
MIA	Mine Industry Archives
NARN	National Archives of Rhodesia and Nyasaland
NAZ	National Archives of Zambia
NRFDP	Northern Rhodesia First Development Plan
NRG	Northern Rhodesia Government
NWRFC	North Western Rhodesia Farmers' Cooperative Society
PACRA	Patents and Companies Registration Agency
PWD	Public Works Department

TDB

Trade Development Board

UTC

United Tobacco Company

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CHAPTER ONE

1.1. Introduction and background

The main focus of this study is to identify the significant constraints on industrialisation in colonial Zambia in the period between 1890 and 1964. The word ‘industrialisation’ in this context refers to the development of secondary or manufacturing industries. Scholars argue that “industrialisation was all about profound inventions in manufacturing, mining, transportation, communications, rapid changes in society and commerce.”¹ The study begins in 1890 because it was during this period when the British South Africa Company (BSACo) was mandated under the Lochner treaty to carry out manufacturing using the local resources no matter how little they were. Secondly, the company was obligated to carry out commercial or other trading business and to civilise the local people. The treaty also gave the company powers of administration in the territory including land and mineral rights.² The year 1964 signified the end of colonial rule in Northern Rhodesia and its detrimental economic policies.

The development of secondary industries in Northern Rhodesia was a slow, painful and insignificant process when compared to Southern Rhodesia and South Africa. The origin of the development of secondary industries can be traced to the period when the mining industry began to be established in the territory. In 1902, the zinc and lead mine at Broken Hill was discovered and began small operations in 1904 and reached full scale production in 1906. The value of zinc and other products exported from the territory according to Lewis H. Gann was £81,000 in 1906.³ The output of manufactured lead ingots and lead pig at the Broken Hill mine was

¹ Lyman Johnson et.al, *The Earth and its people; A Global History* (New York: Houghton Mifflin Company, 2003), pp.463-464.

² National Archives of Rhodesia and Nyasaland [Hereafter NARN], *Occasional Papers* (Salisbury: Government printers, 1963), pp.8-10; D.E. Needham, E.K. Mashingaidze and N. Bhebe, *From Iron Age to Independence; A History of Central Africa* (Essex: Longman Group Ltd, 1974), p.132.

³ T.C. Gardner, “Economic Future of Northern Rhodesia”, in T.C. Gardner (ed.), *Economic Future of Northern Rhodesia* (Lusaka: The Central African Association, 1961), pp.1-3 and Lewis H. Gann, *The Birth of a plural society; The Development of Northern Rhodesia under the British South Africa Company 1894-1914* (Manchester: Manchester University Press, 1958), pp.120-121.

expected to rise to over 900 tons monthly in 1915.⁴ The mining of copper by Europeans in Northern Rhodesia began on a small scale in 1907 in the Kafue Hook, at Bwana Mkubwa (in Ndola) and at Kansanshi (in Solwezi) mines and they were able to deliver ore in small quantities, thus contributing to exports in the territory. Furthermore, the manufacture of copper ingots began by Europeans in the Kafue Hook (at Silver King and Sable Antelope mines) in 1907. These were the earliest foundry industries to be set up in the Kafue Hook mines by Europeans. However, the copper mines in the Kafue Hook remained ineffectual small workings up to 1923 when they were closed. The Bwana Mkubwa copper mine near the Congo border produced a modest amount of copper during the First World War but extraction difficulties forced it to shut down from 1920 to 1921.⁵

During the first two decades of BSACo rule in Northern Rhodesia, little was done to create a viable economy on which secondary industries could have developed to greater heights. The economic policies pursued by the company were harmful to the creation of a prosperous industrial country. For example, one of its policies was to keep administrative costs of the territory to the minimum and at the same time concentrated on profit making by creating a suitable environment for mining and agricultural activities for white commercial farmers. The company further concentrated on recruiting labour from Northern Rhodesia for the mines in Southern Rhodesia and South Africa. The only developed means of communication during Company rule was the railway. Attempts to develop the non-mineral areas were avoided from the beginning of the Company rule. This was evident in the way public infrastructure was built. Most infrastructure was built in a rudimentary way while much emphasis was put on maintaining law and order in the territory.⁶ The Company believed in the *laissez-faire* policy which meant that industrial development was an endeavour of private enterprise.⁷

The transition from Company rule to Crown government rule in 1924 did not bring about the much-needed changes to diversify the economy into manufacturing. Most of the policies pursued by the BSACo were perpetuated under the Crown government. For example, it was

⁴ John A. Bancroft, *Mining in Northern Rhodesia* (London: British South Africa Company, 1961), pp.116.

⁵ Gardner, "Economic Future of Northern Rhodesia", pp.1-3.

⁶ Gardner, "Economic Future of Northern Rhodesia", pp.1-3.

⁷ Gann, *The Birth of a Plural Society*, p.48.

under Crown government rule that debilitating economic policies were enacted. These policies included the *laissez-faire* policy, unfavourable customs and tariff agreements, failure to make use of the colonial development fund in 1929 (CDFA), and the Great Depression. The CDFA was provided by the British government to help colonies to develop agriculture and industry. There was also deliberate delay in developing hydro-electric power stations for industrial purposes. In addition, there was loss of income tax from the copper mines, introduction of the Trade Development Board (TDB) in 1933 to encourage the development of local industries and the declaration of Ndola as the only commercial, industrial and distribution centre in 1935. The law enacted in 1935 by the government entailed that all secondary industries had to be established at Ndola only, and had to serve the needs of the mines.⁸

Once Ndola became a distribution centre, both partially and completely manufactured goods arrived in bulk from Southern Rhodesia, South Africa and overseas. Partially manufactured goods underwent further processing at different workshops of industrial companies before being sold to retailers, wholesalers or directly to consumers. Other goods had to be assembled, branded and repackaged.⁹ Some of the partially manufactured goods included different types of chemicals and materials for the manufacture of soft drinks, sweets, bakery products, furniture, soaps, and dairy products and for purification of bottled water. Other goods like steel could be processed into different metal products for the mines.¹⁰ Completely manufactured goods from Southern Rhodesia, South Africa and overseas which were being distributed at Ndola included different types of specialized mining machinery, structural steel, electrical apparatus, vehicles, bearings, rails, fittings and piping.¹¹ Thus, the distribution centre at Ndola was a manufacturing centre since other categories of goods underwent further processing or value addition was undertaken.¹² However, these goods were mostly of low quality and they could not be traded outside Northern Rhodesia.

⁸ NAZ, SEC 1/1534, Notes on Governor Ronald Storrs' interview at Ndola, 09/05/1934.

⁹ NAZ, SEC 1/1534, Notes on Governor Ronald Storrs' interview at Ndola, 09/05/1934.

¹⁰ NAZ, SEC 1/1534, Notes on Governor Ronald Storrs' interview at Ndola, 09/05/1934.

¹¹ Robert E. Baldwin, *Economic Development and Export Growth; A study of Northern Rhodesia 1920-1960* (Berkeley and Los Angeles: Cambridge university press, 1966), p.451 and NAZ, SEC 1/1534, Notes on Governor Ronald Storrs' interview at Ndola, 09/05/1934.

¹² NAZ, SEC 1/1534, Notes on Governor Ronald Storrs' interview at Ndola, 09/05/1934.

Furthermore, in 1946, the government set up the Advisory Committee on Industrial Development (ACID) which replaced the TDB. The mandate of the ACID was to encourage and promote the development of local industries in the country. However, the ACID discouraged the government in 1948 when it identified a small local market and a small European population as significant constraints on industrialisation.¹³ Equally, the introduction of the Northern Rhodesia First development plan (NRFDP) in 1947 did not lead to industrial development in the country. The £50,000 allocated in the NRFDP to be spent each year on establishing local industries was not enough. In 1951, the government went ahead and created the Industrial Loans Board (ILB) with an initial capital of £250,000 to assist industry with loans but there was little demand for these funds.¹⁴ In order to tackle the constraints on industrialisation, the government encouraged the formation of the Federation. When the Federation of Rhodesia and Nyasaland (FRN) began in 1953, all issues of commerce and industry in the territory became the responsibility of the Federal government. Northern Rhodesia's economy became highly integrated into the industrial economies of Southern Rhodesia and South Africa throughout the Federation period.¹⁵

The government also encouraged the incorporation and registration of the two major copper mining companies, Anglo-American Corporation Ltd and Roan Selection Trust Ltd locally. It was envisioned that once these two copper mining companies were incorporated locally, their surplus profits would be invested in non-mining activities such as secondary industries. In addition, the government built the Kariba dam, enacted the private sector led industrialisation policy and formed the Industrial Development Corporation Ltd (INDECO) in 1960 as the successor to the ILB in order to tackle the constraints on industrialisation. However, these steps did not bring about the much needed local industrialisation in the territory. The government could not create a conducive environment for foreign private capital to invest in local industries. Therefore, industrial capital invested in small, metal-working industries to support the needs of the mines only.¹⁶

¹³Northern Rhodesia Government [Hereafter NRG], *Advisory Committee on Industrial Development, Third Report* (Lusaka: Government printers, 1948), p.7.

¹⁴ Richard Hall, *Zambia*, (London: Pall Mall press, 1965), pp. 251-252.

¹⁵T.C. Gardner, "The Role of INDECO", in T.C. Gardner (ed.), *A Budget Address* (Lusaka: Government printers, 1961), p.1.

¹⁶ Gardner, "The Role of INDECO", p.1.

Towards the end of the Federation, Northern Rhodesia had not made any significant achievement in developing her own secondary industries. It is also important to note that between 1890 and 1964, little spurts of industrial establishments emerged in the country. In 1909, an Italian entrepreneur, G.B. Marrapodi was the first to set up a lime manufacturing industry at Lusaka which produced lime for local farmers and other markets in Southern Rhodesia and the Congo.¹⁷ Other small local establishments consisted of thermal electric power generation at the Livingstone Cold Storage in 1905, milling, rubber production, meat processing, and manufacture of cigarettes, manufacture of lead and copper ingots and the provision of pumped water.¹⁸ Provision of pumped water and electricity are considered in the category of manufacturing because they involved generation, transmission, purification and distribution to domestic and industrial consumers.¹⁹

The other early industrial establishment was the Livingstone Sawmills which was started by the Jacob brothers of Jewish origin in 1911. The company was initially called the *Dimitra* Sawmills and manufactured 100 railway sleepers a day in the early years of the First World War. The Sawmills also produced timber for export as well as for the local mining industry. It employed 46 Europeans and 1,100 Africans. The Sawmill was incorporated in 1927 as the Zambezi Sawmills Ltd and was developed in conjunction with the Rhodesia Railways in the later 1930s.²⁰ Besides, hydro-electric power production started in a small way in 1925 at the Mulungushi power station. The power station supplied electricity to the mines at Broken Hill

¹⁷ G.J. Williams, "The Early Years of the Township", in G.J. Williams (ed.), *Lusaka and its Environs; A Geographical Study of a planned capital city in tropical Africa* (Lusaka: Zambia Geographical Association, 1987), p.278.

¹⁸ *Rhodesia Herald*, Thursday, 12/06/1958, p.9; Richard Sampson, *So this was Lusakaas; the story of the capital of Zambia to 1964* (Lusaka: Publicity Association, 1959), p.73; Smith Jonathan, "Exports from Northern Rhodesia 1899-1924", MA Dissertation, Area Studies of Africa, 1978, p.17; NAZ, B1/1/9, Tobacco Factory in the Fort Jameson Area 1914 and Bancroft, *Mining in Northern Rhodesia*, pp.116.

¹⁹ Government of the Republic of Zambia [Hereafter: GRZ], *Census of production* (Lusaka: Central Statistical Office, 1964), p.2.

²⁰ Hugh Macmillan and Frank Shapiro, *Zion in Africa the Jews of Zambia* (London: I.B. Tauris, 1919), pp.47-48.

while the entire African population in the country earned a living through subsistence farming in rural areas.²¹

When Lusaka became the capital city in 1935, other small industries were established such the tile and brick factory owned by David Shapiro, a Jewish entrepreneur. He secured the contract for the supply of all brickworks for the new town up to the end of the Second World War when he diversified into the milling business. Apart from the Sawmills, a soap industry was opened at Ndola in 1939 while Bata Shoe Company also opened some branches in the country.²² In addition, the Northern Rhodesia Textiles Ltd (NORTEX) began manufacturing blankets in Livingstone starting in 1948 although it was affected by the creation of the FRN in 1953 when protective tariffs on imports were removed.²³ From the early 1940s onwards, copper production began to expand significantly on the Copperbelt province. From this industrial base of mining, development of other non-mining industries was expected to take off. The collective anticipation was to see the establishment of heavy-secondary mineral processing industries and local supplier production, including the provision of food for miners and other urban workers.²⁴

After the first census on industrial establishment was done in 1947, there were only 107 industries in Northern Rhodesia. However, the secondary sector was defined broadly and was taken to include some activities such as repair of transport equipment, provision of electricity, water supplies, processing of food, beverages, the manufacture of wearing apparel and furniture. The gross value of manufacturing output was less than £4 million in 1947.²⁵ When the second census on industrial establishment was carried out in 1954, 284 industries were reported to be in operation in the country. The only establishment of reasonable size was the cement industry at Chilanga financed jointly by the Commonwealth Development Corporation (CDC) and the Northern Rhodesia government. The other ancillary industry to the cement industry at Chilanga

²¹ Gardner, "Economic Future of Northern Rhodesia", pp.1-3 and Buzandi Mufinda, "A History of mining in Broken Hill (Kabwe) 1902-1929", MA Dissertation, University of the Free State, 2015, [Online] (www.scholar.ufs.ac.za.8080/...mufindaB.pdf?...) p.66.

²² Macmillan and Shapiro, *Zion in Africa the Jews of Zambia*, pp.99-111.

²³ Macmillan and Shapiro, *Zion in Africa the Jews of Zambia*, pp.48-49.

²⁴ Akashambatwa Mbikusita Lewanika, *Milk in a Basket; the political Economic Malaise in Zambia* (Lusaka: Zambia Research Foundation, 1990), p.9.

²⁵ NRG, *First Report on census of industrial production, Northern Rhodesia* (Lusaka: Central Statistical Office, 1947), pp.139-140.

was Turner Asbestos Products Ltd (TAP) which manufactured cement products.²⁶ The remainder were small industries, some of them funded through the ILB created by the government in 1951.²⁷ After the third census on industrial establishment in 1961, there were 315 small, industrial firms in the country and the majority were in the category of metal-working industries which supplied the needs of the mines. One-fifth of this total comprised of food, beverage and metal using industries. More than half or 58% of these establishments were located on the Copperbelt, principally at Ndola, and they were all related to the copper mines. On the other hand, industrial units in Lusaka accounted for 21% while Broken Hill and Livingstone had 7% each of the total number. In the rural areas, grain milling for home consumption was the only industrial activity, and consequently, the whole manufacturing sector was limited to the line of rail.²⁸

This modest development of secondary industries in colonial Zambia could not supercede or outgrow the mining industry since these establishments were mostly small ones which produced goods that could not compete on the international market. Lewanika argued that Northern Rhodesia was not able to manufacture products capable of being exported to neighbouring countries including its Federal partners, Southern Rhodesia and Nyasaland. The Federation therefore ensured that industrial development and trade favoured Southern Rhodesia.²⁹ Furthermore, Anne Seidmann pointed out that Northern Rhodesia never had the chance to develop her own secondary industries to suit the growing needs of the local community. Up to independence, the territory remained a primary producer as opposed to a secondary producer.³⁰ It is against this historical background therefore, that the proposed study endeavours to identify the significant constraints on industrialisation in colonial Zambia between 1890 and 1964.

1.2. Objectives of the study

The study was anchored on the following objectives:

- i. To trace the origin and development of industrialisation in colonial Zambia.

²⁶ *African Mail*, 23 January, 1961, p.15.

²⁷ NRG, *First Report on census of industrial production*, p.140.

²⁸ UN/ECA/FAO, *Report on Economic Survey Mission* (Lusaka: United Nations, 1964), chapter v, pp.1-3.

²⁹ Lewanika, *Milk in a Basket*, p.82.

³⁰ Anne Seidmann, *An Economics Text Book for Africa* (London: Methuen and Co. Ltd, 1969), p.15.

- ii. To identify the significant constraints on industrialisation.
- iii. To analyse the extent to which the colonial state and industrial capital tackled the constraints to industrialisation.

1.3. Statement of the problem

Development of secondary industries in the colonial period in Zambia faced a lot of challenges which adversely affected their smooth development. Therefore, in view of the constraints faced by these industries, this study intends to investigate what the constraints to Zambia's industrialisation process were in the colonial period.

1.4. Significance of the study

Northern Rhodesia had enormous mineral wealth, yet very little was done to stimulate other non-mining industries. This study is critical because it brings out a better understanding of the significant constraints on industrialisation in colonial Zambia. Secondly, the study will add value to the existing literature on industrial and economic history of Zambia. Lastly, this study may provoke further research into other aspects of local industrialisation during the colonial period.

1.5. Literature Review

A review of literature available on the constraints on industrialisation in colonial Zambia reveals several gaps of detailed scholarly work. Many studies in which constraints on industrialisation have been discussed by scholars during the above period, do so mainly in passing references. Therefore, this study, taking into account multi-disciplinary literature, engages with scholarly works on the development of secondary industries in Southern Rhodesia, South Africa and Britain in order to better appreciate the factors that hindered the development of secondary industry in colonial Zambia.

According to Jill Natrass, the first primary industrial establishment that took place in South Africa on a large scale was mining. He argued that it took the intervention of the local merchants and traders to force the mining companies to invest part of their surplus profits from the mining industry into the development of local secondary industries. He argued further that the South African economy would have been trapped in mining activities only if the mining companies

were not forced to invest the surplus profits into manufacturing.³¹ Belinda Bozzoli just like Natrass, argued that in the early phases of the mineral revolution in South Africa, monopoly capital was neither willing to invest into secondary industries nor to create local markets because cheaper machinery and other products were imported from overseas. For Bozzoli, monopoly capital had to be redirected by investing in manufacturing industries and also creating larger local markets for industries.³² Natrass and Bozzoli's works are important to this study because they act as reference points from which the constraints on industrialisation in colonial Zambia can be explained in detail.

Paul T. Zeleza's work went further by stating that, the South African state used the enormous surplus profits it collected from income tax on the mines to invest in industrial infrastructure and managed to establish state owned heavy secondary industries.³³ This work is valuable to this study because it is used as a point of reference to argue that income tax which was collected on Northern Rhodesia's copper mines was not used to set up industrial infrastructure but was instead expropriated and externalized. More important to this study are the works by Colin Stoneman³⁴ and Victor Muchineripi Gwande.³⁵ The two scholars pointed out that the development of local secondary industries in Southern Rhodesia was a state led process. The state created a conducive environment for industrialisation through legislation, financing and collaboration with private enterprise and foreign capital. The state's legislation involved protection of local industries by enacting tariffs. These two works are important to this study because we use this information to argue that all the secondary industries that developed in colonial Zambia lacked protection against stiff competition from Southern Rhodesia, South Africa and overseas.

³¹ Jill Natrass, *The South African Economy its Growth and Change* (London: Oxford university press, 1981), pp.162-163.

³² Belinda Bozzoli, *The political nature of a ruling class; capital and ideology in South Africa 1890-1933* (London: 1981), pp.119-120.

³³ Paul T. Zeleza, *A modern Economic History of Africa Vol. 1 The nineteenth century* (London: CODESRIA, 1993), p.249.

³⁴ Colin Stoneman, "The Industrialisation of Zimbabwe; Past, Present and the Future", *Afrika Focus*, vol.6, No.3-4, (1990), pp.245-282.

³⁵ Victor Muchineripi Gwande, "Foreign Capital, State and the Development of Secondary Industry in Southern Rhodesia, 1939-1956", MA Dissertation, University of the Free State, 2015 [Online],(www.scholar.ufs.ac.za:8080/.../Gwande_VM.pdf...), pp.35-36.

Beyond Africa, works on the beginning of the industrial revolution in Britain cannot be ignored because Northern Rhodesia was a British colony and the latter had a direct influence on the country's industrialisation process. Mounir A. Farah and Andrea B. Karls pointed out that the rise of industrialisation in Britain required that certain things had to be put in place first. Although this work is about world history in general, there is a chapter on industrialisation in Britain. According to the two scholars, there was need to put in place the following things for Britain to industrialise: money or capital to build machines, labour to operate machines and markets to make the system profitable. Furthermore, there was need for efficient farms to feed industrial workers, a transport system, incentives, scientific inventions and Britain possessed all these things at the start of the 18th century. Consequently, this enabled industrialisation to take root in Britain and expanded enormously.³⁶ This work is vital to this study because it provides detailed information on the linkages between proper planning and implementation in establishing secondary industries. The book also enlightens this study about sustainable industrialisation.

There are several studies that discuss industrial developments in colonial Zambia. Lewis H. Gann produced two such works. In the first, he explored some of the new secondary industries during the early years of colonial rule such as the lime industry and gave information on the Europeans who first settled at Lusaka. He stated that the lime industry was established by G.M. Marrapodi, a settler from Italy at Chinika in Matero Township. Marrapodi began manufacturing lime in 1909.³⁷ Gann's other book explained that the BSACo believed in *laissez-faire* which left the development of secondary industries in the hands of private enterprise.³⁸ Richard Sampson, just like Gann showed in his book that there was lime manufacturing in the Chinika area both under the BSACo and the Crown government. The other industry identified by Sampson was the manufacture of biltong by the Afrikaner settlers at Lusaka.³⁹ Works by Gann and Sampson are important to this study because they provide background information on Lusaka, the early European settlers, the naming of the railway siding and new secondary industries.

³⁶ Mounir A. Farah and Andrea Karls, *World History* (New York: McGraw Hill, 1999), p.372.

³⁷ Lewis H. Gann, *A History of Northern Rhodesia; Early Days to 1953* (Manchester: Manchester university press, 1964), p.141.

³⁸ Gann, *The Birth of a plural society*, p.48.

³⁹ Sampson, *so this was Lusakaas*, p.11.

Norman C. Rothman complemented Sampson and Gann's works. Rothman, just like Richard Sampson and Lewis H. Gann, not only identified the lime industry as one of the earliest industrial activity in the territory but also identified some of the significant constraints on lime manufacturing. For instance, he argued that Lusaka was never envisioned to become an industrial town by the colonial state but instead was intended to develop as an agricultural town. However, with time, there was an expansion of farming activities in the city, which acted as a catalyst in encouraging the establishment of small lime industries and urban growth. Agricultural lime was manufactured and supplied to farmers at Lusaka and other regions in the territory. The major constraint on the lime industry identified by Rothman between 1911 and 1919 at Lusaka was the failure by the state to control floods in the town. Floods worsened due to lack of a drainage system in the town.⁴⁰ Rothman's work is vital to this study because it identifies some of the significant constraints on lime manufacturing in colonial Zambia.

Peter Slinn's work looked at the role of the BSACo in Northern Rhodesia between 1890 and 1964. The work explored some of the economic policies adopted by the Company in colonial Zambia. For example, the policy of maximising profits by purposefully avoiding investment in non-mining industries.⁴¹ The current study argues that the emphasis by the BSACo on profit maximisation meant that infrastructure for the development of secondary industries was not a priority since all manufactured goods came from South Africa, Britain and Southern Rhodesia. Secondly, Slinn's work is valuable to this study because it gives details about some of the negative policies enacted under the BSACo rule.

Complementing Peter Slinn's study is the work by Gerald Clapman. He explored the extent to which the BSACo and the Crown government undermined the development of industrialisation in Barotseland. For example, the BSACo considered the area to be a source of cheap labour and showed no interest of investing in the territory the kind of capital necessary to

⁴⁰ Norman C. Rothman, "African Urban Development in The Colonial Period; A Study of Lusaka, 1895-1964", PhD History Dissertation, North Western University (1972), pp.4-22.

⁴¹ Peter Slinn, "Commercial concessions and politics during the colonial period; The Role of the British South Africa Company in Northern Rhodesia 1890-1924", *The Journal of African Affairs* Vol. 70, No. 281, (1971), p.37.

create the infrastructure of a viable economy.⁴² This work is vital to our study because it brings out the causes of economic underdevelopment in Barotseland under colonial rule. Similarly, Robert H. Bates's work argued that under the terms of the treaty with Lewanika, the BSACo was supposed to construct roads and set up manufacturing establishments in exchange for the minerals but deliberately dishonoured the terms of the agreement.⁴³ The current study will benefit from such information when discussing the significant constraints on industrialisation in colonial Zambia.

Richard Hall's book, *Zambia*, reveals that under the Crown government in Northern Rhodesia, the only local industries which developed were those which offered a service to the mines. He further argues that even when the colonial state formed the Industrial Loans Board in 1951 as a way of tackling the constraints to industrialisation by giving out loans to industrial firms, there was little demand on these funds.⁴⁴ Frederick K. Mwanza just like Hall argued that the formation of the Industrial Development Corporation in 1960 as a successor to the ILB did not lead to industrialisation in the country. Although the formation of the INDECO was considered as one of the ways to tackle the constraints on industrialisation, it did not have impact on the country.⁴⁵ These two works are important to this study because they provide useful background information on how the colonial state tried to tackle the constraints on industrialisation.

More important to this study, is Elena L. Berger's book which argues that the growth and expansion of the copper mines in the country did not lead to industrial development between 1924 and 1964. Instead, the entire economy was built around mineral extraction and this led to the creation of impoverished rural areas in the country. Berger notes further that when the major mining companies, Anglo American Corporation Ltd and Roan Selection Trust Ltd shifted their offices from London to Northern Rhodesia in the early 1950s, the country did not benefit because the government could not obtain all the income tax paid out by these companies.

⁴² Gerald Clapman, *The Elites of Barotseland* (Berkeley and Los Angeles: University of California, 1970), p.144.

⁴³ Robert H. Bates, *Rural Responses to industrialisation a Study of Village Zambia* (New Haven: Yale University press, 1976), p.44.

⁴⁴ Hall, *Zambia*, p.278.

⁴⁵ Frederick K. Mwanza, *Chasing the Winds and Dependency Syndrome; Topical Issues on Zambia's Political Economy* (Lusaka: MFIC, 1993), P.8.

Instead, the Federal state collected income tax and other forms of revenue in the country.⁴⁶ Berger's work provided this study with vital information from which the constraints on industrialisation in colonial Zambia can be glimpsed although other significant constraints are not accounted for in her work.

Equally critical to this study is the work by Chilala Habeenzu who looked at industrial development, urban growth and the environment during pre-independent and post-independent Zambia through a historical survey of the Chilanga Cement Factory between 1949 and 1995. The study highlighted the significant impact that Chilanga Cement Plc has had on the history of construction, urban growth and the environment.⁴⁷ While Habeenzu's work focused on one manufacturing industry and its impact on the environment, the current study will discuss different local secondary industries which developed in the territory and the constraints they encountered.

Robert E. Baldwin's work argued that the failure to develop local secondary industries in Northern Rhodesia was caused by the narrowness of the industrial market and the geographical location of the country. He also pointed out that the people who owned the mines were racists who stopped Africans from acquiring the necessary skills to support industrial development.⁴⁸ Similarly, the work by T.C Gardner complements Baldwin's book in that he identified some of the significant constraints on industrialisation in colonial Zambia such as: low population of Europeans, limited local markets and the formation of the Federation. Gardner also identified a Sawmill as one of the earliest manufacturing establishments in the territory.⁴⁹ These two works are important to this study because they identified some of the significant constraints on industrialisation in colonial Zambia.

Although with specific emphasis on the impact of the Second World War on Northern Rhodesia, Alfred Tembo's work explored and identified some of the significant obstacles on industrialisation during the war. He demonstrated how the Northern Rhodesia government faced

⁴⁶ Elena Berger, *Labour, Race and Colonial Rule; The Copperbelt from 1924 to Independence* (Oxford: Clarendon press: 1974), pp.8-9.

⁴⁷ Chilala Habeenzu, "A Historical Study of the Impact of Chilanga Cement Factory on Chilanga Township, 1949-1995", MA Dissertation, University of Zambia, 2016, p.7.

⁴⁸ Baldwin, *Economic Development and Export Growth*, PP.66-70 and p.177.

⁴⁹ Gardner, "Economic Future of Northern Rhodesia", pp.1-3.

persistent pressure from local merchants and industrialists to encourage domestic manufacturing in the same way it had supported commercial farming between 1939 and 1947. The work argued that the war offered opportunities for import substitution industrialisation due to the shortage of goods previously imported from Britain, but the government could not seize the opportunity.⁵⁰ Tembo's work is vital to this study because it gives valuable information concerning some of the significant obstacles on industrialisation in Northern Rhodesia during and after the war. In the same line of thought as Tembo, Alistair Young argued that there were several opportunities to set up secondary industries in the form of import substitution beginning from the Great Depression period but the government intentionally ignored them.⁵¹ This study draws on such information to discuss in detail the significant constraints on industrialisation in colonial Zambia.

The book by Phyllis Deane entitled *Colonial Social Accounting*, argues that the colonial state in Northern Rhodesia deliberately enacted the closed townships policy in which secondary industries had to be established at Ndola only. The rest of the towns on the Copperbelt remained closed for industrial development from 1935 up to 1956. Dean's argument is supported in the works by Hugh Macmillan and Frank Shapiro and Progress Choongo et.al who noted that during the flourishing copper mining era, Ndola became a leading commercial, industrial and distribution centre.⁵² These works, however, do not explain that the other way to look at a distribution centre at Ndola is to perceive it as a manufacturing centre. This study fills this gap. The study argues that some of the goods which arrived at Ndola were partially manufactured. Thus, the industries which were set up at Ndola could buy the partially manufactured goods which they processed further into finished products.

The last work of relevance to our study is P.E.N. Tindall's. This book is about the history of central Africa in general but he also explores one of the significant constraints on

⁵⁰ Alfred Tembo, "The Impact of the Second World War on Northern Rhodesia (Zambia), 1939-1953", PhD Thesis, University of the Free State, 2015, [online] (www.scholar.ufs.ac.za.8080/Tembo.pdf), pp.162-175.

⁵¹ Alistair Young, "Industrial Diversification in the Zambian Economy", PhD Thesis, University of Reading, 1973, p.20.

⁵² Phyllis Deane, *Colonial Social Accounting* (Cambridge: Cambridge university press, 1953), p.48; Macmillan and Shapiro, *Zion in Africa the Jews of Zambia*, p.178 and Progress Choongo et.al, "The Evolution of Urban Entrepreneurship in Zambia", in Muhammad N. Iftikhar et.al (eds.), *Urban Studies and Entrepreneurship* (Cham: Springer Nature, 2020), p.258.

industrialisation in colonial Zambia. He argues that between 1937 and 1957, the colonial state in Northern Rhodesia calculatingly delayed the development of hydro-electric power stations for economic development. The government facilitated the agreement between the copper mining companies and the Rhodesia Railways in which the latter would transport coal from Wankie to the Copperbelt at reduced prices for a period of twenty years. The mining companies on the Copperbelt would now depend on cheaper deliveries of coal from Wankie to meet their energy requirements.⁵³ This study builds on this information and argues that the delay to build hydro-electric power stations was one of the significant constraints on industrialisation under Crown rule in colonial Zambia.

1.6. Research Methodology

The study used the qualitative research method which utilised archival, secondary and oral sources of data. Data was analysed thematically. I collected data within a period of five months from October 2017 to February 2018. The first stage of data collection took place at the University of Zambia library in the special collections division. Useful data from the special collections which I consulted included theses, dissertations, books, journal articles, magazines, brochures, published government reports and legislative council debates. The second stage of data collection was at the National Archives of Zambia (NAZ) in Lusaka. There, I consulted colonial files under both the BSACo and the Crown government which yielded useful information on early industries set up in colonial Zambia. Other documents which I consulted included District notebooks, minutes of meetings, correspondences and memoranda between government officers in Northern Rhodesia and the Colonial Office in London, South Africa and BSACo officials.

Primary data was also collected at the Institute of Economic and Social Research (INESOR) in Lusaka, at the Mine Industry Archives (MIA) in Ndola and at the Patents and Companies Registration Agency (PACRA) offices in Lusaka. At PACRA, I consulted the *First Companies' Register* from 1922 to 1952 and the *Second Companies' Register* from 1953 to 1964. These registers gave information on all industrial companies that were registered and incorporated in the country from 1922 to 1964. The final stage of data collection involved conducting oral

⁵³ P.E.N. Tindall, *A History of Central Africa* (New York: Frederick A. Praeger, 1967), p.273.

interviews. Interviews were conducted with officers at the Ministry of Commerce, Trade and Industry in Lusaka. Officers at the above ministry recommended the names of retired officers who served in the first republic after independence as suitable people to be interviewed. Thus, three retired officers who served in the first republic and a historian were interviewed. Once the data was collected, much time was devoted to sorting it out and thereafter interpretation was done which resulted into the actual crafting of this dissertation.

1.7. Organisation of the study

The study is divided into five chapters. The first chapter is the introduction and the historical background of the study. Chapter two looks at the origin and development of secondary industries during the early years of colonial rule from 1890 to 1924. The early secondary industries which emerged and their constraints on expansion during this period are explored. Chapter three looks at the significant constraints on industrialisation under the Crown government from 1924 to 1952. Chapter four explores the extent to which the colonial state and industrial capital tackled the constraints to industrialisation between 1953 and 1964. The last chapter is the conclusion of the major findings in the study.

CHAPTER TWO

ORIGIN AND DEVELOPMENT OF SECONDARY INDUSTRIES IN THE EARLY YEARS OF COLONIAL RULE, 1890-1924

2.1. Introduction

This chapter traces the origin and development of secondary industries in the early years of colonial rule. During the early years of colonial rule, the territory was under the British South Africa Company. The first part reveals that immediately the territory came under colonial rule, international capital began to be invested in the small copper mines in the Kafue Hook, at Kansanshi and at the zinc and lead mines at Broken Hill. Capital was also invested in agriculture, the railways and in the commercial sector. The second part of the chapter looks at industrial developments before World War One. The third part explores industrial developments during World War One and the last part examines industrial development during the post-war period. The chapter reveals that the period between 1890 and 1924 witnessed the development of small industrial companies such as the lime industry, the rubber industry, milling industries, provision of purified pumped water, thermal electricity, meat processing, and tobacco industry. There was also manufacture of copper and lead ingots. The significant constraints on industrialisation identified in this chapter were the economic policies such as the *laissez-faire*, profit maximisation and also lack of industrial infrastructure.

2.1.1. Categories of foreign capital during the early years of colonial rule

Foreign capital in Northern Rhodesia which could have been responsible for large scale industrialisation during the early years of colonial rule comprised of three categories. According to Peter Slinn and Richard Hall, the first category of international capital in Northern Rhodesia comprised one from the railways and the small copper mining companies known as Sable Antelope and Silver King in the Kafue Hook¹ and at Kansanshi mine beginning in 1907.² The

¹Slinn, "Commercial concessions and politics during the colonial period", pp.365-384. Slinn further notes that after the discovery of large copper ore bodies in 1928, international capital in Northern Rhodesia comprised of two major mining companies, the Roan Selection Trust Ltd and the Anglo-American Corporation Ltd which invested heavily in the copper mines.

² Hall, *Zambia*, p.250.

other important mines which attracted foreign capital were the lead and zinc mines at Broken Hill. The mining of lead and zinc began in 1904 and reached full-scale production in 1906.³ The company which developed the lead and zinc mines was the Northern Rhodesia Copper Company, a subsidiary of the BSACo.⁴ The second category, according to Ackson M. Kanduzi, was settler agrarian capital, which was engaged in agriculture. Kanduzi argued that agrarian settler capital received tremendous support from the colonial state, “as long as it could be reproduced without considerable expense to international mining capital.”⁵ The third category, according to Macmillan and Shapiro, was commercial capital mostly dominated by the Jewish community and, to a smaller extent, the Indians or Asians. The owners of commercial capital were responsible for setting up trading shops in the territory.⁶

The drive behind commercial activities began to take root as the railway reached the country in 1904 and this was vivid when some towns began to develop closer to the line of rail attracting an ever-increasing population.⁷ It has been demonstrated by Macmillan and Shapiro that there were many opportunities which the line of rail offered, especially among the African peasants. The conglomeration of the African peasants, white farmers and traders transformed the line of rail into a central economic zone in Northern Rhodesia. The Jews, are said to have laid the foundations of modern commerce in Northern Rhodesia.⁸ Although the latter were pioneers of modern commerce in the territory, their initial capital in the form of goods and money was very little. However, their high level of motivation and simple skills in accounts enabled them to differentiate between capital and income.⁹ They were also successful as entrepreneurs because of their strong kinship ties which enabled them to help each other with credit facilities to open up commercial centres and trading empires in the country.¹⁰ Foreign capital which was invested in the mining industry and the railways, as will be argued in this dissertation undermined economic

³ A. Turner, “A Socio-Economic History of Kabwe 1902-1966,” unpub PhD Thesis, university of California, 1979, p.6.

⁴ M. Chanock, *Unconsummated Union; Britain, Rhodesia and South Africa, 1900-45* (Manchester: Manchester university press, 1977), p.16.

⁵ Ackson M. Kanduzi, *The Political Economy of Underdevelopment in Northern Rhodesia 1919-1960* (Boston: University press of America, 1986), p.15.

⁶ Macmillan and Shapiro, *Zion in Africa; the Jews of Zambia*, p.38.

⁷ Macmillan and Shapiro, *Zion in Africa; the Jews of Zambia*, p.38.

⁸ Macmillan and Shapiro, *Zion in Africa; the Jews of Zambia*, p.38.

⁹ Macmillan and Shapiro, *Zion in Africa; the Jews of Zambia*, p.38.

¹⁰ Macmillan and Shapiro, *Zion in Africa; the Jews of Zambia*, p.39.

development in Northern Rhodesia, especially concerning the development of secondary industries. The expropriation and externalization of surplus profits generated in the territory's mines and how the railway freight rates and the customs agreements were structured constrained the development of secondary industries.¹¹

2.2. Industrialisation before World War One

Before the outbreak of the First World War, the territory witnessed the development of small industries such as lime, rubber, milling, provision of purified pumped water, thermal electricity, manufacture of copper ingots and meat processing. The first thermal electric power in colonial Zambia came from the Cold Storage plant built at Livingstone in 1905 by Messrs Pauling and Company. Messrs Pauling and Company was the contractor who built the railway line from Livingstone to Broken Hill in 1906 and reached up to the Congo border in 1910. In 1906, the BSACo bought the power plant from Messrs Pauling and Company. The cost of power to users in the town was two shillings three pence per unit.¹² In addition to the power supply, there was also a provision of pumped water. The first place in colonial Zambia to have purified, pumped water supply was Livingstone, which began in 1906. The companies responsible for the pumped water industry were the Beira and Mashonaland Railways. Water came from the Maramba River, which was two miles from Livingstone conveyed through pipes. The company had installed two galvanized tanks with a capacity of 1000 gallons of water at the corner of Jameson Avenue and Sackville Street. From here, other people in the town had to draw water using buckets and other utensils at a charge of ten shillings per month.¹³ In 1910, the first pipeline was laid from the Zambezi River up to the hill at the top of the town from which a gravity supply was laid on to the houses in the township. It was not possible to dig wells because the land in the town was a sand belt.¹⁴

¹¹ Kanduzi, *The Political Economy of Underdevelopment in Northern Rhodesia*, p.20.

¹² *The Rhodesia Herald*, Thursday, 12/07/1958, p.9; NRG, *Legislative Council Debates; First Session of the First Legislative Council, 23 May, 1924* (Livingstone: Government printers, 1924), p.101.

¹³ *The Rhodesia Herald*, Thursday, 12/07/1958, p.9.

¹⁴ *The Rhodesia Herald*, Thursday, 12/07/1958, p.9; NRG, *Legislative Council Debates; First Session of the First Legislative Council, 23 May, 1924*, p.109.

Apart from the provision of pumped water and thermal electricity, there was a good number of grain milling industries which began to flourish in the early years of the territory. The first grain milling industry was started at Lusaka by E. Kollenberg on stand 6 at the site of the present-day Post Office along Cairo road in 1910. A second mill was opened in 1912 by King and Werner on stand 9, and there was a high demand for mealie meal from these two mills. For example, Sampson pointed out that one storekeeper at Lusaka was said to have stocked over 6,000 bags of mealie meal produced by these two mills in 1912 alone.¹⁵ However, in 1918 the North-Western Rhodesia Farmers' Cooperative Society Ltd (NWRFCs) moved from Kafue to Lusaka and purchased King and Werner's mill. In 1921, they sold it and moved to the site between Cairo road and the railway. During the 1920s, these two milling businesses (for Kollenberg and the NWRFCs) appeared in the Rhodesia Dictionary.¹⁶ By 1924, a new wheat and mealie mill were set up at Lusaka by the Northern Rhodesia Wheat Growers Association, Messrs. King, Werner and others. The wheat mill was manufacturing flour in the mid-1920s.¹⁷ The significant constraint which faced these early industries in the territory was that the colonial state (BSACO) favoured Southern Rhodesia in terms of developing better infrastructure.¹⁸ During the visit of the President of the BSACO to Northern Rhodesia in 1913, he explained that, "our policy was to develop Southern Rhodesia, and that policy has been carried almost till present."¹⁹ At the helm of these early industries, the territory also witnessed the first manufacture of copper ingots by Europeans in the Kafue Hook copper mines.

2.2.1. Manufacture of copper ingots in the Kafue Hook

The copper mines in the Kafue Hook were the first places where the manufacture of copper ingots by Europeans took place in colonial Zambia. Initially, Europeans discovered copper in the Kafue Hook through Africans who had ancient mines in the area with pits which ranged from

¹⁵ Sampson, *so this was Lusakaas*, p.73.

¹⁶ Sampson, *so this was Lusakaas*, p.73.

¹⁷ Sampson, *so this was Lusakaas*, p.73; NAZ, KDC/6/1/6, Chilanga Sub-District Annual Reports (CDAR), 1917-1920.

¹⁸ Kalonga Moonga, "Development of Tourism in Livingstone District 1945-1991", MA Dissertation, University of Zambia, 1999, p.30.

¹⁹ *Livingstone Mail* 05/12/1913, quoted in Kanduzi, *The Political Economy of Underdevelopment in Northern Rhodesia*, p.20.

40ft to 50ft across.²⁰ The manufacture of copper ingots began in 1907 at the two prominent mines (Silver King and Sable Antelope mines) in the Kafue Hook. At the Silver King mine, the ore discovered contained 48 % metal while the Sable Antelope mine had ore which contained 8-12 % metal.²¹ After mining and smelting, the molten was poured into a mould which produced copper ingots. The ingots were taken to the Lusaka railway siding where they continued en route to Beira for export to Britain. From 1907 to 1923, 4,268 tons of copper came from the Silver King and Sable Antelope mines.²² During the boom years 1914-1918, a ton of copper was £171 and the latter mines (Silver King and Sable Antelope) together exported copper ingots and copper ore worth £160,890 in this same period.²³

The first significant constraint on the manufacture of copper ingots in the Kafue Hook was lack of transport. As a tsetse fly infested area, traction engines were used as transport while for the last 70 miles or so, ingots moved on ox wagons to the Lusaka railway siding.²⁴ Over time, a Daimler four-wheel drive motor lorry conveyed to the mines urgent goods in small quantities, but running costs were still high for the mine companies. Later, they decided to use paraffin tractors, but they also turned out to be unsuccessful. The last option to be considered was the use of barges on the Kafue River. Copper ingots from the Kafue Hook were transported down the Kafue River by barges, but still more the mine companies incurred high expenses up to 1923 when the mines closed.²⁵ Apart from transport problems, there were also outbreaks of malaria which hindered smelting and manufacture of copper ingots. Some measures which were taken such as draining surface water around the mines and clearing vegetation to combat malaria and tsetse flies could not wholly eradicate both the former and the latter.²⁶ While exploring the obstacles which the copper mines encountered in the Kafue Hook, Gann noted that, “the mines suffered from water and foul air seeping through the limestone formation.”²⁷ Perhaps, one of the

²⁰ Hall, *Zambia*, p.250.

²¹ Hall, *Zambia*, p.250.

²² A.M. Bentley, “Lusaka in 1907”, *The Northern Rhodesia Journal* Vol. III 1956-1959, p.451.

²³ Bancroft, *Mining in Northern Rhodesia*, pp.68-70.

²⁴ Bentley, “Lusaka in 1907”, p.452.

²⁵ Bentley, “Lusaka in 1907”, p.452.

²⁶ NAZ, A3/33/4, Northern Copper Company, a report by Mr. Bentley 1910.

²⁷ Gann, *A History of Northern Rhodesia*, p.123.

most significant constraints on manufacture of copper ingots was the frequent closures due to inability to pump water in the mines during the rainy season.²⁸

2.2.2. Early meat processing industries-the manufacture of biltong at Lusaka 1906

During this same period, the territory witnessed the opening of the first meat processing industry by whites, specifically the Afrikaners who had settled at Lusaka and Chilanga. The Afrikaner settler farmers at Lusaka and Chilanga, beginning from 1906 were the first to engage in the manufacture of biltong. 'Biltong' is a Dutch word, 'bil' which means rump while 'tong' means strip or tongue. Biltong was, therefore, a type of dried meat which originated from South Africa. Biltong could be made either from game meat or beef in which one cut fillets of meat into strips following the grain of the muscle or flat pieces sliced across the grain.²⁹ Permanent settlement by the Afrikaner farmers began when the railway reached Lusaka in 1905. The earliest Afrikaner to settle at Lusaka was H.F. Varian who was employed by the railway company. During the construction of the railway, the company had recruited several transport riders or contractors who used their ox-drawn carts. Their main job was the laying of rails as well as transporting supplies of various materials.³⁰

These Afrikaner riders or contractors had enormous experience in farming, and most of them were part of the Boers who had lost their homes in the second Anglo-Boer war of 1899-1902. When the railway reached Broken Hill in 1906, all the Afrikaner riders decided to settle at Lusaka and Chilanga where they engaged in farming. By this time, prominent Afrikaner farmers apart from H.F Varian included Van Collers, Carinus, Gibbons and J.J. Geldenhuys. Other European settlers included Susman, Marrapodi, Oosthuizen, Spencer, Rocher, Harry Shanker and Kollenberg.³¹ The availability of game at Lusaka had attracted many lions which not only killed wild animals but Afrikaner cattle also. Biltong was explicitly for trade with the local African people and other European settlers at Lusaka. The African (Native) Commissioner in 1913

²⁸ Gann, *A History of Northern Rhodesia*, p.123.

²⁹ NAZ, HC/1/3/11, Native Commissioner to the District Commissioner at Broken Hill, 30/08/1913; <https://en.m.wikipedia.org/wiki/Biltong> Accessed on 16/01/2018.

³⁰ NAZ, HC/1/3/11, Native Commissioner to the District Commissioner at Broken Hill, 30/08/1913 and Sampson, *so this was Lusakaas*, pp.12-14.

³¹ NAZ, HC/1/3/11, Native Commissioner to the District Commissioner at Broken Hill, 30/08/1913.

reported that, “the Afrikaners at Lusaka live entirely on *nsima*, milk and biltong being their staple diet.”³² In order to produce biltong of high quality, the Afrikaners used methods that were different from those used by indigenous people like the Khoikhoi in South Africa who sliced the meat into strips, cured it with salt and hanged it up to dry. For the Afrikaners, in addition to using salt, they used special spices like pepper, coriander and cloves. These spices contained antimicrobial properties which not only preserved the meat but also added a distinctive flavour. It was this distinctive flavour in the biltong which made it a lucrative business especially with the local Africans at Lusaka as the Afrikaners bartered it for mealie meal and money among the white settlers.³³

The colonial state, through the African (Native) Commissioner ordered for an inquiry into Afrikaner way of life at Lusaka and discovered that they carried out illegal manufacture of biltong. The state argued that although the Afrikaners processed game meat into biltong, “their sanitary conditions were primitive; they camped in native huts and in wagons, conditions which the average educated Africans would scorn.”³⁴ The main concern of the state, at this time was to try and control the Afrikaner way of life so that they could conform to the British standard of civilisation. For this reason, Percy Sillitoe a police officer was sent from Livingstone to Lusaka in 1913 to open up a police post, and was instructed to carry out prevention of big-game poaching by Afrikaners who were considered to be addicted to this habit. The majority of them were seen to be crack shots and made a good trade by making biltong of their kill.³⁵

Although the colonial state used the excuse of preserving game and the primitive way of life of the Afrikaners as significant reasons for suppressing the biltong industry, its real hidden motive was to see to it that the industry did not progress. The state, at this time had not yet developed an official game preservation policy in the territory. The President of the BSACo, L.S. Jameson visited Lusaka in 1913. At a public meeting along Cairo road, he pointed out that, “I am

³² NAZ, HC/1/3/11, Native Commissioner to the District Commissioner at Broken Hill, 30/08/1913.

³³ Sampson, *so this was Lusakaas*, p.38; <https://en.m.wikipedia.org/wiki/Biltong> , Accessed 16/01/2018 and NAZ, HC/1/3/11, Native Commissioner to the District Commissioner at Broken Hill, 30/08/1913.

³⁴ NAZ, HC/1/3/11, Native Commissioner to the District Commissioner at Broken Hill, 30/08/1913.

³⁵ Sampson, *so this was Lusakaas*, pp.37-38.

not a game-preserved. I believe in preserving the farmer, and I would give the settler the right to shoot anything that interferes with the crops.”³⁶ If the colonial state’s main goal was to preserve game, it could have promoted the industry by encouraging the manufacture of biltong using beef. Between 1906 and 1913, the Susman brothers had already established cattle ranches such as Leopards Hill and Kabulonga. With the development of copper mines in the Congo from 1910 onwards, opportunities for the supply of beef and biltong were available. From 1914 up to the early 1920s, only the supply of beef was dominant in the Congo mines.³⁷ The other industry which flourished before World War One in the country was the production of rubber.

2.2.3. The Rubber Industry

At the beginning of 1900, rubber prices on the world market were high, and the industry had become a lucrative source of revenue for most governments in the world. The high prices on the world market encouraged the exploitation of wild rubber (*Landolphia* vines and *Carpodinus* roots) in the forest areas of North-Eastern and North-Western Rhodesia between 1890 and 1924.³⁸ In 1900, 75,000 pounds of wild rubber valued at £4,104 moved from Fife and Fort Jameson. It was one of the vital commodities which dominated trade in the territory.³⁹ Locally, rubber fetched three to six pence per pound. The total value of rubber exports in 1902 was £14,332 of 150,000 pounds while the value for 1903-1904 was £17,459. The value dropped to £2,602 in 1905 because of the Rubber Ordinance which the government had introduced in 1903.⁴⁰ Under the 1903 Ordinance, the possession of rubber became illegal because unscrupulous traders were using destructive methods of rubber extraction which destroyed both the vines and the roots.⁴¹ The 1903 Ordinance was followed by the imposition of export duty of four to nine pence per pound.⁴² To effectively exploit rubber therefore, the BSACo decided to

³⁶ Sampson, *so this was Lusakaas*, p.33.

³⁷ Hugh Macmillan, *An African Trading Empire; the Story of Susman Brothers and Wulfson 1901-2005* (London: I.B. Tauris, 2017), p. 99; Macmillan and Shapiro, *Zion in Africa the Jews of Zambia*, pp.28-29.

³⁸ Jonathan, “Exports from Northern Rhodesia 1899-1924”, p.19.

³⁹ Jonathan, “Exports from Northern Rhodesia 1899-1924”, p.19.

⁴⁰ Jonathan, “Exports from Northern Rhodesia, 1899-1924”, p.19.

⁴¹ Cullen Gouldsbury and Hubert Sheane, *The Great Plateau of Northern Rhodesia* (London: Edward Arnold, 1911), p.333.

⁴² Jonathan, “Exports from Northern Rhodesia 1899-1924”, p.19.

investigate the rubber resources of the territory between 1901 and 1909.⁴³ The Company recruited a Dutch expert Johande Joselin de Jong to investigate the rubber resources in the country. Having done his investigations, he presented a report in October 1910 on the rubber producing districts of Mpika, Chinsali, Kasama, Ndola, Kafue and Kasempa. Johande also presented a report on the Mirongo experimental plantation and the *Kaunga-Teka* rubber plant. The samples he collected from the Mirongo experimental plantation were the *Ceara* scrap rubber.⁴⁴ Johande's recommendation in the report was encouraging when he said that, "there is no doubt that a large industry can be opened and the country could benefit greatly by exporting its rubber resources."⁴⁵

Colin Hardbury the acting administrator of North-Western Rhodesia, affirmed this in 1907 when he stated that, "it is now ascertained that extensive tracts in North-Western Rhodesia and North-Eastern Rhodesia produce natural rubber of high commercial value."⁴⁶ Rubber forests were also located on the watershed of the Luangwa Valley, on the Luapula, Luansenshi, Lupososhi, on the banks of the Chambishi River and Lake Bangweulu.⁴⁷ In North-Eastern Rhodesia, rubber forests covered about 21,000 acres and rubber vines known as the *Landolphia* numbered 800,000. In 1910, samples of rubber from Northern Rhodesia passed tests at the laboratory in London and were recommended as good quality. In this same year (1910), rubber on the London market was four shillings per pound and the government of Northern Rhodesia even encouraged Africans in the country to pay hut tax using rubber.⁴⁸

It is not surprising, therefore that in 1913, a small experimental rubber factory was set up at Mirongo on the banks of the Chambishi River in Isoka district to effectively exploit the rubber resources. However, the factory was soon abandoned mostly because the state could not initiate the setting up of a scientific department of forestry to which people with exceptional technical knowledge in rubber production and manufacture could be assigned. Secondly, the Mirongo factory was far from the railway line, thereby leading to high transportation costs. Thirdly, the

⁴³ NAZ, A3/28/1, Mr. Acknowledge to the BSACo Authorities, 24/07/1909.

⁴⁴ NAZ, A3/28/2, Vine and Root Rubber in the Ndola district 1910.

⁴⁵ NAZ, A3/28/2, Vine and Root Rubber in the Ndola district 1910.

⁴⁶ NAZ, A3/28/2, Rubber industry in North-Western Rhodesia 1907.

⁴⁷ Gouldsbury and Sheane, *The Great Plateau of Northern Rhodesia*, p.333.

⁴⁸ Gouldsbury and Sheane, *The Great Plateau of Northern Rhodesia*, p.334-335.

outbreak of the First World War in 1914 contributed to the collapse of the industry in the territory due to a slump in rubber prices on the international market.⁴⁹ The other vital constraint on the rubber factory at Mirongo was that the government held the view that although the exploitation of wild rubber was a branch of the government Forestry Department, it was still a matter for private enterprise (*Laissez-faire* policy).⁵⁰ The government believed that private capital had to initiate industrial development in the country. The other industry which emerged during the Company rule and before World War One was the lime industry. For a good number of years, the lime industry was able to flourish but eventually collapsed towards the end of the 1920s.

2.2.4. Lime Industries at Lusaka, 1909 to the mid-1920s

An Italian settler G.B. Marrapodi started the first lime industry in colonial Zambia. He operated the lime kilns, first at Kalomo between 1909 and 1911, after which he moved to Lusaka and opened similar works in the Chinika area. Geological surveys which were carried out in Lusaka indicated that the area contained 88.2% caustic lime, which was suitable for exploitation. The abundance of lime resources led to the building of lime kilns marking the beginning of a flourishing industry in the territory. Marrapodi acquired a land grant of 640 acres for his lime works between railway mile pegs 1,937 and 1, 939½ on the east side of the railway line.⁵¹ He paid a £25 rent for this grant per annum. Marrapodi also constructed housing units for African workers on the same land. Four years after the arrival of the railway at Lusaka (in 1909), a potential shortage of labour at the lime works was reported. One kiln in use during 1913 is said to have produced 300 tons of lime, and the output for 1913/16 was 1,120 tons. The 1917/18 output was 650 tons showing a considerable drop compared to the 1913/16 output, possibly because of the war during this period. The 1918/19 output was 262 bags of 180 pounds.⁵²

The other two prominent businessmen in the lime industry were Rosazza and Percy Morton. Their lime works were located one-mile south of Lusaka on the west side of the railway. By

⁴⁹ Gouldsbury and Sheane, *The Great Plateau of Northern Rhodesia*, p.335.

⁵⁰ Gouldsbury and Sheane, *The Great Plateau of Northern Rhodesia*, p.335.

⁵¹ NAZ, KS A6/1, Chilanga District Notebook, pp.323-324 and UNZA, INESOR/30756.1, Mr. A.A. Beveridge, Notes on the History of Chilanga District 1954.

⁵² NAZ, KS A6/1, Chilanga District Notebook, pp.323-324.

1914, they had set up two kilns in which one kiln was capable of producing three and half tons of lime per day while another produced one ton per day. The total output for this kiln in 1913 was 10,738 bags equal to 976 tons of lime. The output for 1915/16 was 8,000 bags on Rosazza and Percy Morton's farms which they supplied to the mines at Elisabethville. The 1917/18 output was 8,500 bags while the 1918/19 output was 900 tons. They sold 1,200 bags of lime in Northern Rhodesia while the other 380 tons went to the Congo. The remaining 400 tons were exported to Southern Rhodesia. The output for the period 1919 to 1920 was 1,000 tons while that for the period 1921 to 1924 was 1,593 tons.⁵³ In 1918, the Public Works Department (PWD) even predicted that the lime works were destined to become a large industry in the country. However, contrary to the prediction by the PWD, by 1924 the industry began to decline drastically. The major constraint on the industry starting in 1916 was the failure by the authorities to control the floods at Lusaka.⁵⁴

The floods worsened during the 1925/1926 rainy season in which the town almost came to a standstill. The town was under water to a varying depth of between nine to 15 inches, and during this period all the lime kilns were flooded making production impossible.⁵⁵ What made the floods worse were the excavations which the railway company had made while constructing the railway at Lusaka. Since the land was flat, there was a need to raise the level of the railway road above that of the surrounding area by making excavations on each side. During heavy rains, the excavations collected water which further flowed into the stands and roads of the township. The people in the township together with the Management Board of Lusaka tried to stop the water flowing from the excavations by digging gravel into the pan and deposited it upon the stands and roads. This initiative further worsened the situation because other excavations developed and began to collect other pools of stagnant water. When the Lusaka Management Board approached the railway management over the issue, it blatantly refused to take responsibility.⁵⁶

⁵³ NAZ, KS A6/1, Chilanga District Notebook, pp.323-324; NAZ, KDC 6/1/6, Chilanga Sub-District Annual Reports, 1917-1920 and NAZ, KSA8/1, BSACo Annual Reports 1920.

⁵⁴ NAZ, KS A6/1, Chilanga District Notebook, pp.323-324.

⁵⁵ NAZ, B1/1/2/166, Extract of a letter from Superintendent of Public Works Department (PWD) to the Administration at Lusaka, 30/06/1918; NAZ, KS A6/1, Chilanga District Notebook p.324; NAZ, BS3/245, Memorandum on proposed drainage, 29/06/1918 and Sampson, *so this was Lusakaas*, pp.44-45.

⁵⁶ NAZ, KDC 4/2/1, Lusaka Management Board Meeting, 13/12/1918.

The urgency of the problem made the PWD offer a solution by suggesting the construction of two gutters along the front and centre roads connected to a diagonal drain under the railway to the Ngwerere River. The entire project was estimated to cost £1,600. However, the administration at Lusaka paid a deaf ear to these suggestions by the PWD and nothing was done about it and the floods continued to ravage the town in 1918.⁵⁷ In the following year, a petition made by stand holders did not move the administration. The only response the government gave was that it had tried to convince the railway company to help with the construction of the drainage system in the township, but it yielded nothing. The government also emphasized that even if the railway company had agreed to cooperate, “the administration would not enter into any arrangement unless assured those stand holders would be prepared to pay their portion of the cost of the work.”⁵⁸ The severe floods which continued up to 1926 made Lusaka suffer from serious health problems and a dangerous work environment. It was pointed out by the resident doctor at Lusaka that the latrines in the town were under water and human excreta could be seen floating upon the water. He lamented that such a state was a grave menace to the health of the community and also a disgrace to any administration.⁵⁹

The other constraint on the lime industry was lack of support from the administration at Lusaka as it considered the methods used by the lime manufacturers to have been very primitive. For example, the superintendent of PWD in 1918 stated that, “the present lime burners with their primitive methods cannot keep up the supply.”⁶⁰ One of the most outstanding obstacles on the lime industry was the high freight rates to Congo and competition from Southern Rhodesia. Between 1918 and 1919, Marrapodi alone had exported 157 tons of lime to Southern Rhodesia, 62 tons to Congo and supplied 43 tons locally.⁶¹ The years 1915 to 1916 were taken to be the period when the lime industry in the territory had reached its highest peak with production rising to a net worth of £6,000 on the market.⁶² From 1917 onwards, the net amount began to decline. Railway rates added an extra five shillings four pence per bag between Lusaka and the border.

⁵⁷ Williams, “The Early Years of a Township”, in Geoffrey Williams J. (ed.) *Lusaka and its Environs*, p.76.

⁵⁸ NAZ, BS3/243, Secretary to the Administration to C. Sutton, 26/02/1919.

⁵⁹ NAZ, B1/1/2/166, Health Officer to the Administration at Lusaka, 17/02/1926.

⁶⁰ NAZ, B1/1/2/166, Superintendent of PWD Livingstone to the Administration, 30/06/1918.

⁶¹ NAZ, B1/1/1, Visit of the Secretary of Agriculture of Northern Rhodesia to Katanga, 1921.

⁶² NAZ, B1/1/1, Visit of the Secretary of Agriculture of Northern Rhodesia to Katanga, 1921.

The Rhodesia railways charged a flat rate on goods from Southern Rhodesia and South Africa which were considered as domestic goods while goods from Northern Rhodesia were considered foreign, thereby subjecting them to high railway freight rates.⁶³

Between 1922 and 1924, lime production output drastically reduced to 268 and 273 tons respectively. By this time, Congo and Southern Rhodesia had developed their lime works, and this impacted negatively on the lime industry in Northern Rhodesia.⁶⁴ The lime industry's importance lay in the fact that it employed a good number of Africans. Between 1917 and 1918, Rosazza and Percy Morton employed 100 Africans and two Europeans while Marrapodi had 50 Africans and two Europeans. The former had to reduce their African labour force to 63 between 1922 and 1923 due to the rising cost of production. Production of lime continued to decline when Marrapodi died in September 1922. Marrapodi's wife and Percy Morton continued production up to the early 1930s, but their concentration shifted to the local market.⁶⁵ The high rentals charged by the authorities on the lime grants were brought to light by Percy Morton on his 20 acre lime grant which expired on 31 December, 1921. The original grant was for two years at a rent of £2 per month from 1 January, 1913 to 31 December, 1921. Thereafter, it was renewed for seven years at a rent of £5 per month from 1 January 1915 to 31 December 1921. Throughout 1921, Percy Morton had difficulties in paying his rentals. Morton, therefore, asked the acting Secretary of Mines in Livingstone to help convince the BSACo to reduce the rental charges on his lime grant.⁶⁶

Besides, Morton had made it clear that his lime business had been going down because of the high rent on his grant. Secondly, the opening of many lime works in Southern Rhodesia and the Congo reduced his output of lime to below half.⁶⁷ While informing the BSACo administration about Morton's request, the acting Secretary of Mines urged the authorities not to reduce the rent charged. He cautioned the BSACo authorities after enclosing a copy of Morton's letter for

⁶³ NAZ, B1/1/1, Visit of the Secretary of Agriculture of Northern Rhodesia to Katanga, 1921.

⁶⁴ NAZ, KS A6/1, Chilanga District Notebook, pp.323-324.

⁶⁵ NAZ, B1/48/1, Correspondence from J. Gibson Hall, Assistant Magistrate at Chilanga to the Secretary of Mines, 15/09/1922.

⁶⁶ NAZ, B1/48/1, British South Africa Company Memorandum on Percy Morton's 20 acre lime grant, 31/08/1922.

⁶⁷ NAZ, B1/48/1, British South Africa Company Memorandum on Percy Morton's 20 acre lime grant, 31/08/1922.

consideration, indicating that he was unable to recommend any reduction on the rent.⁶⁸ Despite the importance of the lime industry as a watershed in the process of developing local secondary industries, it was not given the attention it deserved. One of the main priorities of the state during this time was to intensify revenue collection and not local industrialisation.⁶⁹ The table below gives details on lime production at Lusaka between 1911 and 1924.

Table 1: Lime production at Lusaka, 1911 - 1924

Year	Rosazza/Morton Output (tons)	Marrapodi Output (tons)	Total	Value (£)
1911-12	n.a	n.a	1,191	3,297
1912-13	n.a	n.a	n.a	n.a
1913-14	976	300	1,276	3,504
1914-15	n.a	n.a	1,588	5,129
1915-16	654	1,200	1,774	6,000
1916-17	n.a	n.a	1,765	4,760
1917-18	680	650	1,330	n.a
1918-19	900	262	1,162	n.a
1919-20	1000	500+	1,500	n.a
1920-21	520	215	735	1,862
1921-22	442	165	607	n.a
1922-23	268	n.a	n.a	268
1923-24	n.a	n.a	n.a	n.a

Source: Williams, “The Early Years of the Township”, p.88 and NAZ, KS A6/1, Chilanga District Notebook, pp.223-224. n.a – not available.

⁶⁸ NAZ, B1/48/1, British South Africa Company Memorandum on Percy Morton’s 20-acre lime grant, 31/08/1922 and NAZ B1/48/1, British South Africa Company Memorandum, 27/08/1922.

⁶⁹ Sampson, *so this was Lusakaas*, p.35.

2.3. Industrialisation during the First World War

The outbreak of the First World War in 1914 offered opportunities for industrialisation in the form of import substitution. However, the BSACo did not take full advantage of war time scarcity to encourage the establishment of secondary industries in order to meet local demand. Ian Phimister, for example, while reflecting on World War One opportunities for industrialisation in the entire Southern African region stated that:

When the war broke out in Europe in 1914, the destruction of many international trading relationships and interruption of others initiated a period of unprecedented opportunity for Southern African countries' secondary industries. Freed from overseas competition, they had domestic and regional markets primarily to themselves.⁷⁰

In Northern Rhodesia, for instance, there was enormous demand for cigarettes during the First World War. The country experienced disruption of supplies of foreign manufactured cigarettes. The demand, therefore, led to the establishment of the first tobacco industry by the United Tobacco Company (UTC) in the Fort Jameson District. The industry began to manufacture cigarettes in 1914.⁷¹ Initially, between 1914 and 1915, capitalist tobacco production in Northern Rhodesia had increased to 500,000 lbs. It rose further to 600,000 lbs. in 1917/1918 and 800,000 lbs. in 1918/1919. Cultivation of tobacco on a commercial level was a predominantly white settler venture in the Fort Jameson area. Africans were excluded from growing Virginia flue-cured tobacco and only participated as cheap labourers on white-owned farms. From 1912 to the early 1920s a white-controlled tobacco industry flourished in the Fort Jameson District as a result of high prices on the world market and a ready market in South Africa.⁷² These factors encouraged a steady flow of European settler farmers to Fort Jameson. Within the Fort Jameson town, Europeans lived in residential areas for whites only such as Moth and Magazine and by 1902 the construction of a golf course in the town was complete. Dean argued that the cigarette factory was directed towards catering for the local market only in the Fort Jameson area. He

⁷⁰ Ian Phimister, *An Economic and Social History of Zimbabwe; Capital Accumulation and Class Struggles* (London: Longman, 1988), p.239.

⁷¹ NAZ, B1/1/9, Tobacco Factory in the Fort Jameson Area, 1914.

⁷² Ackson M. Kanduza, "The Tobacco Industry in Northern Rhodesia 1912-1939", *Journal of African Historical Studies*, Vol.16. No.2, (1983), pp.201-229.

noted further that it used to take three days to transport goods from Lusaka to Fort Jameson by road, thereby leading to transportation costs.⁷³

Apart from the demand for cigarettes, the outbreak of the First World War stimulated the demand for base metals in the country. Base metals like copper were mined in the Kafue Hook, at Kansanshi and Bwana Mkubwa mines during the war period. Other base metals included zinc and lead which were mined at Broken Hill. The latter metals were the major exports of Northern Rhodesia from 1915 to 1925. Copper was in high demand by the expanding electrical and automobile industries both during and after the war.⁷⁴ Lead and copper were also used in the manufacture of spelter. The price for spelter during the war period was very high at £100 per ton. At the Broken Hill mine, the manufacture of lead ingots by the Rhodesian Lead and Zinc Syndicate Company began in 1915 after procuring two blast furnaces. In 1918 alone, 14,704 tons of manufactured lead ingots and lead pig were produced for export to Britain at the value of £215,967.⁷⁵ Despite the increase in the finances of the country, industrialisation was not given the attention it deserved.

The other industry which began large scale production during the First World War was the Zambezi Sawmills. Although its origin dates back to 1911/12, it only picked up during the First World War. The outbreak of the war was a significant stimulant in the setting up of the sawmill industry in the territory. The war led to the disruption of external supplies of manufactured goods, especially of furniture. The supply of furniture became erratic and unreliable.⁷⁶ J.D. Martin made it clear by saying that the formation of the Zambezi Sawmills was as a result of the need to supply furniture which was in high demand among the settlers on both sides of the Zambezi and also to supply railway and mining sleepers to South Africa and the two Rhodesia.⁷⁷

⁷³ NAZ, B1/1/9, Tobacco Factory in the Fort Jameson Area, 1914 and Deane, *Colonial Social Accounting*, p.48 and p.54.

⁷⁴ Andrew Roberts, *A History of Zambia* (London: Heinemann, 1976), pp.176-185.

⁷⁵ Bancroft, *Mining in Northern Rhodesia*, p.116 and E.A. Smith, *The Zinc Industry* (London: Longman, Green and Company, 1918), p.142.

⁷⁶ NAZ, SEC1/159, Director of Zambezi Sawmills to the Pim Commission, 1938 and Iven Mweetwa Nzila, "The Zambezi Sawmills; A Study of Forest Exploitation in Western province of Zambia 1910-1968", MA Dissertation, University of Zambia, 1987, p.16.

⁷⁷ J.D. Martin, "The Mukusi (*Baikiea Plurijuga Harms*) Forests of Northern Rhodesia", in the Department of Agriculture, *Second Annual Report Bulletin*, 1932 (Livingstone: Government printers, 1932), p.74.

In order to exploit the timber resources of the territory, the BSACo gave permits to the Zambezi Sawmills in Crown land estates of Mapanda, Kaoma, Kazungula, Katombora, Malanda, Siburu and Bombwe. On 18 September, 1915 the owners of the Zambezi Sawmills, Messers Trombas and Jacobs whose headquarters were at Livingstone, obtained permission to cut timber in the Malanda and Mapanda forests and on the south bank of the Machili River in the Senkobo sub-district. All timber cut or manufactured had to be measured or checked for royalty at rail terminus pumping station in Livingstone before delivery to purchasers. Trees less than twelve inches in diameter could be cut for the manufacture of railway sleepers while trees less than eight inches in diameter were for the manufacture of handles.⁷⁸

The royalty rate for all timber sawed or manufactured to be paid by the company was also agreed. For the first 30,000 railway sleepers manufactured, three pence per sleeper was charged. The three pence were subject to revision but could not exceed sixpence per sleeper in any case. The charge for mining timber was three pence per cubic foot on sawn timber while for logging it was one penny per cubic foot and one penny per dozen was charged for handles.⁷⁹ The sawmill industry faced many constraints beginning in the post-war period. The first was the lack of a forestry department in the territory. The colonial state was not able to put up a forest department which would have ensured protection and regeneration of the forests. The survival of the industry depended on managing the forests well through regeneration, protection from fire and careless cutting of trees. The *report of the commission appointed to enquire into the financial and economic position of Northern Rhodesia* (Pim commission) in 1938 argued that the forests were from the start treated as mines which had to be worked out and then abandoned. The BSACo had made agreements with the Zambezi Sawmills which made the destruction of forests inevitable.⁸⁰

According to Nzila, the colonial state was fully aware of the value of forests to the nation and the local people but deliberately allowed destructive exploitation of the resources.⁸¹ At the

⁷⁸ NAZ, B1/105/1, Vol. II permits for Zambezi Sawmills to cut timber, 18/08/1915.

⁷⁹ NAZ, B1/105/1, Vol. II permits for Zambezi Sawmills to cut timber, 18/08/1915.

⁸⁰ NRG, *Report of the Commission Appointed to enquire into the Financial and Economic position of Northern Rhodesia (Pim Report)* (Lusaka: Government printers, 1938), p.245 and NAZ, SEC 1/759, Director of Zambezi Sawmills to Pim Commission, 1938.

⁸¹ Nzila, "The Zambezi Sawmills", pp.26-27.

same time, it was pointed out by D. Stevenson an agriculture officer that the forests constituted raw materials which, if appropriately managed were capable of meeting many of the country's timber requirements.⁸² Compounding to this problem was the failure by the company to prevent severe fires in the areas cut over under the lease from the BSACo. Complete protection from the fires was supposed to be a priority for preserving forests. The *Pim* commission concluded that the colonial state showed no urgency to regenerate the forests after cutting and damage by fire.⁸³

Apart from the demand for timber and wood products, there was a demand for saltpetre and potassium nitrate salts, especially in Britain. In 1916, the manufacture of gun powder by Africans in the Chilanga sub-district attracted the attention of the colonial state. The state carried out investigations so that, if possible, the industry could be set up. The first investigation by J.W. Sharrat, a probationer at the magistrates' office in Chilanga offered hope for the setting up of the industry. After visiting all the villages in the Chilanga sub-district which manufactured gun powder, Sharrat discovered that the ingredients used were saltpetre, potassium nitrate salts and charcoal. African gun powder cost one shilling per pound or a pot of about 15 pounds for ten pence in 1916. In his report, Sharrat recommended highly that the manufacture of gun powder formed a recognized part of the African life in these villages and that there was no reason why the state could not establish an industry. He further noted that potassium nitrate salts and saltpetre deposits were of considerable size in the region.⁸⁴ Samples of the saltpetre and potassium nitrate salts were collected from the villages and were sent to the Imperial Institute in London for analysis. After the analysis, a detailed report was published on 6 July, 1916. Upon examination, it was found that the samples contained 3.5% potassium nitrate. The results obtained further indicated that with the high prices on the international market for potassium nitrate salts in 1916, it was possible to set up the industry provided the potassium salts were available in sufficient quantity.⁸⁵

⁸² D.Stevenson, "Some important native timbers", *First Annual Report Bulletin of the Department of Agriculture 1931* (Lusaka: Government printers, 1931), p.43.

⁸³ NRG, *Pim Report*, p.245.

⁸⁴ NAZ, B1/29/1, Manufacture of gun powder in the Chilanga Sub-District.

⁸⁵ NAZ, B1/29/1, Imperial Institute Report on saltpetre rock from Northern Rhodesia, 26/10/1916.

To be sure that Africans were not adding sulphur in the manufacture of gunpowder, enquiries were made from the local merchants at Lusaka in 1916. Only two storekeepers Messrs. King and E. Kollenberg, admitted stocking sulphur. The former agreed having imported 100 pounds of which 50 pounds was sold to Afrikaner farmers. Afrikaner farmers used to mix sulphur with mealie meal for treating *Senkobo* skin diseases on their cattle. E. Kollenberg on the other hand sold 100 pounds to Europeans during the previous year and had 40 pounds in stock and that none of the merchants had sold any sulphur to Africans at Lusaka.⁸⁶ The report by the Imperial Institute on saltpetre and potassium nitrate salt samples from Northern Rhodesia attracted mixed feelings among the Directors of the BSACo. The Company Directors argued that it was not possible to determine the quantities and sizes of the saltpetre and potassium nitrate salt deposits in the region. Therefore, a second investigation was carried out by A.H. Ackermann, the resident mining engineer. Ackermann's findings were negative. He revealed that the saltpetre and potassium nitrate salts which Africans were using to manufacture gun powder were as a result of the colonies of baboons which inhabited the caves in the limestone. The baboons used to urinate on the limestone thereby leading to the formation of saltpetre and potassium nitrate in the same limestone rocks. Secondly, the Chilanga area was said to be too small to support extensive mining of saltpetre and potassium nitrate. Lastly, there was no capital to put up the plant despite the enhanced value of the saltpetre and potassium nitrate owing to the war.⁸⁷

Consequently, the whole project did not come to fruition as a commercial undertaking.⁸⁸ The failure by the state to develop the gun powder industry at Chilanga denied Africans an opportunity to develop their indigenous manufacturing skills which could have helped to create local markets for manufactured goods. In addition, the African gun powder manufacturers, in spite of their familiarity with gun powder making still needed assistance from the government, especially on how to refine the local saltpetre and potassium nitrate. The obligation of the BSACo under the Lochner treaty signed on 26 June, 1890 was to carry out manufacturing using the local resources no matter how little they were. Secondly, the Company was mandated to

⁸⁶ NAZ, B1/29/1, British South Africa Company Memorandum, 11/12/1916.

⁸⁷ NAZ, B1/29/1, Chilanga saltpetre findings by A.H. Ackerman, 28/06/1917.

⁸⁸ NAZ, B1/29/1, Chilanga saltpetre findings by A.H. Ackerman, 28/06/1917.

carry out commercial or other trading business and also to civilize the local people.⁸⁹ Most importantly, Africans in Northern Rhodesia deserved to have better industrial establishments because they contributed enormously by offering cheap labour and taxation. Gann, for example, pointed out that between 1910 and 1911, the income from African taxation alone amounted to over £57,000 out of a total of £95,000 in Northern Rhodesia.⁹⁰ During the First World War, there was a good demand for potassium nitrate salts and saltpetre in the United Kingdom, and there were considerable quantities of imports. See table 2 below.

Table 2: Value and quantity of saltpetre and potassium nitrate salts on world market, 1914 -1915

Imports to the UK	1914 (Quantity in tons)	Value	1915 (Quantity in tons)	Value
From British possessions	10,472	£109,629	13,820	£363,855
From foreign countries	10,472	£120, 615	13,820	Not available
TOTAL	10,472	£230,244	13,820	£363,855

Source: NAZ B1/29/1 Imperial Institute to BSACo Directors 17 November, 1916.

Most of the potassium nitrate salts imported from British possessions came from India while that from Europe came from Germany. During this time, the price of refined potassium nitrate salts and saltpetre in the UK was about £56 per ton while the price before the war was about £25 per ton.⁹¹

⁸⁹ NARN, *Occasional Papers*, pp.8-10; Needham, Mashingaidze and Bhebe, *From Iron Age to Independence*, p.132.

⁹⁰ Gann, *The Birth of a Plural Society*, p.48.

⁹¹ NAZ, B1/29/1, District Commissioner at Broken Hill to the Secretary for mines, Livingstone, 12/01/1917.

2.4. Industrialisation in the post War One period

The post-war period offered more opportunities for industrialisation in Northern Rhodesia, but only a wheat flour milling industry was started in 1923. The other possible industry which was supposed to start after the war was a brewery for the manufacture of commercial alcohol, but the colonial state did not support it. It was the North-Western Rhodesia Farmers' Cooperative Society (NWRFCs) that came up with an idea to set up a brewery after the war. In 1920, the NWRFCs wrote to the Imperial Secretary at Cape Town to find out what steps the Committee of the Privy Council for Scientific and Industrial Research had to take regarding the manufacture of commercial alcohol in Northern Rhodesia.⁹² The Committee had earlier on made enquiries concerning the possibilities of starting such an industry after the end of the war. The suggestion by the NWRFCs to put up a brewery was as a result of the surplus maize that was anticipated to take place after the war. NWRFCs contended that all the returning soldiers in the country were to engage in maize growing, such that there was a high danger of the crop being over-produced and going to waste if a brewery was not set up.⁹³

It was in this regard that the NWRFCs urged the Privy Council to help them get a plant for the manufacture of commercial alcohol so that the surplus maize could be processed into alcohol. For example, the 1919 to 1920 farming season produced 50,000 surplus bags of maize while estimation for the 1920 to 1921 farming season was 100, 000 surplus bags. The NWRFCs further explained that the manufacture of commercial alcohol was going to be of great benefit not only in Northern Rhodesia but also the entire Central African British Empire. To achieve this goal, the NWRFCs even suggested that the best place for the brewery was Kafue owing to it being the geographical centre of the country and that it was equidistant from the great maize growing districts in Southern province, and also due to its unlimited water supply.⁹⁴ Although the results revealed that 95% alcohol could have been produced in the territory after the war, the government argued that it was not the right time for the industry to be set up. The government's position was that the alcohol industry could only start once maize had reached the pre-war price

⁹² NAZ, B1/1/9, NWRFCs to the Privy Council, 25/10/1920.

⁹³ NAZ, B1/1/9, NWRFCs to the Privy Council, 25/10/1920.

⁹⁴ NAZ, B1/1/9, NWRFCs to the Privy Council, 25/10/1920.

of 9/-12/- per bag or £4: 10/- to £6 per short ton of 2000 pounds.⁹⁵ Consequently, the suggestion to establish a brewery in 1920 could not come to fruition. Soon after brushing off the suggestion to set up the brewery, the government promulgated what came to be known as the Northern Rhodesia Companies' Proclamation or company law in 1921.⁹⁶

This proclamation was the first step in the right direction towards the formation, management and administration of companies in Northern Rhodesia. It was read as the Northern Rhodesia Companies' Proclamation No. 18 of 1921. The proclamation was a replica of the British Companies Act which Britain enacted in 1908 to regulate companies. Before the companies' proclamation of 1921, Northern Rhodesia was using a system of registration of deeds similar to the one issued in Cape Town. In Northern Rhodesia, the 1921 proclamation led to the formation of companies with limited liability and that they could either be public or private.⁹⁷ The first company to be incorporated under the 1921 Companies' Proclamation Act was the Northern Rhodesia Creamery Ltd on 1 February, 1922 at the Choma office with a nominal capital of £2000. It was given certificate No.1 and by the end of Company rule on 1 April, 1924, twelve companies had been registered and incorporated in Northern Rhodesia.⁹⁸ Manufacturing industries established and incorporated after 1 February, 1922 were intended to reduce importation of foreign manufactured goods in the country. For example, the first company to be formed with a view to reducing importation of flour was the Northern Rhodesia Milling Company Ltd in 1923.⁹⁹

2.4.1. Formation of the Northern Rhodesia Milling Company Ltd

The idea behind the setting up of a flour mill at Lusaka by the Northern Rhodesia Wheat Growers Association was because wheat which was grown in the territory was sent to Southern Rhodesia to be ground into flour. The cost to and from Southern Rhodesia by train was 15

⁹⁵ NAZ, B1/1/9, His Excellency the High Commissioner's Dispatch No.1300, Alcohol within the Empire, 1920.

⁹⁶ NAZ, BS3/286, The Northern Rhodesia Companies' Proclamation of 1921; Nzila, "The Zambezi Sawmills", p.40 and Munalula V. Lishumba, "Company Law in Zambia; Its impact on members, creditors and workers", Master of Law Dissertation, University of Zambia, 1981, pp.6-7.

⁹⁷ NAZ, BS3/286, Northern Rhodesia Companies' Proclamation of 1921.

⁹⁸ PACRA, *First Companies' Register 1922-1952* (Lusaka: PACRA, n.d), pp.1-12.

⁹⁹ NAZ, BS3/286, Northern Rhodesia Milling Company Ltd prospectus.

shillings per bag. In 1922, for instance, the importation of flour and wheaten meal from both Southern Rhodesia and South Africa had reached 654,000 pounds in Northern Rhodesia alone while flour from the South into the Belgian Congo was 929,000 pounds.¹⁰⁰ This was a clear indication that once the flour mill was set up at Lusaka, it could not only rely on the local market but also in the Congo market. On 20 March, 1922, the Northern Rhodesia Wheat Growers Association wrote to the Land Board requesting for a one-acre plot at Lusaka on a five year lease. Rent was pegged at £6 per annum payable in advance but with an option to purchase for £100 once the flour mill started operating. The flour mill plant site was finally located between Cairo road and the railway (the present location of National Milling along Cairo road) known as plot No.103.¹⁰¹ It was recorded in the *Annual Report of Agriculture* in 1921 that the second most important crop after maize produced entirely in Lusaka was wheat. There was a considerable increase in the acreage and total yield of wheat between 1918 and 1920.¹⁰²

The Northern Rhodesia Milling Company Ltd was incorporated on 25 May, 1923 with a nominal capital of £10,000 divided into 10,000 ordinary shares of £1 each. The Directors were Randolph Baker, Messrs. King, Hanslett, J. Brown, Baxter, the two Kollenberg brothers and Mr. McKenzie, who was the secretary of the Cooperative Society. The milling machines were purchased from Thomas Robson and Son Ltd (Flour Mill Engineers) of England. The machines were worked by suction gas and had a capacity to produce 1,200 pounds of wheat per hour. From this, up to 15,000 bags per annum could be produced. By October 1923 the flour mill was operational at Lusaka.¹⁰³ However, the *Livingstone Mail* reported in 1924 that the wheat flour industry at Lusaka was a short-lived enterprise. The primary constraint on the flour industry was the customs agreements and the railway freight rates. Under these customs agreements, which came into being immediately company rule ended, manufactured goods from both South Africa and Southern Rhodesia were allowed to enter the country duty-free. Northern Rhodesia was likely to benefit from these customs agreements. However, she did not because the manufacturing sector was still undeveloped during this time. If the manufacturing sector was

¹⁰⁰ NAZ, BS3/286, BSACo Memorandum, 06/04/1922; NAZ, BS3/286, Annexure A. P.5; NAZ, BS3/286, Assistant Secretary to His Honour the Administrator, Sir Drummond Chaplin, 07/09/1922 and NAZ, BS3/286, Northern Rhodesia Milling Company Ltd Prospectus.

¹⁰¹ NAZ, BS3/286, Northern Rhodesia Milling Company Ltd Prospectus.

¹⁰² NRG, *Agriculture Annual Report, 1920* (Livingstone: Government printers, 1921), p.16.

¹⁰³ NAZ, BS3/286, Northern Rhodesia Milling Company Ltd Prospectus.

already developed at the time of the customs agreements, it was going to be possible for the country to export its manufactured goods to countries in the south including Bechuanaland and in the Northern Rhodesia-Congo Basin Area.¹⁰⁴

At the time of entering into these customs agreements, Southern Rhodesia and South Africa had enacted tariffs which protected their local industries against competition. For example, manufactured goods which sold at prices ranging from £100-£200 in South Africa could sell in Southern Rhodesia at a higher price of £250-a price that was above the local production cost of the same goods. Equally, manufactured goods from Southern Rhodesia sold at a higher price in South Africa. Ironically in Northern Rhodesia, these same goods were merely dumped at a give-away price of £100 or less.¹⁰⁵ This amount was below the local production cost of the same goods. This state of doing business forced many upcoming industries like the Northern Rhodesia Milling Company Ltd to close down. In other words, these customs agreements subjected Northern Rhodesia to the dumping of cheap surplus manufactured goods from the south.

Although the cheaper manufactured goods from the south had a beneficial effect of keeping the cost of living in the country low which was an essential factor for a country that was situated far away from the sea, it did not augur well with the country's quest to develop local secondary industries. Compounding the problem of customs agreements was the issue of railway freight rates. According to Kanduzza, the Rhodesia Railways aimed at promoting Southern Rhodesian goods both to the Northern Rhodesia and Congo markets by coming up with a railway freight rate reduction on all manufactured goods from the latter.¹⁰⁶ This strategy lured customers in Northern Rhodesia and the Congo as they preferred buying cheaper goods from the South instead of local goods. The result was that the upcoming local secondary industries in Northern Rhodesia lost the privilege of being nearer to the market than Southern Rhodesian producers.¹⁰⁷

¹⁰⁴ *Livingstone Mail*, 09/10/1924 quoted in Williams, "The Early Years of the Township", p.88.

¹⁰⁵ NAZ, SEC 1/279, Customs Agreements between the Union of South Africa and the governments of Northern Rhodesia and Southern Rhodesia.

¹⁰⁶ Ackson M. Kanduzza, "The impact of Railway Rates and Customs Agreements on Settler farming in Northern Rhodesia; The case of maize and cattle farming", MA Dissertation, University of Zambia, 1979, pp.150-151.

¹⁰⁷ Kanduzza, "The impact of Railway Rates and Customs Agreements on Settler farming in Northern Rhodesia", pp.150-151.

2.5. End of the BSACo rule in Northern Rhodesia

The BSACo relinquished its powers of administration to the British government on 1 April, 1924. The Company had financial problems, which made the administration difficult. The argument was that the Company had spent a lot of money in building the railway, on defence and other developmental projects in Northern Rhodesia but the returns were minimal and had not made any payment on dividends. During incorporation in England, the Company had a share capital of £1 million, but its paid-up capital in 1923 had risen to £9 million with substantial revenues deriving from the mineral and land rights it possessed. To appreciate the Company's administrative work between 1890 and 1924, the British government paid it £3,750,000 in 1924.¹⁰⁸ Such colossal sums of money went to the Company at a time when the country's industrial sector needed attention for it to develop. Berger argued that when the Company rule came to an end, the royalties which it received stood at £12,781 but kept on increasing such that in 1937 they were valued at £300,000 and soared to £400,000 after the end of the Second World War. In 1963, the total royalties paid to the Company amounted to £160 million.¹⁰⁹ Thus, it can be argued that despite having been making so much money, the Company used financial problems as the key reason for leaving Northern Rhodesia.

2.6. Conclusion

This chapter has traced the origin and development of industrialisation in the early years of colonial rule between 1890 and 1924. The chapter has demonstrated that there were small industrial establishments in the country during the early years of colonial rule. These included provision of purified pumped water, thermal electricity, lime and milling industries. Other industries included meat processing (manufacture of biltong), rubber production, manufacture of copper and lead ingots, sawmill and a tobacco industry. Furthermore, it was argued that there were possibilities of setting up an industry to manufacture gun powder and also commercial alcohol, but the government did not support these. The government believed in the *laissez-faire*

¹⁰⁸ William J. Barber, *The Economy of British Central Africa; a case study of economic development in a dualistic society* (London: Oxford University press, 1961), p.14 and FRN, *Handbook to the Federation of Rhodesia and Nyasaland* (Salisbury: Government printers, 1960), p.793.

¹⁰⁹ Berger, *Land, Race and Colonial Rule*, pp.10-11.

policy (industrial development was regarded as an endeavour for private undertaking). The next chapter will look at the significant constraints on industrialisation under the Crown government rule from 1924 to 1952.

CHAPTER THREE

SIGNIFICANT CONSTRAINTS ON INDUSTRIALISATION UNDER THE CROWN GOVERNMENT RULE, 1924 -1952

3.1. Introduction

This chapter explores the significant constraints on industrialisation under the Crown Government rule between 1924 and 1952. The chapter reveals that the significant constraints on industrialisation identified during this period include the *laissez-faire* policy, formation of the Trade Development Board (TDB), declaration of Ndola as the commercial, industrial and distribution centre, loss of income tax, and deliberate delay to develop hydro-electric power stations. It argues that the government intentionally failed to take advantage of the opportunities which the Great Depression, Colonial Development Fund Act (1929) and the Second World War offered to set up industries. The chapter demonstrates that the introduction of the Advisory Committee on Industrial Development (ACID) in 1946, the Northern Rhodesia First Development plan (NRFDP) in 1947 and the Industrial Loans Board (ILB) in 1951 did not lead to local industrialisation. Besides, the chapter shows that the industries set up during this period were those which manufactured soap, cement and its associated products and textile products. It is also argued that the establishment of the lime, Oxygen and Acetylene, and Bitumen industries was intended to serve the needs of the mines only. Lastly, other industries established were intended to contribute to the war effort.

3.2. Legislative Council debates on local industrialisation

During the first session of the LEGCO debates in May 1924, the issue of starting local industrialisation was debated at length by the members. It was the view of many members that the government had to consider developing secondary industries in the country.¹ Leopold F. Moore (Member for the Livingstone and Western Electoral area) for example, reminded the government about the report which the African Concessions Syndicate Company Ltd (ACSC) had published in 1901. One of the important recommendations in the report was that, “the industrial future of the country would depend on developing cheap hydro-electricity from the

¹NRG, *Legislative Council Debates; First Session of the First Council, 23 May, 1924*, p.100.

latent power which the Victoria Falls possessed.”² At the beginning of 1901, the ACSC Ltd was granted a concession by the BSACo to develop and manage the water power of the Victoria Falls for a period of 75 years.³ The report further recommended that the proximity of the coal fields at Wankie and the water power at the Victoria Falls was going to stimulate the establishment of a big manufacturing centre in the two Rhodesia.⁴ However, the ACSC Ltd handed over its concession to the Victoria Falls and Transvaal Power company Ltd to develop a power station at the falls in 1906.⁵ The latter companies could not immediately embark on the project not until 1936.

It was this delay by the two power companies which led to persistent pressure on the government in the LEGCO. The members felt that the industrial development of the country depended on developing cheap hydro-electric power at the falls. For instance, Mr Douglas E.C.R. Stirke (Member for the Midland Electoral Area) consistently tried both in the 1926 and 1927⁶ LEGCO sessions to find out if any steps had been taken since 1924 to develop a power station at the falls. However, from 1924 up to 1927, there was no concrete step which had been taken by the government to develop hydro-electric power at the falls for economic development. The government instead preferred private capital to develop hydro-electric power stations in the country. The response given by the Governor to Mr. Stirke’s question on the power project during the 1927 LEGCO session gives us a glimpse of the government’s policy on local industrialisation during this period. He said emphatically that, “the development of a power scheme of this nature could hardly be undertaken by the government but by private enterprise.”⁷ This quotation makes it clear that the policy of the government on local industrialisation was that of *laissez-faire* which entailed that private capital had to initiate it and not the government.

² www.tothevictoriafalls.com/.../power.htm... Accessed on 16/08/2018 and NRG, *Legislative Council Debates; First Session of the First Council, 23 May, 1924*, p.100.

³ www.tothevictoriafalls.com/.../power.htm... Accessed on 16/08/2018.

⁴ www.tothevictoriafalls.com/.../power.htm... Accessed on 16/08/2018.

⁵ www.tothevictoriafalls.com/.../power.htm... Accessed on 16/08/2018.

⁶ NRG, *Legislative Council Debates; First Session of the Second Council, 14 September, 1926* (Livingstone: Government printers, 1926), p.69 and NRG, *Legislative Council Debates; Second Council, 11 February, 1927* (Livingstone: Government printers, 1927), p.69.

⁷ NRG, *Legislative Council Debates; First Session of the Second Council, 14 September, 1926*, P.185.

As a result of the continued pressure to encourage local industrialisation in the LEGCO, the government was compelled to invite the Consulting Engineers to the Crown Agents for the colonies (CETCA) in 1931 to study the possibility of developing a hydro-electric scheme at the Victoria Falls for industrial purposes. The CETCA presented its report to the government on 21 May, 1931.⁸ This report, just like the one published in 1901, recommended succinctly that the existence of cheap hydro-electric power at the Victoria Falls and coal available at Wankie would ultimately lead to the establishment of secondary industries around Livingstone.⁹ The report further noted that once power developed at the Victoria Falls, it would make it possible to even establish at Livingstone a smelter for refining of electrolyte copper. However, the government was still not convinced by these recommendations. The new Governor for instance, James Crawford Maxwell in 1931 argued that:

At present, the use of electricity either for lighting or power is negligible. The European population is small in Livingstone. It is an essential factor because power cannot be sold so cheaply. We have been told that other industries would be developed if we have electrical scheme put in, which is all very vague. What are they going to be? Nobody has told us what they are going to be.¹⁰

The recommendation by the CETCA for the government to consider establishing a smelter at Livingstone did not come to pass. In June 1932, the British government announced that a company known as the British Copper Refinery Ltd was already underway in erecting a fire refinery at Prescott in Lancashire England where Northern Rhodesia's electrolyte copper went for refining. The result, therefore, was that the government strongly opposed the development of a big hydro-electric scheme for two significant reasons. Firstly, the government argued that construction of a big hydro-electric station would take away the beauty of the Victoria Falls. Secondly, there was also the fear that the move would sacrifice other commercial undertakings, primarily the catering of tourists who came to see those falls.¹¹

⁸ NRG, *Legislative Council Debates; Fifth Session of the Third Council, July 1931* (Livingstone: Government printers, 1931), p.22.

⁹ NRG, *Legislative Council Debates; Fifth Session of the Third Council, July 1931*, p.23.

¹⁰ NRG, *Legislative Council Debates; Fifth Session of the Third Council, July 1931*, p.34.

¹¹ NRG, *Legislative Council Debates; Third Council, July 1932* (Livingstone: Government printers, 1932), p.35.

With these two primary reasons put forward, the government announced in the LEGCO in May 1935 that the construction of a small hydro-electric station on the eastern cataract of the falls would commence soon.¹² The construction of a small power station by the Victoria Falls and Transvaal Power company began in June 1936. The station composed of station (A) with four units of two megawatts (MW) each. The power station was officially opened on 16 March, 1938 by Governor Hubert Young. In 1949, the Government purchased the Victoria Falls power station at the cost of £104,000.¹³ The development of big hydro-electric power stations was further delayed in the country because in 1937, the government facilitated the agreement between the copper mining companies and the Rhodesia Railways in which the latter would transport coal from Wankie to the Copperbelt at reduced prices for a period of twenty years. The mining companies on the Copperbelt would now depend on cheaper deliveries of coal to meet their energy requirements.¹⁴ From the preceding discussion, it is evident that when the territory came under the Crown government rule, the country still lacked ample and cheaper hydro-electricity. This was a significant constraint on the development of local secondary industries. Needless to say that industrialisation all over the world is influenced by the availability of cheaper sources of energy such as hydro-electricity. In support of this argument therefore, Kimble contended that, “the key to national greatness is industry and the key to the industry is hydro-electric power.”¹⁵

3.3. The Great Depression and policies on local industrialisation

Apart from the hydro-electricity constraint, the Crown government deliberately failed to take advantage of the opportunities which the Great Depression period offered to set up local secondary industries. The Great Depression began in 1929 in the United States of America. During the period of the depression, there was economic failure affecting trade, banking services, investment opportunities, employment as people became unemployed and generally led to a low

¹² NRG, *Legislative Council Debates; Third Session of the Fifth Council, 1-10 May, 1935* (Lusaka: Government printers, 1935), p.7.

¹³ www.tothevictoriafalls.com/.../power.htm... Accessed on 16/08/2018.

¹⁴ Tindall, *A History of Central Africa*, p.273.

¹⁵ George H.T. Kimble, *Tropical Africa Vol. I Land and Livelihood* (New York: Baltimore press, 1960), p.394.

standard of living.¹⁶ In 1930, only two mines, Roan Antelope and Nkana were producing copper while Mufulira, Nchanga, Chambishi and Kansanshi mines were closed due to the depression.¹⁷ Copper prices which varied between £56 and £77 in the years 1921 to 1928 sharply rose to £100 a ton in 1929. However, the Great Depression struck the copper industry in the country in 1931. The price of copper reduced from £100 to £47 and finally £27 a ton.¹⁸ Since a good number of mines were closed, many Africans and Europeans lost their jobs. After massive job losses in 1932, the combined labour force at the two mines in operation (Roan Antelope and Nkana) was 5,831 Africans and 959 Europeans. Apart from the copper mining industry, losses of jobs occurred also at the Zambezi Sawmills. The workforce at the latter reduced from 2,933 in 1932 to 1,700 in 1933.¹⁹ The government appointed a committee on 3 October, 1932 whose task was to investigate the impact of unemployment in Northern Rhodesia and also to make recommendations on how to ameliorate the unemployment situation. In the first place, the colonial state argued that Africans who had lost jobs on the mines were not severely affected much because they quickly returned to their villages where they continued with their economic ways of life.²⁰

The cause of unemployment according to the committee was that the country's prosperity was bound up with one industry only, the mining industry. The committee noted that it was reasonable to expect high job losses during times of economic recession in countries with one primary industry, as was the case in Northern Rhodesia. It predicted further that unless something was done quickly, unemployment and destitution was likely to increase by 1 April, 1933 in the country. The committee therefore, highly recommended that the government had to quickly initiate the setting up of local secondary industries to cushion unemployment during the Great Depression period. The government was reprimanded to renounce its reluctance towards

¹⁶ J.F Munro, *Africa and the international Economy* (London: J.M. Dent and Sons Ltd, 1975), p.150.

¹⁷ E.A.G Robinson, "The Economic Problem", in J. Merle Davis (ed.), *Modern Industry and the African; An Enquiry into the effect of the copper mines of Central Africa and the work of Christian Missions* (London: H.M.S.O, 1938), p.356.

¹⁸ Robinson, "The Economic Problem", p.144.

¹⁹ Nzila, "Zambezi Sawmills", p.45.

²⁰ NAZ, SEC 3/65, Vol. I Northern Rhodesia Governor to Colonial Secretary, 01/06/1932 and NRG, *Report of the Government Unemployment Committee 1932*, (Livingstone: Government printers, 1932) p.10.

setting up local industries. Thus, the committee told the government to consider proposals for the establishment of local secondary industries and to examine representations sympathetically for protective duties. This meant either revoking or reviewing the customs and tariff agreements with Southern Rhodesia and South Africa which were working to the disadvantage of local secondary industries in the country.²¹ The local secondary industries which the committee identified for immediate undertaking during the Great Depression period were the manufacture of cigarettes, beer, explosives, copper and zinc wares, jams, oils, soaps and other items involving the use of local products. These industries would act as a way in which small beginnings in economic diversification and industrial development would have taken place during the Great Depression period.²² Scholars such as Young have argued that the colonial state in Northern Rhodesia deliberately decided not to take action according to the recommendations of the committee and made sure that the customs and tariff agreements with the two latter countries in the south remained in force.²³

Even though there was enough money in the reserves at the beginning of the Great Depression in 1929, the government was not willing to diversify into setting up local secondary industries. Its attitude towards local industrialisation was still ambivalent. Instead, the government exonerated itself and argued that the BSACo had left the country in a very backward state and that it could not embark on local industrialisation on its own. Thus, much of the reserved money had to be expended on public buildings, municipal requirements, communication infrastructure, surveys and agricultural developments so that the towns coming into existence had essential services.²⁴ These were capital projects which could not be achieved using the government revenue alone. Money had to come from somewhere, and it was announced in the 1929 LEGCO session by the Chief Secretary to the Government, Geoffrey A.S. Northcote that:

²¹ NRG, *Report of the Government Unemployment Committee 1932*, p.62.

²² NRG, *Report of the Government Unemployment Committee 1932*, p.62.

²³ Young, "Industrial Diversification in the Zambian Economy", p.20.

²⁴ NRG, *Report of the Finance Commission 1932* (Livingstone: Government printers, 1932), p.2.

The question arises, when shall we provide for the relatively large capital expenditure which the territory's growth renders necessary? There is only one way in which that can be done, and that is through borrowings on the market.²⁵

The colonial state, therefore, created a public debt in 1929, which coincided with the introduction of the Colonial Development Fund Act (CDFA) by the British government. The money for the newly created public debt came from the British government in the form of loans. Money had to be paid back with interest and redeemed through a sinking fund. The next step the government took was to obtain legislative authority so that they could solicit for a loan of two and a quarter million sterling. Between January and February 1932, £1,250,000 (loan) was given by the Crown Agents for the colony.²⁶ The CDFA of 1929, on the other hand, was a way in which the British government aimed to help her colonies to achieve their developmental goals. The purpose of the fund was for the development of agriculture and industry in British colonies.²⁷

To this effect, a total of £1 million was approved by the British parliament for the colonies.²⁸ Therefore, the colonies were urged to make use of the money for developmental projects beyond their revenue.²⁹ In practice, the creation of public debt and the introduction of the CDFA in 1929 did not lead to economic or industrial development in the country. For example, the *Official Report of Northern Rhodesia* published on 5 April, 1944 revealed that large capital grants and loans from the CDFA were given to the country between 1929 and 1939. However, it was not possible to tell how much, for instance, was to be used on industrial undertakings alone. In effect, the years that followed after 1932 were for repaying the loans the state got and was still getting.³⁰ Seeley stated that the CDFA of 1929 was meant to reduce

²⁵ NRG, *Legislative Council Debates; First Session of the Third Council, 8 November-21 November, 1929* (Livingstone: Government printers, 1930), p.71.

²⁶ NRG, *Report of the Finance Commission 1932*, p.2.

²⁷ NRG, *Report of the Finance Commission 1932*, pp.16-17.

²⁸ Janet Seeley, "Social Welfare in a Kenyan town; policy and practice, 1902-1985", *Journal of African Affairs* Vol. 86, No. 345, (1987), p.545.

²⁹ NAZ, MF1/11, Colonial Development Welfare Act of 1929.

³⁰ NAZ, SEC 1/358, Extract from the Official Report of Northern Rhodesia, 05/04/1944.

unemployment in Britain because the funds given to the colonies were used to service the loan interest by the colonial governments which gave contracts to British firms.³¹

Despite the creation of public debt and introduction of the CDFA in 1929 in Northern Rhodesia, there was still discontentment especially among the local merchants, traders and the members of the local chambers of commerce and industry. These groups felt that the government needed to do more in order to foster local industrialisation. Much pressure outside the LEGCO in the early 1930s forcing the government to set up local industries came from the Ndola and Lusaka Chamber of Commerce and Industry. The Ndola Chamber of Commerce and Industry was formed in 1930 while the Lusaka Chamber of Commerce and Industry in 1933.³² The two chambers of commerce and industry were associated with the commercial and industrial development of the two towns. Later, other chambers of commerce and industry emerged in Livingstone, Chingola, Kitwe, Luanshya and Mufulira.³³ As a result of so much pressure from these chambers of commerce and industry, the government decided to set up the Trade Development Board (TDB) in 1933. The main task of the TDB was to promote and encourage the formation and establishment of local secondary industries.

3.4. Formation of the Trade Development Board 1933

As stated earlier, in order to contain the pressure and also to conceal its unwillingness to encourage local industrialisation, the colonial state initiated the formation of the TDB in 1933. Merchants and traders from the local chambers of commerce and industry demanded that the state was supposed to initiate the establishment of local secondary industries. Their contention was that the government had to find ways of creating the local market for manufactured goods, initiate the development of and circulation of information regarding trade.³⁴ During the 1934 LEGCO debates, for example, Captain J. Brown asked the government: “I refer to the TDB which was established in

³¹ Seeley, “Social Welfare in a Kenyan town”, p.545.

³² GRZ, *Lusaka Chamber of Commerce and Industry Five Decades of Progress, 1933-1983 Brochure* (Lusaka: Litho and Multiservice Ltd, 1983), pp.1-8.

³³ GRZ, *Lusaka Chamber of Commerce and Industry*, pp.1-8.

³⁴ NAZ, SEC 1/226, Chief Secretary to the Government to the Provincial Commissioner at Ndola, 02/10/1933.

1933, what is its mandate and where it meets for board meetings?”³⁵ In response, Mr. Goodall, who represented H.F. Cartmel Robinson, the Provincial Commissioner for Ndola and Chairman of the TDB explained that:

The mandate of the Board is set out in General Notice No. 433 of 1933 and consists of the Provincial Commissioner, Ndola (Chairman), Customs Officer, Ndola, (Malcolm Fergusson), S.P.J. Fry (Senior Inspector of Mines), the President of Ndola Chamber of Commerce and Industry and they meet at Ndola. The scope of the Board’s activities is to consider proposals and suggestions for the establishment and encouragement of local secondary industries and report to the government the results of its investigations.³⁶

In the same year, the TDB recommended to the government that there was a possibility of establishing a vegetable oil extraction industry in the country. The information which the Board collected revealed that there was unlimited demand in South Africa by soap industries for refined groundnut and palm kernel oil. Palm kernel oil was sold at £19 per ton on the open market in Johannesburg. The Board argued further that Northern Rhodesia was suitably placed for such an industry because huge tons of palm kernels came from the Congo throughout the early 1930s. As for groundnuts and castor oil plants, farmers cultivated them locally in the country, and there was no doubt that the industry was likely to open.³⁷ However, the colonial state did not seize this opportunity to set up the suggested vegetable oil extraction industry in 1934. The government was reluctant and possibly was still influenced by the *laissez-faire* policy, which entailed that industrial development was an endeavour of private enterprise. This reluctance was also possibly influenced by the belief in Britain that all colonies were not supposed to promote active industrialisation during this period. While debating on the issue of starting industrialisation in the British colonies in 1935, Sir William Maclean argued that:

³⁵ NRG, *Legislative Council Debates; Seventh Session of the Fourth Council, 1 December- 21 December, 1934* (Livingstone: Government printers, 1935), p.419.

³⁶ NRG, *Legislative Council Debates; Seventh Session of the Fourth Council, 1 December -21 December, 1934*, p.419; NAZ, SEC 1/226, Chief Secretary to the Government to the Provincial Commissioner at Ndola, 02/10/1933; NAZ, SEC 1/226, General Notice No. 433 of 1933 on TDB; NAZ, SEC 1/226, BSACo to Chief Secretary to the Government, 06/10/1933 and NAZ, SEC 1/226, Beira and Mashonaland and Rhodesia Railways to Chief Secretary to the Government, 07/10/1933.

³⁷ NAZ, SEC 1/226, Chairman of TDB at Ndola to J.W. Brigden Department of Overseas Trade at Johannesburg, 01/02/1934.

The suggestion that the colonies should actively promote industrialisation requires special considerations because it has severe limitations. It is evident that manufacturing countries like ours could not afford to provide free or assured markets for manufactured goods in direct competition with their own.³⁸

At the beginning of 1934, the government formulated a plan to make Ndola town a commercial, industrial and distribution centre of the Copperbelt. This plan further constrained the process of developing local industries in the country because it did not involve the participation of Africans in the manufacturing, distribution, wholesale and retail trade.³⁹ Initially, the government first obtained approval from the Secretary of State for colonies in London regarding the plan for Ndola town. Thus, to achieve the plan on Ndola town, a binding agreement was signed between the government of Northern Rhodesia, all the mining corporations on the Copperbelt and the Rhodesia Railways.⁴⁰

3.5. Making Ndola a commercial, industrial and distribution centre 1935

At a meeting held on 8 August, 1935 in Ndola, the new Governor, Sir Hubert Young, pronounced the policy of the government that Ndola was now officially declared a commercial, industrial and distribution centre of the Copperbelt. Under this policy, it was announced by the Governor that:

Within a certain limited period of 21 years (8 August, 1935 to 31 March, 1956), Ndola will function as a commercial, industrial and distribution centre. The government will permit no other competitive commercial, industrial or distribution centre. Agencies, firms or companies connected with the mines are to remain at Ndola.⁴¹

³⁸ House of Commons, *Debates* 25 Vii 35, V.304, C.211, Quoted in E.A. Brett, *Colonialism and Underdevelopment in East Africa; The politics of Economic Change 1919-1939* (London: Heinemann, 1973), p.273.

³⁹ Dean, *Colonial Social Accounting*, p.53.

⁴⁰ In 1933, the Northern Rhodesia government invited Sir Auckland Geddes, a representative of the British government to help with plans on how to make Ndola a commercial, industrial and distribution centre. Geddes advised the government to go ahead and pronounce the government's policy concerning Ndola. After returning to London, Geddes recommended highly to the Secretary of State for colonies that Ndola was suitable as a commercial, industrial and distribution centre. Geddes came back to Northern Rhodesia in 1934 for more discussions which made the government to pronounce the policy on Ndola in 1935 and NAZ, SEC 1/1535, Notes of a meeting between Governor Ronald Storrs and the Ndola Chamber of Commerce, 17/01/1934.

⁴¹ NAZ, SEC 1/1534, Governor Hubert Young's visit to the Copperbelt, 08/08/1935.

This new law entailed that all secondary industries had to be established at Ndola only. Other towns on the Copperbelt had only business facilities for the retail trade which was capable of supplying the day to day needs of the people and provided reasonable scope for competition.⁴² This policy was later published in the Government Gazette and read as Section 4 of the General Notice No. 397 of 1935.⁴³ Additionally, the system whereby the mining corporations in South Africa and Southern Rhodesia procured all their mining supplies at different distribution centres at Bulawayo, Salisbury and Johannesburg was to apply to Ndola.⁴⁴ In fact, the government envisioned that Ndola would in the long-run become like the Johannesburg of the Copperbelt.⁴⁵

To this effect, the entire mining corporation on the Copperbelt negotiated for an exclusive rebate with Rhodesia Railways on the Railway rates to transport all partially and completely manufactured goods supplied to their mines. The reduction of Railway rates meant that all industrial firms based at Ndola would now maintain enough stocks of these goods for processing and distribution to the mines and other towns in the country.⁴⁶ However, the argument here is that the declaration of Ndola as the only commercial, industrial and distribution centre did not lead to industrialisation in Northern Rhodesia. Firstly, Africans were excluded from participating in the licensed wholesale and retail trade on the Copperbelt because they did not have capital or access to credit facilities and lacked skills to set up industries.⁴⁷ Secondly, the colonial state, beginning from 1933 had already mooted a plan to set up industries that could serve the needs of the mines at Ndola. Julius B. Sakala remarks that, “by taking stock of all the industries that operated at Ndola in the colonial period, one can tell that they were associated with the needs of the mines only on the Copperbelt.”⁴⁸ More interesting to note is the fact that most of these industries had to be subsidiaries of those industries which were already serving the needs of the mines in Southern Rhodesia and South Africa. The Provincial Commissioner for Ndola, Mr. H.F.

⁴² NAZ, SEC 1/1534, Governor Hubert Young’s visit to the Copperbelt, 08/08/1935.

⁴³ NAZ, SEC 1/1534, Section 4 of General Notice No. 397 of 1935 on Ndola as a commercial, industrial and distribution centre.

⁴⁴ NAZ, SEC 1/1534, Governor Hubert Young’s visit to the Copperbelt, 08/08/1935.

⁴⁵ NAZ, SEC 1/1534, Governor Hubert Young’s visit to the Copperbelt, 08/08/1935.

⁴⁶ NAZ, SEC 1/1534, Governor Hubert Young’s visit to the Copperbelt, 08/08/1935.

⁴⁷ Dean, *Colonial Social Accounting*, p.53.

⁴⁸ Interview with Julius B. Sakala; Director of Housing and Social Services, Ndola City Council, 1965-1967; Town Clerk, Ndola City Council, 1967-1977 and Mayor, Ndola City Council, 1979-1981, 13/03/ 2018.

Cartmel Robinson who was also Chairman of the TDB, pronounced this policy when he wrote to the Chief Secretary of Government saying:

Most industries will be subsidiary in some way or the other to the leading industry of the country [Copper Industry], and it would be an advantage to have the needs of the mines [only] continuously before the TDB (Trade Development Board).⁴⁹

Before the end of 1935, new industries associated with the needs of the mines opened at Ndola. Overall, between 1924 and 1938, a total of 91 companies were incorporated in Northern Rhodesia. Out of 91 companies, 35 opened at Ndola.⁵⁰ Three outstanding examples of industries which began to supply the needs of the mines were the Northern Rhodesia Lime Company Ltd (currently known as Ndola Lime Company Ltd), Ailen Liversedge Ltd (currently known as Afrox Zambia Ltd) and Bitumen Products Ltd. Although the incorporation of Northern Rhodesia Lime Company Ltd was on 14 August, 1931 at the Ndola office, it began full-scale production of lime in 1935. For instance, at the time of its incorporation in 1931, the nominal capital was just £1000 but rose to £10,000 in 1935. It increased further to £30,000 in 1951 and £50,000 in 1955. Lime was supplied to all the mines on the Copperbelt and was used for neutralisation of acid plant effluents.⁵¹

Ailen Liversedge was incorporated on 1 January, 1927 at the Ndola office with a nominal capital of £10,000.⁵² The company began manufacturing Oxygen and Acetylene which were supplied to all the mines. This company, just like the Northern Rhodesia lime company Ltd, began full-scale production of Oxygen and Acetylene in 1935. Acetylene and Oxygen were used for welding or fabrication, cutting metals and for use in underground working conditions. They were also used for brazing, flame gouging, spot heating, hardening, texturing, cleaning and thermal spraying many materials. In 1931, the company was renamed as the Northern Rhodesia Oxygen and Acetylene Company Ltd at its current Ndola site. After independence, it was

⁴⁹ NAZ, SEC 1/226, H.F. Cartmel Robinson (Chairman of the TDB) to the Chief Secretary to the Government, 19/10/1933 [Copper industry] and [Only] my emphasis.

⁵⁰ PACRA, *First Companies' Register*, pp.13-60 and NAZ, SEC 1/1534, Extract from the Bulawayo Chronicle, 13/08/1935.

⁵¹ Mine Industry Archives, (Hereafter, MIA) LOC 18.18.4.4F. Northern Rhodesia Lime Company Ltd returns 1935 and PACRA, *First Companies' Register*, p.54.

⁵² PACRA, *First Companies' Register*, p.30.

renamed as BOC Ltd which changed to Zamox Ltd and presently as Afrox Ltd, a subsidiary of the South African BOC Ltd. The Zambian government currently has 30% shares in the company.⁵³ Another industrial firm called Bitumen Products Ltd was incorporated on 1 January, 1937 at the Ndola office with a nominal capital of £10,000. This company imported materials which were processed with crushed stones to make surfacing materials for tarmac roads. Roads leading to the mines were constructed using surfacing materials from Bitumen products Ltd.⁵⁴

Dissatisfied with the government industrial policy in which Ndola was the only commercial, industrial and distribution centre of the entire country, people from all sections of the country began to call on the government to rescind this policy. The Ndola Chamber of Commerce and Industry which in the late 1930s was already made up of over 70% of merchants and traders was among the first to advocate for change to the 1935 policy. Members pointed out that only after the establishment of local industries that catered for the needs of the whole country and not just those of the mines, would the country be in a position to initiate the process of capital formation.⁵⁵ The main concern of the government was to promote the establishment of industries that served the needs of the mines only. Karen Tranberg Hansen put it more clearly that, “in fact, Northern Rhodesia never developed a domestic manufacturing industry to speak of except those supplying the needs of the copper mines.”⁵⁶

For instance, Captain Skipper (Member for the Pemba Electoral Area) in 1939 tried to find out in the LEGCO whether the government was aware of the rumour that the German Jews who were running away from Hitler’s persecution were likely to come and settle in Northern Rhodesia and would be pioneers in establishing secondary industries. However, the government did not favour the idea.⁵⁷ The government argued that if they happened to come to Northern Rhodesia, they were going to be settled under the Agricultural Settlement Scheme and not to

⁵³ PACRA, *First Companies’ Register*, p.30 and John Sutton and Gillian Langmead, *An Enterprise Map of Zambia* (London: International Growth Centre, 2013), p.152.

⁵⁴ PACRA, *First Companies’ Register*, p.58.

⁵⁵ NAZ, B1/2/1/, R.E. Campbell, Chairman of Northern Rhodesia Traders Association to Royal Commission, 04/06/1938; NAZ, B1/1/7, R.S. Bake to Royal Commission 1938; NAZ, SEC 3/232, H.K. McKee and E.W. Dechow to Chambers of Commerce of Northern Rhodesia, 24/04/39 and NAZ, B1/15/9, Cost of Living Commission of inquiry, 30/06/47.

⁵⁶ Karen Tranberg Hansen, *Salaula; The world of second hand clothing and Zambia* (Chicago: The University of Chicago Press Ltd, 2000), p.47.

⁵⁷ Macmillan and Shapiro, *Zion in Africa: The Jews of Zambia*, pp.110-111.

engage in the establishment of secondary industries.⁵⁸ In 1939, only 405 German Jews arrived in the country. The idea to even resettle them under the proposed Agricultural Settlement Scheme did not come to pass because the government construed it as an expense.⁵⁹

3.6. Government's policy on industrialisation during the Second World War

The outbreak of the Second World War in September 1939 offered opportunities for setting up secondary industries in Northern Rhodesia. The war led to a shortage of consumer manufactured goods from overseas. It was very dangerous to transport goods by sea from Europe as ships were susceptible to attacks.⁶⁰ Under these circumstances, countries like Southern Rhodesia, South Africa and Kenya began to implement import substitution industrialisation policies. In Southern Rhodesia, an Industrial Development Committee was set up in 1940 and in Kenya an Industrial Management Board was also set up in 1940 to encourage local manufacturing during the war period. In South Africa, an Industrial Development Corporation was set up in 1941.⁶¹

In Northern Rhodesia, the effort was not made to come up with the policy of import substitution industrialisation during the war period despite the shortage of foreign manufactured consumer goods in the country. Instead, the government enacted the war effort policy by encouraging the setting up of industries which would make a direct contribution to the war. While addressing members in the LEGCO in December 1940, Governor John Maybin announced this policy saying, “the first and most important fact is that we are at war and that the war effort must have priority over any other claim.”⁶² This statement makes it loud and clear that the most urgent priority, according to the government was a contribution towards the war effort and not setting up secondary industries as was the case in other countries in the region. The war

⁵⁸ Macmillan and Shapiro, *Zion in Africa; the Jews of Zambia*, pp.110-111.

⁵⁹ NAZ, SEC 3/54/5, Hudson to Maybin, 06/02/1938 and Logan to Campbell, 13/02/1939 and Campbell to Logan, 18/02/1939 and NAZ, SEC 3/54/4, Boyd to Maybin, 30/06/1939.

⁶⁰ R.M.A. Zwanenberg and Anne King, *An Economic History of Kenya and Uganda* (London: Macmillan Press Ltd, 1975), p.124.

⁶¹ Zwanenberg and King, *An Economic History of Kenya and Uganda*, p.124 and NAZ, CH/1/2/14, Memorandum on Industrial Policy by the Kitwe Chamber of Commerce and Industry.

⁶² NRG, *Legislative Council Debates; Fifth Session of the Sixth Council, 30 November-December, 1940* (Lusaka: Government printers, 1941), p.4.

effort policy meant increasing the production of base metals, especially copper for export to Britain. Governor Maybin pointed out that, “Our main economic contribution will continue to be the production of base metals.”⁶³ While the production of base metals in the country increased during the war period, Southern Rhodesian and South African manufacturers were busy supplying the Northern Rhodesian market with goods previously imported from Britain. Apart from the production of base metals, the government set up subsidiary industries of a company from Bulawayo at the Broken Hill Railway plant and the other factory at Mupepetwe in Serenje District where production of small military materials took place as a contribution towards the war effort.⁶⁴ Before setting up these industries, Roy Welensky (Member for the Northern Electoral Area) had challenged the government to imitate what was happening in Southern Rhodesia during the 1941 LEGCO debates. He noted that:

I had the opportunity, very recently during my visit to Southern Rhodesia of going over a munitions’ factory at Bulawayo. There is nothing Southern Rhodesia is producing that we cannot produce with the industrial plant in the Copperbelt and the plant at Broken Hill Railway plant.⁶⁵

When these industries opened at the latter places, white women were employed to manufacture munitions, spare parts for war tanks and bombs. When the war ended in 1945, these industrial plants closed. The closing of these industries after the war shows that the government’s priority was a contribution towards the war effort and not local industrialisation. The government also set up the Livingstone Cold Storage Company Ltd in 1942 as a contribution to the war effort. Due to the high production of base metals, there was a high demand for beef on the Copperbelt mines. The war effort paved a way for massive recruitment of labour on the shafts to maximize the production of copper. The company was initially incorporated on 6 January, 1939 at the Ndola office with a nominal capital of £35,000 and was given certificate No. 106.⁶⁶ The Cold Storage bought beef cattle and supplied it to the mines on the Copperbelt during the war. Soon, a debate raged in the LEGCO in which members argued

⁶³ NRG, *Legislative Council Debates; Fourth Session of the Sixth Council, 1-13 June, 1940* (Lusaka: Government printers, 1940), p.4.

⁶⁴ A.H. Croxton, *Railways of Rhodesia* (Newton Abbot: David and Charles, 1973), pp.193-194 and www.latitude.to/>...>Zambia , accessed on 05/10/2020.

⁶⁵NRG, *Legislative Council Debates; Fifth Session of the Sixth Council, 5 July-17 July, 1941* (Lusaka: Government printers, 1941), p.22.

⁶⁶ PACRA, *First Companies’ Register*, p.106.

that there were other subsidiary industries which could be developed from the same beef plant at Livingstone. Mr. Sinclair (Member for the Livingstone and Western Electoral Area) argued that there was a possibility of secondary industries to be started as by-products from the same Cold Storage business. He pointed out that it was possible to manufacture fertilizer, glue as well as set up a tannery. The tanning industry was more likely to have been the first by-product industry to emerge out of the Cold Storage plant because a lot of cattle hides went to waste without processing them. The government, however, did not take the initiative to immediately establish the proposed by-product industries but instead concentrated on buying, slaughtering, preserving and supplying beef to the mines throughout the war period.⁶⁷

During this same period, two Jewish entrepreneurs, Ruben Amato and his brother Benny established the first soap industry at Ndola in 1939. It was known as The Rhodesia Congo Oil Soap Industries Ltd. The incorporation of the company was on 28 March, 1939 at the Ndola office with a nominal capital of £10,000 and was issued certificate No. 107.⁶⁸ The soap industry was set up in partnership with other Jews, Nic Capelouto and Joe Tarica. Together, these Jewish entrepreneurs used their vast experience in the vegetable oil extraction industry, which they had established in Congo before coming to Northern Rhodesia. They were able to extract vegetable oils for the manufacture of soap. Against all the odds their products found a sizeable local market in Northern Rhodesia, Southern Rhodesia and South Africa.⁶⁹

Apart from the soap industry, there was also the opportunity for the establishment of a pulp industry in the country during the war period. Despite the government's awareness about this opportunity, no concrete step was taken to set up the pulp industry. When the Second World War broke out, there was a significant demand for pulp in Britain. Britain had huge industries and depended entirely upon imported pulp, but the war had cut off familiar sources of supply, Scandinavia and the Baltic. Pre-war supplies of pulp to Great Britain came mainly from former and the latter. However, the war cut off this source as well as other areas which were controlled primarily by Germany. It was in this regard that M.A. Viljoen, an entrepreneur from Durban in South Africa, informed the government of Northern Rhodesia that there was an unprecedented

⁶⁷ NRG, *Legislative Council Debates; Second Session of the Seventh Council, 28 November-11 December, 1943* (Lusaka: Government printers, 1944), p.83.

⁶⁸ PACRA, *First Companies' Register*, p.104.

⁶⁹ Rudy Frankel, *Tiger Tapestry* (Cape Town: Struik, 1988), pp.177-178 and pp.216-218.

opportunity for the supply of pulp in Britain during the war period. Pulp is a primary material used to manufacture paper, cardboard, fibreboard, paper Mache, plastics, lacquers, pressed containers, artificial silk, artificial leather, cellulose wadding, celluloid, and cellophane and explosives.⁷⁰ Due to the scarcity of pulp in Britain during the war, the British Ministry of Supply had established a paper control policy which rationed raw materials, regulated the distribution and restricted exports, especially of sulphide papers. By April 1940, many paper industries were compelled to close down in Britain as a result of the shortage of pulp. Since pulp was in high demand during the war, the prices were also high. The price rose from £11 to £28 per ton during this same period.⁷¹

Viljoen suggested to the government to use the abundant reeds and elephant grasses which were abundant in the rivers and swamps in Northern Rhodesia to manufacture pulp for export to Britain. In response, the government decided first to carry out experiments to determine the value and properties of the fibre in the local materials such as reeds and elephant grasses. A few samples of both specimens were digested, milled and dried. Eventually, the Division of Forestry Products in Pretoria and the South African Pulp Industries Ltd in Johannesburg tested the samples of pulp from Northern Rhodesia. The two South African firms proved the samples as good quality and the fibres in the reeds and grasses as suitable for papermaking.⁷² Viljoen further suggested the establishment of pulp plant which could produce 50 tons of pulp a day to the government. The actual cost was going to consist of buying a crusher and chipper, pulp dryer, black liquor recovery plant, stationery digesters, steam power plant of 1,500 kW back pressure and the cost of the whole plant was £250,000.⁷³ The government of Northern Rhodesia through the Director of Agriculture dismissed the whole project of setting up the pulp industry in the country during the war period saying:

⁷⁰ NAZ, SEC 1/229, M.A. Viljoen of Durban, South Africa to the Chief Secretary to the Government, 08/06/1940.

⁷¹ NAZ, SEC 1/229, M.A. Viljoen of Durban, South Africa to the Chief Secretary to the Government, 08/06/1940.

⁷² NAZ, SEC 1/229, M.A. Viljoen of Durban, South Africa to the Chief Secretary to the Government, 08/06/1940.

⁷³ NAZ, SEC 1/229, M.A. Viljoen of Durban, South Africa to the Chief Secretary to the Government, 08/06/1940.

To start an industry of this magnitude in wartime would be out of the question. Who would be prepared to risk £250,000 or more on a dubious venture under present conditions?⁷⁴

This quotation makes it clear that the government of Northern Rhodesia was not in any way ready to make use of wartime opportunities to industrialise. Instead of enacting tariffs to protect the would-be home industries in Northern Rhodesia, Governor Maybin went ahead and expressed his unwavering gratitude to Southern Rhodesia for supplying manufactured goods to the country during the war period. He gladly said in 1940 that, “we are very much indebted to our neighbours in Southern Rhodesia for assisting us in ensuring our supplies by coming to our aid.”⁷⁵ The value of goods which South Africa supplied on the local market in Northern Rhodesia between 1939 and 1943 was massive. The goods used to come from Britain. By 1941, South Africa had practically replaced Britain as the main primary source of imports in Northern Rhodesia. The table below shows the value of imports from South Africa and Southern Rhodesia in this same period.

Table 3: Value of imports from South Africa and Southern Rhodesia, 1939 - 1943

Year	1939	1940	1941	1942	1943
Imports from South Africa	£819,460	£1,157,983	£1,410,023	£1,502,017	£1,669,978
Imports from Southern Rhodesia	£882,779	£1,051,805	£1,208,910	£1,502,017	£1,493,273

Source: s

Throughout the Second World War period, the government never had a sense of urgency to take advantage of wartime scarcity to induce local manufacturing industries in the same way Southern Rhodesia and South Africa had done. For example, Mr. Visagie (Member for the Nkana Electoral Area) bemoaned in the LEGCO in 1943 that:

⁷⁴ NAZ, SEC 1/229, Director of Agriculture to M.A. Viljoen of Durban, South Africa, 30/09/1940.

⁷⁵ NRG, *Legislative Council Debates; Fourth Session of the Sixth Council, 1-13 June, 1940*, p.4.

If this war has taught us nothing else, it has taught us some of our most glaring weaknesses, and one of these I submit Sir is our dependence on other territories for the bulk of our requirements. The products of our leading industry at present are required for war purposes.⁷⁶

Despite the successful production of copper during the war, the mining companies refused to invest surplus profits into local manufacturing industries. The argument was that they had a heavy responsibility of paying royalties and income tax which went to the British treasury and the BSACo. After collecting income tax in Northern Rhodesia, the British government could later decide how much of it was to be remitted back to the country for developmental purposes. For example, between 1930 and 1940, Britain received £2,400,000 in form of income tax of which only £136,000 was spent in Northern Rhodesia.⁷⁷ Tembo argued that throughout the war period, “the colony’s importance was in the fact that a fiscally-challenged Britain benefited from the dollar-earnings of copper exports.”⁷⁸ During this period, the two major copper mining companies, Anglo-American Corporation (AAC) and Roan Selection Trust (RST) were taxed at the rate current in Britain and this made the two governments to share the tax.⁷⁹ As copper production in the country progressed, the British Ministry of Supply was instructed to buy Northern Rhodesia’s copper at the fixed price of £62 per ton throughout the war period.⁸⁰ By 1943, the issue concerning the loss of income tax attracted the attention of members in the LEGCO. They cautioned the government that, “there is a substantial proportion of income tax in this country enjoyed elsewhere or goes overseas.”⁸¹

On the other hand, Zeleza, contends that the giant mining company, Anglo-American Corporation Ltd had invested its surplus profits heavily into secondary industries in South Africa. At the same time, the South African state used the enormous surplus profits it collected from income tax on the mines to invest in industrial infrastructure and managed to establish

⁷⁶ NRG, *Legislative Council Debates; Third Session of the Seventh Council, 20 November-10 December, 1943* (Lusaka: Government printers, 1944), pp.237-238.

⁷⁷ Andrew Roberts, *A History of Zambia* (London: Heinemann, 1976), pp.192-193.

⁷⁸ Tembo, “The Impact of the Second World War on Northern Rhodesia”, p.176.

⁷⁹ Berger, *Labour, Race and Colonial Rule in the Copperbelt*, pp.9-10.

⁸⁰ Tembo, “The Impact of the Second World War on Northern Rhodesia”, p.179.

⁸¹ NRG, *Legislative Council Debates; Third Session of the Seventh Council, 20 November-10 December, 1943*, p.79.

state-owned heavy secondary industries.⁸² Loss of income tax was, therefore, one of the significant constraints on industrialisation in colonial Zambia. Major McKee (Member for the Midland Electoral Area) challenged the government of Northern Rhodesia in 1943 in the LEGCO debates that the copper mining companies in the country were capable of investing their surplus profits locally into secondary industries. He explained that:

Sir that the whole future of the territory should depend on copper only is a view I am not ready to accept. The egg which this country has been nursing is not copper but copper production. Eggs, however, have been known to produce chickens, chickens to produce more eggs and eggs to produce more chickens and so on.⁸³

The illustration which McKee referred to above meant that there were a lot of metaphorical eggs which were attached to copper production and that they were capable of producing metaphorical chickens. McKee underscored his illustration when he identified possible industries which could have emerged from copper products such as industrial refining of the significant proportion of copper, making brass alloys, manufacture of brass and copper into plates, sheets, copper tubes and wire. There were also possibilities of local processing of lead, zinc, vanadium, galvanised iron, water power, iron and steel, dairy, cheese, butter, bacon and many others.⁸⁴ Therefore, one of the significant constraints on industrialisation in Northern Rhodesia was a refusal by the mining companies to invest the enormous surplus profits which they generated on the country's copper mines into the manufacturing industry.

Members in the LEGCO intensified their pressure on the government to consider establishing local secondary industries in the country. They believed that the production of copper during the war period was just a temporary activity. They predicted that immediately the war came to an end that would make the end of the copper boom as well. They postulated that economic survival in the post-war period depended on developing secondary industries. Roy Welensky (Member for the Broken Hill Electoral Area) in 1943 asked, "Can government indicate the extent of collaboration between Northern Rhodesia and Southern Rhodesia

⁸² Zeleza, *Modern Economic History of Africa Vol. I*, p.249.

⁸³ NRG, *Legislative Council Debates; Third Session of the Seventh Council, 20 November-10 December, 1943*, pp.215-216.

⁸⁴ NRG, *Legislative Council Debates; Third Session of the Seventh Council, 20 November-10 December, 1943*, p.217.

regarding setting up secondary industries as a general consideration for post-war problems?”⁸⁵ They challenged the government that there was a need to set up an Industrial Development Board under the Chairmanship of a Director of post-war reconstruction in Northern Rhodesia. The mounting pressure from the members in the LEGCO forced the government, in 1944 to take radical steps towards the process of local industrialisation. In May 1944, the Governor, E.J. Waddington announced, in the LEGCO that the government had decided to appoint Dr W.J. Busschau, an economist from South Africa to inquire into the possibility of setting up local secondary industries in the country.⁸⁶

3.7. W.J. Busschau Report on the Development of Secondary Industries in Northern Rhodesia

Having made his inquiry on industrial development in Northern Rhodesia, Busschau presented his report to the government on 7 January, 1945. The terms of reference for Busschau report were to: examine and report on the whole question of secondary industry in the territory and to advise what steps should be taken to encourage the institution and development of secondary industries which were judged to be economically sound.⁸⁷ Young argued that Busschau report was not in support of local industrialisation because most of his recommendations were negative. As a result, the recommendations made in the report were compatible with what the government was all along expecting to hear on the issue of setting up secondary industries in the country.⁸⁸ As was argued by Young, Busschau was extremely negative in his report on the possibility of setting up secondary industries in the country. He was not in support of the idea that the government should take the lead in setting up secondary sectors. He wrote in paragraph 56 of the report that:

It is unfortunate that in Northern Rhodesia, many persons have been sold the idea that the immediate future of the territory could be greatly increased and that profitable industries capable of providing high wages and steady employment

⁸⁵ NRG, *Legislative Council Debates; Third Session of the Seventh Council, 20 November-10 December, 1943*, p.25.

⁸⁶ NRG, *Legislative Council Debates; Third Session 10-27 May, 1944* (Lusaka: Government printers, 1944), p.3.

⁸⁷ NRG, *Report on the Development of Secondary Industries in Northern Rhodesia*, (Lusaka: Government printers, 1945), p.13.

⁸⁸ Young, “Industrial Diversification in the Zambian Economy”, p.24.

could come into being if only the government would earnestly and diligently embark on encouraging the creation of industries. Alas, the fulfilment of many of these ideas requires much more than the wave of a wand and Shakespeare may have described many of the projects proposed as 'too rash', too unadvised, too sudden.⁸⁹

The quotation above makes it clear that the idea to set up secondary industries in the country even after the end of the war was still premature. As far as Busschau was concerned, industrialisation in the country was supposed to be a gradual process.

Busschau identified many constraints on industrialisation in Northern Rhodesia. First, he identified the lack of skills and low earning power of Africans. Secondly, the small size of the local market for manufactured goods and the Apprenticeship Ordinance which prevented Africans from becoming skilled workers and also lack of capital by the government as constraints on industrialisation. He noted that industrial development world over was influenced by the level of skills acquired by the people.⁹⁰ By 1940, Northern Rhodesia was still experiencing deficient levels of skills among the Africans. However, the worst recommendation in Busschau report was on customs agreements and tariff protection which ensured that the country's industrial sector would remain that of subordination to the larger industrial countries of Southern Rhodesia and South Africa. Busschau recommended that:

No crucial changes should at present change in the customs agreements between Northern Rhodesia and Southern Rhodesia and protection through tariff is an unsuitable instrument with which to encourage the development of secondary industries in Northern Rhodesia.⁹¹

The government gladly accepted the recommendations above because they acted as a lethal weapon used to silence and suppress the mounting pressure from the local merchants and traders who called for radical steps towards the establishment of local secondary industries in the country. Welensky and Mr. Page criticized Busschau report in the LEGCO saying that he acted like a prophet of gloom whose views on local industrialisation were too discouraging and narrow.⁹² Busschau further recommended the setting up of the Advisory Committee on Industrial

⁸⁹ NRG, *Report on the Development of Secondary Industries in Northern Rhodesia*, p.28.

⁹⁰ NRG, *Report on the Development of Secondary Industries in Northern Rhodesia*, p.26.

⁹¹ NRG, *Report on the Development of Secondary Industries in Northern Rhodesia*, p.11.

⁹² NRG, *Legislative Council Debates; First Session of the Eighth Council, 23-31 August 1945* (Lusaka: Government printers, 1945), pp.189-190.

Development (ACID). The TDB which was set up in 1933 was now replaced by the ACID. On 3 December, 1945 the government accepted a motion in the LEGCO in which the formation of the ACID was legally authorised. Its objectives were to “advise the government on all matters relating to the establishment, development and efficient working of existing and potential industries in the territory.”⁹³ Between 1946 and 1948, the ACID managed to produce three reports on industrial development in Northern Rhodesia, and these are discussed in the paragraphs below.

3.8. Industrialisation in the post-war period

Scholars have argued that there was no real question of industrialisation in Northern Rhodesia not until the end of the Second World War.⁹⁴ The first report on industrial development by the ACID was published on 25 March, 1946 and it recommended that the government had to change its 1935 policy on Ndola as the only commercial, industrial and distribution centre of the Copperbelt. The recommendation stated that:

The policy laid down by the government regarding Ndola be rescinded immediately and that secondary industries are allowed to select any location most convenient for them, including the four Copperbelt townships.⁹⁵

The committee contended that Ndola was poorly situated geographically as a commercial, industrial and distribution centre of the Copperbelt.⁹⁶ The Government, however, re-announced through General Notice No. 224 of 1949 saying that, “the policy of developing Ndola as a commercial, industrial and distribution centre should be maintained until 31 March, 1956 when the agreement regarding closed townships comes to an end.”⁹⁷ It is clear therefore, that the 1935 policy on Ndola was a significant constraint on developing local secondary industries. Several meetings were held by the ACID between 1946 and 1948 to discuss possible industries for the

⁹³ NRG, *Report on the Development of Secondary Industries in Northern Rhodesia*, p.10.

⁹⁴ Interview with Professor Hugh Macmillan via Email, 14/11/2017.

⁹⁵ NRG, *Advisory Committee on Industrial Development, First Report*, (Lusaka: Government printers, 1946), p.2.

⁹⁶ NRG, *Advisory Committee on Industrial Development, First Report*, p.2.

⁹⁷ NRG, *Debates of the Fifth Session of the Ninth Legislative Council; 25 July-17 August, 1953* (Lusaka: Government printers, 1953), p.294.

country.⁹⁸ Out of all the industries discussed, the manufacture of cement was recommended highly while the rest were considered uneconomic during that time.

The second report by the ACID was published on 20 January 1947. Essential topics in this report included: Government aid for industrial development and the Northern Rhodesia First Development Plan (1947-1956 NRFDP). Although the government had accepted to assist industries with capital, very few people were able to access the funds. There were so many conditions which were attached to the money. One of the requirements was that the applicant had to convince the ACID that the proposed industry requiring financial assistance was capable of enhancing economic development.⁹⁹ In the NRFDP, the development of secondary industries and agriculture was allocated £500,000.¹⁰⁰ The £500,000 to cover ten years meant that only £50,000 was to be expended each year on the development of secondary industries in the country.

Welensky was not impertinent when he criticised the plan during the LEGCO sessions in 1951 for neglecting industrial development. He argued, for example, that the whole plan put much emphasis on social services which were allocated £3,384,000 and neglected the development of secondary industries. Welensky believed that the development of secondary industries was more critical in diversifying the economy from depending on copper production only.¹⁰¹ On 1 May, 1948, the ACID was able to publish its third report on industrial development in Northern Rhodesia. Before publishing the report, the ACID held meetings on 23 January and 2

⁹⁸ NAZ, SEC 1/123, Minutes of the Meeting held by ACID at Nkana, 05/2/1946; NAZ, SEC 1/123, Minutes of the Meeting held by ACID at Nkana, 27/02/1946; NAZ, SEC 1/123, Minutes of the Meeting held by ACID at Ndola, 21/01/1946; NRG, *Advisory Committee on Industrial Development, Second Report* (Lusaka: Government printers, 1947), pp.28-38 and NRG, *Advisory Committee on Industrial Development, Third Report*, pp.33-40. Possible industries discussed in the three reports included: processing agricultural crops, wood and wood products, manufacture of copper piping, bolts, nuts, rivets, nails, barbed wire, fencing wire, manufacture of beer, tannings, leather, vegetable oil, latex, fibre boards and cement. The ACID argued that the cost of setting up a plant either in Britain, Southern Rhodesia or South Africa was less than it would have been in Northern Rhodesia. See also NAZ, SEC 1/117, R.S. Young, Chief Research Chemist to ACID, 07/04/1947.

⁹⁹ NRG, *Advisory Committee on Industrial Development, Second Report*, p.28.

¹⁰⁰ NRG, *Ten Year Development Plan for Northern Rhodesia*, pp. 6-8.

¹⁰¹ NRG, *Legislative Council Debates; Fourth Session of the Ninth Council, 10 November-21 December, 1951* (Lusaka: Government printers, 1952), p.199.

April 1948. In the report, the government accepted the recommendation to set up a cement industry at Chilanga immediately.¹⁰²

3.8.1. Chilanga Cement PLC

The government began the process by first incorporating the company which was given the name of Chilanga Cement Plc. on 29 July, 1949 at the Chilanga office. The company had a nominal capital of £2 million, and was given certificate No. 304.¹⁰³ Soon after the company's incorporation, the construction of the cement industry at Chilanga began. The financing of the industry was by the government and the Commonwealth Development Corporation (CDC). The government of Northern Rhodesia had 25 percent shares while CDC had 75 percent shares.¹⁰⁴ The CDC was incorporated in Britain, and its main aim was to provide finances or loans for capital projects in British colonies. The anticipation was to commence manufacturing cement in 1950, but construction works went up to 1951. Nevertheless, in September 1951, manufacture of cement at the small single kiln of the industry began. Its capacity production was 105 tons of cement per day.¹⁰⁵ From the start, cement manufacturing appeared to be viable at Chilanga. For example, Baldwin noted that cement production at Chilanga proved feasible because a comparatively small plant was efficient.¹⁰⁶ Secondly, cement manufacture was profitable and economical because of the public works which required a lot of cement between 1951 and 1953 as outlined in the NRFDP.¹⁰⁷ The demand for cement increased further in 1955 when the construction of the Kariba dam began in the country.

3.8.2. Turner Asbestos Products (TAP) Ltd

The government also had envisioned that the establishment of a cement factory was going to have a multiplier effect. Other industries associated with cement would be set up such as those

¹⁰² NAZ, SEC 1/124, Extract from the ACID, *Third Report*, May, 1948.

¹⁰³ PACRA, *First Companies' Register*, p.304.

¹⁰⁴ NAZ, SEC 1/244, Memorandum and Articles of Association of Chilanga Cement Factory: Finance and Organisation, 1948.

¹⁰⁵ *Northern News*, "Chilanga cement works progress", 07/02/1950 and Chilanga Cement Plc. *Prospectus* (Ndola: Falcon press, 1996), p.12.

¹⁰⁶ Baldwin, *Economic Development*, p.182.

¹⁰⁷ NRG, *Legislative Council Debates; Fourth Session of the Ninth Council, 10 November-21 December, 1951*, p.202.

that could supply cement packing bags and those that could manufacture cement products.¹⁰⁸ For instance, on the southern end of Chilanga Cement Factory, Turner Asbestos Products Ltd (TAP), a subsidiary of the UK firm called Turner and Newall Ltd was established. Although this company was incorporated on 1 January, 1943 at the Chilanga office, it began to manufacture cement products in 1955.¹⁰⁹ In 1955, TAP began manufacturing cement products such as endurite and Trafford brand tiles, roofing sheets, concrete pipes and decorative garden ceramics from asbestos-cement.¹¹⁰ However, the significant constraint on industrialisation identified by the ACID in the third report was a small European population in the country in 1948. It was argued by the ACID that the development of secondary industries in the country depended on the number of Europeans. The committee recommended that:

The general conclusion is that until the European population in Northern Rhodesia has increased to over 35,000 and standard of living of African people is raised above the present level the internal market will remain too small to support manufacturing industries of a size to require assistance from the government.¹¹¹

Contrary to the assertion above, we argue that the European population in Northern Rhodesia did not remain static, especially in the post-war period. By 1950, the number of Europeans in Northern Rhodesia had already passed the mark of 35,000 which the ACID had set as a condition for setting up local secondary industries.¹¹² In 1949, for example, the copper boom had encouraged a lot of Europeans to come to Northern Rhodesia, and the majority of them were employed on the mines. In this same year, Britain had devalued the sterling against the US dollar which made it possible for her to export and import goods abroad especially copper from Northern Rhodesia.¹¹³

The recommendation by the ACID both in the second and third report that the only industry which deserved the government sponsorship in the post-war period was a cement industry at

¹⁰⁸ NAZ, SEC 1/244, Memorandum and Articles of Association of Chilanga Cement Factory: Finance and Organisation, 1948.

¹⁰⁹ PACRA, *First Companies' Register*, p.105.

¹¹⁰ *African Mail*, 23 January, 1961, p.15 and Sutton and Langmead, *An Enterprise Map of Zambia*, p.117.

¹¹¹ NRG, *Advisory Committee on Industrial Development, Third Report*, p.7.

¹¹² NRG, *Colonial Report 1950* <https://books.google.co.zm/books?id=kcw7AAAAiAAj> Accessed 26/04/2018.

¹¹³ Tembo, "The Impact of the Second World War on Northern Rhodesia", p.183.

Chilanga was not valid. There were other several possible industries which the ACID had not taken time to investigate thoroughly. One such sector which was not even proposed by the ACID was the establishment of the textile industry in the country. Jewish entrepreneurs, Abe Gelman, Harry Wulfson, Maurice Gersh, Geoff Beckell and E.R. Rain, decided to set up the first private owned textile industry in the country in 1946. Their company was known as Northern Rhodesia Textiles Ltd (NORTEX). NORTEX'S incorporation was on 7 October, 1946 at the Livingstone office with a nominal capital of £80,000. The company was given certificate No. 191.¹¹⁴ NORTEX began manufacturing blankets in 1948. In 1955, it was able to make 10,000 blankets a week equivalent to 500,000 sheets a year. The only major constraint on this industry was the creation of the Federation of Rhodesia and Nyasaland in 1953, which led to the reduction of tariff barriers against imports of blankets from Southern Rhodesia. To survive, NORTEX had to manufacture low quality and cheaper sheets so that they could not compete with better quality blankets from Southern Rhodesia, South Africa and from overseas.¹¹⁵

Apart from NORTEX, there were other possible industries for the post-war period. In 1947, J.H. Firhand, an entrepreneur from America wrote to the ACID saying, "Can you tell us the best way to invest our capital in food processing industries in your country, especially extraction of fruit juices?"¹¹⁶ In reply, the Chairman of the ACID H.L. Greenfell argued that, "at this time, large capital investment cannot be justified because the country lacks cheap and ample hydro-electric power."¹¹⁷ Based on such remarks one can firmly argue that the primary constraint on industrialisation in the post-war period in the country was not necessarily a small European population but rather the attitude of the ACID which the government had entrusted with the task of helping to develop local secondary industries. One of the most shocking recommendations made by the ACID in the third report in 1948 was its dissolution. It pointed out, saying:

The only industry deserving the government sponsorship was, in the opinion of the committee the cement industry. The committee submits to the government that

¹¹⁴ PACRA, *First Companies' Register*, p.187.

¹¹⁵ Macmillan, *An African Trading Empire*, p.343.

¹¹⁶ NAZ, SEC 1/117, J.H. Firhand to ACID, 19/11/1947.

¹¹⁷ NAZ, SEC 1/117, H.L. Greenfell to J.H. Firhand, 27/07/1948.

it has completed the task entrusted to it. It recommends, therefore, that it should be dissolved.¹¹⁸

The ACID recommended, therefore, that the government had to appoint a small sub-committee of an expanded Development Authority to give advice on matters of commerce, trade and industry. It was such delaying tactics which led to new agitations both in and outside the LEGCO calling on the government to expedite the process of setting up secondary industries in the country. In 1950 for example, Welensky presented a motion in the LEGCO that the government had to quickly set up a Finance Development Board whose function was to finance the establishment of secondary industries in the country. The government accepted Welensky motion, and in 1951 the Industrial Loans Board (ILB) was set up by the government.¹¹⁹ The ACID was replaced by ILB on 19 January, 1951 with an initial capital of £250,000. The ILB had the following objectives: to assist industry with money for varying purposes of development including the financing of fixed assets, installation of new labour-saving plants and equipment and the provision of working capital. In 1953, the ILB capital increased to £1 million, but there was little demand for these funds.¹²⁰

There were several reasons why there was low demand for funds locally from the ILB. Only a handful of local merchants and traders were able to access the funds while no records of Africans exist to show that they were able to access the funds. To begin with, the ILB was inefficient because of the part-time members of staff who ran it. According to Kanduzza, the low demand for funds from the ILB was as a result of, “the Northern Rhodesia government which was not yet committed to local industrialisation.”¹²¹ The other reason for the small demand was because of the hard questions on the questionnaire which borrowers had to answer before accessing the money. A full copy of the questionnaire appears in the appendix section of this dissertation. The only people who managed to access funds from the ILB were those who had the necessary technical qualifications and training in the industry. None of the Africans was able

¹¹⁸ NRG, *Advisory Committee on Industrial Development, Third Report*, p.7.

¹¹⁹ NRG, *Legislative Council Debates; 31 August-16 September, 1950* (Lusaka: Government printers, 1950), p.193.

¹²⁰ NAZ, SEC 1/117, Extract from the General Notice No. 46 of 1951; NAZ, SEC 1/117, Extract from General Notice No. 1304 of 1950; Mwanza, *Chasing the Wind and Dependency Syndrome*, pp.7-8; NRG, *Legislative Council Debates; 24 November, 1954* (Lusaka: Government printers, 1954), columns 1023-1024 and Hall, *Zambia*, p.278.

¹²¹ Kanduzza, *The Political Economy of Underdevelopment in Northern Rhodesia*, p.223.

to access these funds because they did not meet the required conditions, especially in the area of technical qualifications and training. According to Andrew Sardanis, in the mid-1950s, Africans in Northern Rhodesia were mainly destined for manual labour and low clerical jobs.¹²²

The other reason for the small demand for funds from the ILB was the lengthy and hectic process involved when applying for both financial assistance and advice. For example, apart from meeting the conditions on the questionnaire, applicants were supposed to write another letter to the Central African Council headquarters at Salisbury in Southern Rhodesia where they got advice on whether their proposed industrial establishments were economic or not. The Central African Council formed in 1946, coordinated policies on the economic development of Northern Rhodesia, Southern Rhodesia and Nyasaland.¹²³ A more elaborate example on how complicated the whole process was, came from the letter which Firth and an American entrepreneur wrote to the ACID when he wanted to set up a food processing industry (Extraction of fruit juices) in 1947. He lamented when the ACID told him to seek more advice from the Central African Council concerning his idea to set up a food processing industry in Northern Rhodesia. He complained that, “it is also noted that a Central African Council has been formed. Where does this body function, please, and to whom should we address ourselves in similar terms?”¹²⁴ Such was the dilemma which was involved when one tried to set up a secondary industry in Northern Rhodesia.

3.9. Conclusion

In this chapter, we have laboured to discuss the factors which impeded the development of secondary industries in Northern Rhodesia between 1924 and 1952. In the first place, it has come out that there were unlimited opportunities for the development of secondary industries in the country under the Crown government rule. These opportunities presented themselves through the Great Depression period, the Second World War period and the post-war period. The chapter further demonstrated how externalisation of income tax, *laissez-faire* policy, formation of the

¹²² Andrew Sardanis, *Zambia the First Fifty Years* (London: Tauris and Company Ltd, 2014), p.18.

¹²³ NAZ, SEC 1/117, the role of the Central African Council, 1946.

¹²⁴ NAZ, SEC 1/117, the role of the Central African Council, 1946.

TDB, declaration of Ndola as the commercial, industrial and distribution centre; and lack of hydro-electric power stations constrained industrial development. The main industries which the government wanted to encourage for possible establishment were those which served the needs of the mines only. In addition, government also supported the establishment of those industries which made a direct contribution to the war effort. It has been argued that the introduction of the Advisory Committee on Industrial Development (ACID) in 1946, the Northern Rhodesia First Development plan (NRFDP) in 1947 and the Industrial Loans Board (ILB) in 1951 did not lead to local industrialisation. The next chapter will analyse the extent to which the colonial state and industrial capital tackled these constraints on industrialisation from the Federal period up to independence, 1953-1964.

CHAPTER FOUR

TACKLING THE CONSTRAINTS ON INDUSTRIALISATION, 1953-1964

4.1. Introduction

This chapter examines the extent to which the colonial state and industrial capital tackled the constraints on industrialisation in Northern Rhodesia from the Federal period to independence. The chapter begins by outlining the reasons why the Federation was justified and then discusses the industrial policies which were enacted during this period. The chapter reveals that some of the ways in which the Northern Rhodesia government tried to tackle the constraints on industrialisation was to encourage the formation of the Federation, encouraged the major copper mining companies to be incorporated locally, created the INDECO, built Kariba Dam and enacted the private sector driven industrialisation policy. However, it is argued that the colonial state did not create a conducive environment upon which private capital could invest in local secondary industries. The other argument is that due to lack of tariff protection in the country, foreign industrial capital confined itself to the establishment of small, subsidiary metal-working industries which mostly supplied the needs of the mines. Lastly, it is argued that Northern Rhodesia did not need Federation to develop secondary industries because the country was already rich financially from its copper exports. Up to independence, the country had not yet developed major secondary industries as was the case in Southern Rhodesia and South Africa.

4.2. Justification for the Federation of Rhodesia and Nyasaland

The Federation of Rhodesia and Nyasaland was formed on 23 October, 1953 and it was comprised of the Federal government and the three Central African territorial governments (Northern Rhodesia, Southern Rhodesia and Nyasaland).¹ During the LEGCO debates in 1953 in Northern Rhodesia, the formation of the Federation was justified by the members on many grounds. Just a few months before the imposition of the Federation, Mr. Unsworth who was then Acting Chief Secretary to the government explained that the Federation was destined to bring a positive change in the economies of the three territories. He explained that the Federation was

¹ FRN, *Report on the Development of Government in the Federation* (Salisbury: Government printers, 1958), pp.4-5 and Young, "Industrial Diversification in the Zambian Economy", p.27.

justified because it was intended to bring economic advantage to the country. For example, he noted that Federation would bring economic collaboration between Northern Rhodesia as the producer of copper and Southern Rhodesia which controlled the supply of coal and transport facilities since these facilities were necessary for the copper industry on the Copperbelt. Such collaboration was going to be beneficial to Northern Rhodesia.²

The other justification for Federation was that it was going to create a broader-based economy which was going to attract more foreign capital investment. A broader-based Federal economy was going to be one which would help to cushion the effect of any slump in the mining, agriculture or manufacturing industry.³ Since Southern Rhodesia had developed secondary industries more than Northern Rhodesia and Nyasaland, its services were going to be more readily available in the latter territories. Much more critical, the justification of the Federation was on the ground that, commerce, trade, secondary industries and communications were going to be developed equally in the three Central African States.⁴ However, by all standards in 1953, Northern Rhodesia was already prosperous financially as a result of its minerals, especially copper which brought in much money. On paper, the financial records attest to this fact that the country was financially rich although the Federal state and Britain spent much of this money. Northern Rhodesia therefore, did not need the Federation for it to improve its communication infrastructure, establish local industries and other social services because the monies for such were already available. For example, Northern Rhodesia's National Income had risen to 174% and its Gross Domestic output to 156% from 1945 to 1953.⁵

It is not surprising, therefore, that all Africans in Northern Rhodesia opposed Federation. Mr. Siwale, for example, during the African Representative Council in 1953, argued that,

² NRG, *Legislative Council Debates; 16 April- 25 April, 1953* (Lusaka: Government printers, 1953), p.28.

³ NRG, *Legislative Council Debates; 16 April-25 April, 1953*, p.28.

⁴ NRG, *Legislative Council Debates; 16 April-25 April, 1953*, p.28.

⁵ NRG, *Report on the National Income and Social Accounts of Northern Rhodesia, 1945-1953* (Lusaka: Government printers, 1954), p.1.

“Federation is being imposed against the wishes of 6,000,000 people.”⁶ During this same meeting, Mr. Yamba explained saying:

I am sure and I am convinced that we can develop economically in Northern Rhodesia without Federation. To my knowledge there is no country in Central Africa which can beat Northern Rhodesia in financial matters at the present time. We are told that apart from communications, we are to improve the social services. That can be reached by mere agreements between the three territories without Federation.⁷

The table below shows the progressive changes in National Income and Gross Domestic Product between 1953 and 1955. The National Income comprised of total income received as revenue while the Gross Domestic Product consisted of the total value of goods produced and services generated in Northern Rhodesia from 1953 to 1955. The positive financial prosperity recorded in this period was highly praised by the Financial Secretary in the 1956 LEGCO debates saying, “From almost every point of view, the Territory (Northern Rhodesia) is prosperous to a remarkable degree.”⁸ Export of metals which included copper, lead, zinc accounted for ninety six percent of total exports in 1953 but copper alone accounted for ninety one percent.⁹

Table 4: National Income and GDP, 1953-1955.

YEAR	NATIONAL INCOME	GROSS DOMESTIC PRODUCT
1953	£85.6 million	£ 104.6 million
1954	£99.9 million	£ 119 million
1955	£130.8 million	£ 152 million

Source: NRG, *Debates of the Third Session of the Tenth Legislative Council; 28 June – 24 August, 1956*, (Lusaka: Government printers, 1956), p.53 and NRG, *Report on the National Income and Social Accounts of Northern Rhodesia 1945-1953*, p.1.

⁶ NRG, *African Representative Council; the proceedings of the Second Council, 21 July-24 July, 1953* (Lusaka: Government printers, 1953), p.106.

⁷ NRG, *African Representative Council; the proceedings of the Second Council, 21 July-24 July, 1953*, p.106.

⁸ NRG, *Debates of the Third Session of the Tenth Legislative Council; 28 June – 24 August, 1956*, p.53.

⁹ NRG, *Debates of the First Session of the Tenth Legislative Council; 10 April – 1 May, 1954*, (Lusaka: Government printers, 1954), p.7.

Against this backdrop, therefore, it is believed that there were other hidden motives why the Federation was justified. Mark Chona, for example, argued that Federation was, “a way of entrenching British imperial policies in the colonies because politics of imperialism determined the rate of industrial development.”¹⁰ He reiterated that as far as the Federation was concerned, Northern Rhodesia was looked upon as an area where the British imperial power could tap the mineral wealth, which it used to build its industries in Britain. Therefore, the Federation was intended to transform Northern Rhodesia into a market of foreign manufactured goods.¹¹ Andrew Sardanis argued further and said that both white settlers in Northern Rhodesia, Southern Rhodesia and Nyasaland justified Federation because they wanted to dominate and exploit the mineral wealth in Central Africa for at least 150 years. Since the majority of white settlers were in Southern Rhodesia, they justified Federation so that they could maintain their dominant position over Africans in the same way it was in South Africa. The 50,000 white settlers in Northern Rhodesia justified Federation simply because they were afraid of being dominated by the two million Africans.¹² In Nyasaland, whites pushed for Federation so that Britain could be relieved of looking after a territory which offered little in terms of economic resources.¹³ The Federation therefore, was not meant to enhance economic development or industrial development in Northern Rhodesia, but to exploit its copper resources.

4.3. Steps taken by the colonial state and industrial capital to tackle the constraints

As stated earlier in the previous chapter, there were several constraints between 1924 and 1952 which made the development of secondary industries difficult in Northern Rhodesia. Thus, in 1953 the colonial state had envisioned that the formation of the Federation would be one of the ways to tackle these constraints.¹⁴ Since copper from Northern Rhodesia was the main export earner of the Federation, the government was optimistic that there was going to be a considerable inflow of capital in the copper mines which would later invest its surplus profits in local

¹⁰ Interview with Mark Chona, former Permanent Secretary Ministry of Foreign Affairs, 1965-1968 and also Special Assistant to the President for International Security, 1968-1980 on 05/04/2018.

¹¹ Interview with Mark Chona, 05/04/2018.

¹² Interview with Andrew Sardanis, 16/02/2018.

¹³ Interview with Andrew Sardanis, 16/02/2018.

¹⁴ NAZ, SEC 1/354, Owen Smith to Financial Secretary, 14/12/1953.

industries.¹⁵ The government was of the view that up to 1950, the two major mining companies in Northern Rhodesia, Anglo American Corporation Ltd and Roan Selection Trust Ltd did not transfer their profits to Northern Rhodesia but instead sent them abroad. The head offices for these companies were in London and they controlled the disposal of profits from copper.¹⁶ Thus, the government strongly supported the idea of registering and incorporating these two mining corporations locally. For example, during the LEGCO session in 1953, Mr. Taylor (The Financial Secretary) explained that:

In the past, major mining companies were not incorporated in Northern Rhodesia. Both the Anglo-American group and Roan Selection group are moving their domicile. This is something which we have long waited. It is something which we all welcome as it will have a positive impact on our revenue.¹⁷

The first company to be incorporated locally was the Anglo American Corporation Ltd on 1 January, 1954 at the Kitwe office and was given certificate number 6,783.¹⁸ Roan Selection Trust Ltd was incorporated on 22 May, 1954 at the Lusaka office and was given certificate number 6,906.¹⁹ After incorporating the two companies (AAC and RST) locally, the government amended the Income Tax Bill Number Two of 1953 in order to allow these mining companies to qualify for tax relief under the Relief of Double Taxation Agreement which existed between the United Kingdom and Northern Rhodesia.²⁰ Mr. Taylor explained that all the overseas shareholders of AAC Ltd and RST Ltd who were British citizens were now eligible to claim refund on tax of seven shillings and six pence (in British pound) which was paid on the copper mining companies' profits and on their own individual or personal rates of tax.²¹ The

¹⁵ NAZ, SEC 1/354, Owen Smith to Financial Secretary, 14/12/1953 and United Nations (Hereafter, UN), *Report on Structure and Growth of Selected African Economies* (New York: United Nations Publications, 1958), pp.32-33.

¹⁶ NRG, *Report on the National Income and Social Accounts of Northern Rhodesia 1945-1953*, p.17.

¹⁷ NRG, *Debates of the Fifth Session of the Ninth Legislative Council; 25 July-17 August, 1953*, p.230.

¹⁸ PACRA, *Second Companies' Register 1953-1964* (Lusaka: PACRA, 1965), p.30.

¹⁹ PACRA, *Second Companies' Register*, p.35.

²⁰ NRG, *Debates of the Fifth Session of the Ninth Legislative Council; 25 July-17 August, 1953*, p.231.

²¹ NRG, *Debates of the Fifth Session of the Ninth Legislative Council; 25 July-17 August, 1953*, p.231.

government also introduced an additional Territorial Surcharge Ordinance Tax (TSOT) of 20 percent on all companies registered and incorporated in the country.²²

The TSOT gave authority to the Federal Commissioner of Taxes to collect income tax and other forms of revenue from Northern Rhodesia throughout the Federal period.²³ In addition, the government of Northern Rhodesia provided AAC Ltd and RST Ltd with the following services: a registered telegraphic address, a private post office box number at Lusaka, a private wire telephone service from Lusaka to Luanshya, a private wire tele-printer between Lusaka, Luanshya, Mufulira, Chibuluma and another one between Lusaka and Johannesburg.²⁴ According to Mr. Taylor, the imposed two taxes (income tax and TSOT) were very low because the government intended to attract both large companies like AAC Ltd, RST Ltd and other industrial and commercial companies to come and invest their capital in the country.²⁵ However, Mr. Sergent (Member for the Lusaka Electoral Area) argued in the 1956 LEGCO debate that:

The further imposition of the twenty percent surcharge on company tax is to me disappointing. This is not any encouragement for new industries to open up in this territory, neither is it any encouragement for the present established industries. It is virtually important that secondary industries are given every encouragement to come to this country.²⁶

During the same 1956 LEGCO debate, Mr. Nicholson (The Financial Secretary) reported that 249 companies were registered in Northern Rhodesia since 1 July, 1955 as compared to 139 registered in 1954 and 111 registered in 1953. He pointed out further that 368 factories were in operation at the end of 1955 as against 284 factories in 1954 and 239 in 1953.²⁷ However, when the second census on industrial development was conducted in 1954, it was discovered that the

²² NRG, *Debates of the Third Session of the Tenth Legislative Council; 28 June – 24 August, 1956*, p.324.

²³ NRG, *Debates of the First Session of the Eleventh Legislative Council; 24 November, 1959 – 3 February, 1960*, (Lusaka: Government printers, 1960), pp.668 – 670.

²⁴ NRG, *Debates of the Fifth Session of the Ninth Legislative Council; 16 April – 25 April, 1953*, pp.275-276.

²⁵ NRG, *Debates of the Fifth Session of the Ninth Legislative Council; 25 July-17 August, 1953*, p.235.

²⁶ NRG, *Debates of the Third Session of the Tenth Legislative Council; 28 June – 24 August, 1956*, p.324.

²⁷ NRG, *Debates of the Third Session of the Tenth Legislative Council; 28 June – 24 August, 1956*, p.53.

majority of secondary industries were in the category of metal working, engineering services, repairing services, quarrying and construction to support the needs of the copper mines.²⁸ As the Northern Rhodesia government had predicted, the two companies' change of domicile (AAC Ltd and RST Ltd) to Northern Rhodesia engendered a considerable inflow of capital investment in the copper mines. Between 1953 and 1956, the value of copper kept on increasing. See table 5 below.

Table 5: Balance of payment, value and account of mining industry in Northern Rhodesia

YEAR	Value of mineral production in £ (millions).	Total royalties paid Abroad, (%).	Direct taxes Paid abroad. (%)	Dividends paid abroad. (%)	Addition to reserves locally. (%)
1953	95.0	10.5	16.8	17.9	3.2
1954	97.7	11.0	17	18.3	5.7
1955	120.3	13.6	19	20.8	12.3
1956	129.3	13.8	22.5	25.5	14.2

Source: UN, *Report on Structure and Growth of Selected African Economies*, pp.14-15.

The table above shows the rising value of mineral production in Northern Rhodesia between 1953 and 1956. Whereas the table below shows the value of copper and percentage of income tax paid directly by the copper mining industry to the Federal government which later disbursed it as royalties, dividends, taxes and territorial revenues between 1957 and 1963. The Federal government exercised control over Northern Rhodesia's income tax from the copper mines. Income tax from the mines and revenue from the customs duties were collected and credited to the Federal pool account, and after that, it could be distributed unequally to the three Central

²⁸ PACRA, *Second Companies' Register*, pp.30 – 50 and UN/ECA/FAO, *Report on Economic Survey Mission*, chapter v. pp.1-3.

African territorial governments. Southern Rhodesia was always allocated a more significant share from the Federal pool account.²⁹

Table 6: Income tax paid to the Federal government by copper mining companies in Northern Rhodesia.

YEAR	PERCENTAGE Of TAX (%)	VALUE OF COPPER IN £
1957	36.3	£8,857,691
1958	22.0	£6,669,693
1959	15.3	£12,668,541
1960	24.3	£13,814,059
1961	25.4	£12,963,343
1962	22.1	£12,623,050
1963	21.0	£13,361,931

Source: Berger, *Labour, Race and Colonial Rule; The Copperbelt from 1924 to independence*, pp.9-11.

The other way in which the colonial state in Northern Rhodesia tried to tackle the constraints on industrialisation during this period was to enact the private sector led industrialisation policy. The policy stated that:

The government believes that economic development should be achieved mainly through private enterprise and that government activity should in general be limited to providing the best possible climate for that development, including the provision of supporting services such as research and extension services, as well as by the maintenance of a stable government.³⁰

Equally, under the Federal state, “the development of secondary industries was the field of endeavour for private enterprise. Its role was to create an enabling environment for private capital investment.”³¹ This economic policy was not new to Northern Rhodesia. It was in force both under the BSACo and the Crown government rule. However, both governments neither provided adequate information on investment opportunities in Northern Rhodesia nor attracted enough foreign capital to set up local secondary industries. This policy was perpetuated under

²⁹ Anthony Martin, *Minding Their Own Business; Zambia’s Struggle against Western Control* (Harmondsworth: Hutchinson, 1972), p.36.

³⁰ NRG, *Northern Rhodesia Development Plan 1961-1965* (Lusaka: Government printers, 1961), pp.20-25 and Gardner, “The Role of INDECO”, pp.1-10.

³¹ FRN, *Report on the Development of Manufacturing Industry within the Federation of Rhodesia and Nyasaland 1960* (Salisbury: Government printers, 1960), p. v.

the Federal government. Since a lot of secondary industries were in Southern Rhodesia, the territorial government, together with the Federal State in the former found it easier to attract more foreign capital to invest in local industrialisation. For example, immediately the Federation was established in 1953, the territorial government of Southern Rhodesia enacted tariffs against South African manufacturers. By raising tariffs against South African goods, the Federal state ensured that more secondary industries were established in Southern Rhodesia while no tariffs existed in Northern Rhodesia and Nyasaland.³²

Southern Rhodesian manufacturers therefore had free access to the Northern Rhodesian market. Under these customs and tariff agreements, both Southern Rhodesian and South African manufactured goods were allowed to enter duty-free in Northern Rhodesia, but under the Federation, only Southern Rhodesia was eligible. Gwande argued further that as a result of the policy above, there was the creation of a bigger local market for Southern Rhodesian manufactured goods as it supplied four-fifths of manufactured goods in the entire Federation.³³ Tariff protection would have ensured that dumping of low priced goods was curbed and ensured that the small Northern Rhodesian market was reserved for local manufacturing concerns only.

Even though the Northern Rhodesia and the Federal governments had advocated for the private sector driven industrialisation policy, they did not put in place measures such as setting money aside for capital expenditure on building infrastructure for the establishment of secondary industries.³⁴ Infrastructure such as good roads, factory buildings, communications and water supply systems which could support the production and distribution of manufactured goods were not included in the private sector driven industrialisation policy. Northern Rhodesia's geographical position as a landlocked country required good infrastructure which could have ensured that the country did not incur high costs of transporting its goods and this rendered

³² Quoted in Victor Muchineripi Gwande, "Foreign Capital, State and Development of Secondary Industries in Southern Rhodesia", pp.72-73.

³³ Quoted in Victor Muchineripi Gwande, "Foreign Capital, State and Development of Secondary Industries in Southern Rhodesia", pp.72-73.

³⁴ Gardner, "Economic Future of Northern Rhodesia", pp.3-4.

exports to the south uncompetitive.³⁵ Infrastructure for transport, communications and factories was therefore a pre-requisite for the promotion of industrial growth.

The other way in which the Federal state and the colonial state in Northern Rhodesia tried to tackle the constraints on industrialisation beginning in 1955 was to invest in the construction of the power industry. It was anticipated by the government that the availability of hydro-electric power in the country would entrain additional private capital investment in the mines and also that power would be available to industrial and domestic consumers.³⁶ The Economic Secretary, Mr. Nicholson explained during the LEGCO session in 1953 that:

The provision of cheap power coming in the future as soon as the Government decides to go ahead with the power scheme, is going to attract industry to this country.³⁷

As discussed in the previous chapter, the agreement made between the mining corporations on the Copperbelt and the Rhodesia Railways in 1937 to transport coal from Wankie to the Copperbelt mines was coming to an end in 1957. By 1953, the collieries at Wankie could not meet the energy requirements of the copper mines due to expansion in profitable mineral production.³⁸ The copper mines' total requirements of coal in 1953 was 78,000 tons a month. However, in the first five months of 1953, coal dispatches from Wankie to the copper mines was 51,450 tons.³⁹ Thus, the Federal state, the Northern Rhodesia government and the mining corporations on the Copperbelt began to look for alternative sources of energy. One such alternative was the construction of the Kariba hydroelectric dam. The Federal Hydroelectric Power Act of 1954 provided for the establishment of the Kariba hydroelectric power scheme in accordance with the provision of the Federal constitution.⁴⁰

³⁵ Gardner, "Economic Future of Northern Rhodesia", pp.3-4.

³⁶ NAZ, SEC 1/117, R.S. Young, Chief Research Chemist to Chief Secretary of Government, 01/01/1955 and Robert H. Bates, "The policy origins of migration in Zambia", a paper presented to the annual meeting of the American Political Science Association, August, 1973.

³⁷ NRG, *Debates of Fifth Session of the Ninth Legislative Council; 26 January – 7 March, 1953*, (Lusaka: Government printers, 1953), p.239.

³⁸ Bates, "The policy origins of migration in Zambia", August, 1973.

³⁹ *The Northern News, Tuesday, July 7, 1953*, p.4.

⁴⁰ NRG, *Legislative Council Debates; 8 March-25 March, 1955* (Lusaka: Government printers, 1955), p.203.

Construction of the dam started in 1955 and it began supplying power in 1958.⁴¹ Contrary to what the government had anticipated, power supply from Kariba did not spark industrial development because more than 60 percent of power output was sold and supplied exclusively to the copper mines only.⁴² The growth of the copper mines and the abundance of hydroelectricity only attracted a good number of small, subsidiary, metal-working industries on the Copperbelt to serve the needs of the mines. These small industrial firms included: engineering services, construction and mechanical repairs, manufacture of steel and metal products utilized by the mining companies, refineries, manufacture of chemicals, acids, quarry products, mining apparel and printing services.⁴³ It was reported by Mr. Nicholson in the 1956 LEGCO session that:

The installed capacity of electricity in Northern Rhodesia is still quite inadequate to compete with the rising demand and shortage of power remains, as in 1955, a deterrent to industrial expansion at many centres. The demand for power continue to outstrip supply...⁴⁴

Apart from constructing the Kariba dam to generate power for domestic and industrial sectors, it was the policy of the Federal state to continue encouraging the development of secondary industries in those towns which operated as commercial, industrial and distribution centres. These towns included Umtali, Bulawayo, Ndola, Blantyre and the commercial and administrative centre, Salisbury.⁴⁵ During the LEGCO session of 1953, Colonel Wilson (Member for Health and Local Government) asked the Chief Secretary of Government saying, “what is the Government statement concerning the policy in regard to the future development of Ndola as the commercial centre of the Copperbelt?”⁴⁶ In reply, Mr. Unsworth (The Acting Chief Secretary of Government) said:

The policy of developing Ndola as the commercial, industrial and distribution centre be maintained until 31 March, 1956 when the agreement concerning

⁴¹ Bates, “The policy origins of migration in Zambia”, August, 1973.

⁴² Bates, “The policy origins of migration in Zambia”, August, 1973.

⁴³ Bates, “The policy origins of migration in Zambia”, August, 1973.

⁴⁴ NRG, *Debates of the Third Session of the Tenth Legislative Council; 28 June – 24 August, 1956*, p.54.

⁴⁵ FRN, *Report on the Development of Manufacturing Industry within the Federation of Rhodesia and Nyasaland*, p.10.

⁴⁶ NR G, *Debates of the Fifth Session of the Ninth Legislative Council; 25 July-17 August, 1953*, p.293.

closed townships comes to an end. This policy remains as expressed in the General Notice Number 224 of 1949.⁴⁷

The result, therefore, was that Southern Rhodesia which had a more significant number of towns which functioned as commercial, industrial and distribution centres developed more secondary industries. Mpundu C. Musumpa and Sontwa M. Sinkala argued that, “Northern Rhodesia lost most of its manufacturing investment to Southern Rhodesia and its manufacturing industry remained undeveloped.”⁴⁸ The policy of the Northern Rhodesia government between 1935 and 1956 was that of the closed townships in which secondary industries were only allowed to open at Ndola and mostly served the needs of the copper mines. Thus, the closed townships policy did not lead to industrial development because it excluded the indigenous Africans from participating in the retail and wholesale trade.

4.4. Ancillary metal-working industries of the copper mines and other basic industries

The industrial census which was conducted in 1954 indicated that there were 284 secondary industries in Northern Rhodesia, but the majority were still metal-working industries serving the needs of the mines. Although the net manufacturing output increased from £6.4 million in 1955 to £11.9 million by 1961, it could not compare with that in Southern Rhodesia whose manufacturing output had increased from £31.4 million in 1955 to £60.7 million by 1961.⁴⁹ The Ndola Foundry Ltd was established at Ndola in 1953. It was incorporated on 1 January, 1953 at the Ndola office and was given certificate number 7,165.⁵⁰ This foundry was a subsidiary of Raine Engineering Ltd of Bulawayo. It provided an important service to the mines by making metal products and fabrication. Loans to fund the foundry were also accessed locally from a Jewish company known as the African Commercial Holdings Ltd (Afcom) based in Kitwe and was incorporated on 1 January, 1949 at the Kitwe office.⁵¹

⁴⁷ NRG, *Debates of the Fifth Session of the Ninth Legislative Council; 25 July-17 August, 1953*, p.293.

⁴⁸ Mpundu C. Musumpa and Sontwa M. Sinkala, “Manufacturing Industry in Lusaka”, in Geoffrey J. Williams (ed.), *Lusaka and Its Environs*, p.244.

⁴⁹ Young, “Industrial Diversification in Zambia”, p.39.

⁵⁰ PACRA, *Second Companies' Register*, p.38.

⁵¹ PACRA, *First Companies' Register*, p.130 and Macmillan, *An African Trading Empire*, p.30.

Apart from the Ndola Foundry Ltd, there were other small, metal-working industries incorporated on 1 January, 1953 at the Ndola office. These included the Steel Engineering Ltd and Steel Craft Ltd which carried out engineering services and metal fabrication at Ndola. At the same time, Federal Bolts and Nuts Company Ltd, a subsidiary from Southern Rhodesia manufactured and distributed different types of bolts and nuts for the mines from its base at Ndola. In the quarry industry, Mindola Crushers Ltd, Pioneer Brick Works Ltd and B and B Brickfields Ltd manufactured building materials such as crushed stones, bricks and tiles at Ndola. All these industrial firms supplied the copper mines with their products. The copper mines were the main purchasers of quarry products which were used for construction. Basic industries involved in non-mining activities such as milling and food processing comprised of Lusaka Milling Ltd (incorporated at the Lusaka office), Choma Milling Ltd (incorporated at Choma office), Premier Bakery Ltd and Nyati Bakery Ltd (incorporated at Ndola office). Industrial firms which assembled and distributed different types of mining vehicles and machines included the Earth Movers Ltd, Denver Machinery Ltd, British Motor Corporation Ltd, and the Roan Earth Movers Ltd. All these companies except Roan Earth Movers Ltd (incorporated at the Luanshya office) were incorporated at the Ndola office on 1 January, 1953.⁵²

Additionally, ACME Plumbing Ltd (incorporated at the Ndola office) and Concrete Pipes and Products Ltd were involved in the distribution and manufacture of plumbing and building materials. The latter company manufactured concrete pipes, culverts, concrete roofing materials and was incorporated at the Ndola office on 29 June, 1954.⁵³ Another company, Terrazzo and Precast Stone Products Ltd was set up at Ndola to manufacture Terrazzo concrete floors, stone products and was incorporated on 22 July, 1954.⁵⁴

Soon after the formation of the Federation of Rhodesia and Nyasaland on 23 October, 1953 the mining corporations on the Copperbelt and the territorial government in Northern Rhodesia began to conduct meetings where it was proposed to set up a copper refinery industry at Ndola. During the LEGCO debates in 1954, Mr. Nicholson (Acting Financial Secretary) explained that:

⁵² PACRA, *Second Companies' Register*, pp.45-48.

⁵³ PACRA, *Second Companies' Register*, pp.45-48.

⁵⁴ PACRA, *Second Companies' Register*, pp.45-48.

Members will have read in the recent announcement in the press regarding the building of an electrolytic copper refinery at Ndola. It will be operated by a company known as Ndola Copper Refinery Ltd under the control of Roan Antelope. It will add approximately £1 million annually to the Territory's exports and increase taxable profits within the Federation.⁵⁵

Prior to 1953, Nkana and Mufulira mines had added refining to copper production but this was on a small scale. At the former and latter mines, surface installations were constructed for refining copper, cobalt and smelting the concentrates. Mufulira mine also produced its own mill balls from scrap steel.⁵⁶ Refining of cobalt (a by-product of copper) was done at Chibuluma mine. The production of refined cobalt metal increased in value to £1.9 million in 1953.⁵⁷ It was in this regard that the mining corporations decided to set up a sizeable and slightly larger copper refinery at Ndola.

The Ndola Copper Refinery Ltd was incorporated on 11 May, 1954 at the Lusaka office with a nominal capital of £350,000 and was given certificate number 6,992.⁵⁸ The Directors of the refinery were all under the chairmanship of Ronald L. Prain. Construction of the refinery began by clearing of the site at Ndola. Major works included the construction of the tank house, boiler plant, pulverized fuel plant and installation of underground pump station.⁵⁹ Other major works included the construction of a railway system which linked both the refinery site and the site of the adjacent cobalt treatment plant for Chibuluma Mines Ltd with the Rhodesia Railways' system.⁶⁰ Construction works at the refinery continued up to 1958 although start-up operations began as early as 1954. However, the actual operations of the refinery began in 1959. Power was supplied to the refinery by the Rhodesia Congo Border Power Corporation Ltd.⁶¹ Initially, the Roan Antelope Copper Mines Ltd was contracted to supply the refinery at Ndola with 60,000 long tons of blister copper per annum for refining. Later, other mines on the Copperbelt took

⁵⁵ NRG, *Debates of the First Session of the Tenth Legislative Council; 10 April – 1 May, 1954*, p.7.

⁵⁶ Baldwin, *Economic Development and Export Growth*, p.181.

⁵⁷ FRN, *Economic Report, 1954* (Salisbury: Government printers, 1954), p.19.

⁵⁸ PACRA, *Second Companies' Register*, p.45 and MIA, LOC.18.4.4F. Reports and Accounts of the Ndola Copper Refineries Limited, 1954.

⁵⁹ MIA, LOC.18.4.4F, Reports and Accounts of the Ndola Copper Refineries Limited, 1957.

⁶⁰ MIA, LOC.18.4.4F, Reports and Accounts of the Ndola Copper Refineries Limited, 1954.

⁶¹ MIA, LOC.18.4.4F, Reports and Accounts of the Ndola Copper Refineries Limited, 1957-1959.

their blister copper to the refinery at Ndola for refining. For example, in 1961, 61,231 long tons of blister copper were refined for different mines and out of which 95% was for Roan Antelope Mines Limited. While in 1961, 85,859 long tons of blister copper for the mines were refined and 91% still belonged to Roan Antelope.⁶²

Although the copper refinery at Ndola operated well, it was beset with some constraints. The first vital constraint was inefficiency in its operations. Just barely a year after incorporation, the Board of Directors of the Ndola Copper Refinery Ltd resolved to move the company's head office from Lusaka to Salisbury which was the capital city of the Federation of Rhodesia and Nyasaland. The head office was finally moved to Salisbury on 31 May, 1955.⁶³ This entailed that operations at the refinery were controlled from the head office in Southern Rhodesia. Any emergency at the refinery could only be attended to after consultation with the head office in Southern Rhodesia. Once resolutions were passed at the head office, they could take time to reach the refinery at Ndola. Furthermore, it created a feeling whereby the refinery was not taken to be an indigenous industry because it was externally controlled. In addition to this was the externalization of money made at the refinery. Between 1954 and 1963, a lot of money made at the refinery was given out as dividends to shareholders outside Northern Rhodesia.⁶⁴ In a nutshell, the refinery at Ndola functioned more like a subsidiary industry of other refinery industries in Southern Rhodesia.

A good number of small, subsidiary and basic industries were incorporated in the country between 1955 and 1956. In the beverage industry, Northern Breweries Ltd, a subsidiary of South African Breweries Ltd opened a brewery at Ndola called the Copperbelt Breweries Ltd and began to distribute and manufacture lager beer in 1955.⁶⁵ In the same year, Heinrich's Syndicate Ltd, another subsidiary of South African Breweries Ltd, opened a brewery at Kitwe to manufacture and distribute bottled beer. The Brewery was incorporated on 1 January, 1955 at the

⁶² MIA, LOC.18.4.4F, Reports and Accounts of the Ndola Copper Refineries Limited, 1960-1961.

⁶³ MIA, LOC.18.4.4F, Reports and Accounts of the Ndola Copper Refineries Limited, 1955-1963.

⁶⁴ MIA, LOC.18.4.4F, Reports and Accounts of the Ndola Copper Refineries Limited, 1954-1963.

⁶⁵ PACRA, *Second Companies' Register*, pp.45-48.

Kitwe office.⁶⁶ Industries which belonged to the chemical sector for the mines were registered on 1 January, 1955 at the Ndola office. These included: Imperial Chemicals Ltd, Cunningham Chemicals Ltd both based at Ndola and Kafironda Ltd based at Mufulira. Imperial Chemicals Ltd was a subsidiary of the UK Imperial Chemical Company Ltd. Kafironda Ltd, a local company was developed as an associated Chemical Industry of Imperial Chemical Company Ltd. These chemical industries were involved in the production of different types of chemicals for the manufacture of explosives and blasting services for the copper mines.⁶⁷ Another company which dealt with chemical production was the Match Corporation Ltd a subsidiary company from Southern Rhodesia and it began to manufacture matches. The company was incorporated on 1 January, 1955 at the Ndola office.⁶⁸ Northern Glass works Ltd and Rhodesian Glass Company Ltd were involved in the distribution of different types of glass and they were subsidiaries of glass companies from Southern Rhodesia. They were incorporated at the Ndola office on 1 January, 1955.⁶⁹ In the food processing sector, Shapiro Milling Ltd was incorporated at the Lusaka office, Ndola Milling Ltd was incorporated at Ndola office, Kafue Milling Ltd was incorporated at Kafue office. These companies were incorporated on 1 January, 1955.⁷⁰

Furthermore, the Furniture Corporation Ltd based at Ndola was incorporated on 1 January 1955 at the Ndola office. The company made a wide range of household and office furniture. Household furniture comprised bedroom suites, luxury armchairs, kitchen cabinets and wood chairs. It also made executive suites, desks and receptions. In the early years of its incorporation, it specialized in shop-fittings only. However, the company faced the problem of having no established market for its products because of competition from imports of goods manufactured by larger concerns in Southern Rhodesia and South Africa.⁷¹ At the same time, other industrial companies called Modern Garments Ltd, Colywn Low and Bonar Ltd were incorporated at the Ndola office on 1 January, 1955 and began to manufacture industrial mining protective clothing. Important protective clothing included overalls, dustcoats, uniforms, rainwear of the highest quality and mining tools like drill bits. In addition, they manufactured a wide range of leisure

⁶⁶ PACRA, *Second Companies' Register*, pp.45-48.

⁶⁷ PACRA, *Second Companies' Register*, pp. 45-48.

⁶⁸ PACRA, *Second Companies' Register*, pp.45-48.

⁶⁹ PACRA, *Second Companies' Register*, pp.45-48.

⁷⁰ PACRA, *Second Companies' Register*, pp.45-48.

⁷¹ GRZ, *Ndola City*, p.13.

wear including men's trousers, jackets, safari suits for both sexes, shorts and jeans. The only constraint was competition of better products from Southern Rhodesia and South Africa.⁷² While Vitretex paints ltd which was also incorporated on 1 January, 1955 began production of quality paints for all types of buildings at Ndola but equally faced competition from the South.⁷³

On 1 January 1956, other small industrial firms were incorporated in the country. In the quarry industry, Kitwe Stone Crushers Ltd was incorporated at Kitwe office. In the metal-working industries, Nchanga Iron and Steel Company Ltd was incorporated at Chingola office. Central African Fencing and Metal Works Ltd, Structural Steel and Engineering Company Ltd were incorporated at Ndola office. Kitwe Panel Beaters Ltd (incorporated at Kitwe office), Lusaka Foundry Ltd (incorporated at Lusaka office) and Northern Industrial Milling Ltd was incorporated at Ndola office.⁷⁴ When the closed townships policy came to an end in March, 1956, other industrial firms belonging to metal-working and construction began to be established. Commercial and Industrial Consultants of Africa Ltd (CAICA) was incorporated and registered at Ndola on 1 January, 1957. CAICA was an industrial and Construction Company which provided an important service to the construction industry on the Copperbelt mines. Additional metal-working industries included: Mufulira Iron and Steel Company Ltd (incorporated at Mufulira office), Pipe and Steel Fabrication Ltd and Manley Engineering were incorporated at Ndola office. Food processing industries comprised the Kitwe bakery Ltd and it was the first bakery to sell sliced and wax-wrapped bread. The other bakery was the Mufulira bakery Ltd.⁷⁵ Bwana Mkubwa Crushers Ltd and Central Brick Fields Ltd were involved in the quarrying industry. At the same time, Heinrich's Syndicate Ltd established another brewery at Chingola where they manufactured and distributed bottled beer after incorporation on 1 January, 1957.⁷⁶

The period between 1958 and 1960 witnessed the establishment of other small, subsidiary metal-working and basic industries in the country. The majority of those incorporated on 1

⁷² PACRA, *Second Companies' Register*, pp.48-52 and GRZ, *Ndola City*, p.13.

⁷³ PACRA, *Second Companies' Register*, pp.48-52 and GRZ, *Ndola City*, p.13.

⁷⁴ PACRA, *Second Companies' Register*, pp.52-58.

⁷⁵ Macmillan, *An African Trading Empire*, pp.56-60 and PACRA, *Second Companies' Register*, pp.52-58.

⁷⁶ Macmillan, *An African Trading Empire*, pp.56-60 and PACRA, *Second Companies' Register*, pp.52-58.

January, 1958 were based at Ndola and they were subsidiaries of foreign companies. Chloride Ltd a subsidiary of Chloride Electrical Storage Company (PVT) Ltd from Britain began to manufacture Exide batteries first at its Kitwe factory and later opened outlets in other towns on the Copperbelt and it was incorporated at the Kitwe office. The materials used to manufacture batteries were all procured abroad. Another subsidiary company called Adhesive International from Mauritius began the distribution of a wide range of adhesive products such as glue at its Ndola base. Heinrich's Syndicate Ltd opened another brewery at Ndola for the manufacture and distribution of bottled beer in 1958. Another metal-working industry called Mufulira General Engineering Ltd was incorporated at Mufulira office while Livingstone Panel Beaters Ltd was incorporated at Livingstone office. Olympic Milling Company Ltd was incorporated at Mufulira office on 2 May, 1959.⁷⁷

The other slightly bigger industry set up at Ndola and incorporated at the Ndola office on 1 January, 1959 was the Ndola Sugar Refinery Ltd and began refining sugar for Ndola Sugar Company Ltd which changed its name to Zambia Sugar Plc. after independence. The refinery was a subsidiary of the UK based company called Tate and Lyle Ltd. Construction of the refinery was completed in May, 1960. Initially, Ndola Sugar Company Ltd owned a sugar estate on the Southern Rhodesia border at Chirundu. The refinery refined sugar from Chirundu Sugar Estates but in 1964 the Nakambala Sugar Estate was opened. To refine sugar, first it had to be put into containers where it was heated into liquid form and later chemicals were added to make it safer for consumption. The refinery could produce 30,000 tons of sugar a year.⁷⁸

At the beginning of 1960, the economy of Northern Rhodesia was still built around mineral extraction and its associated small, metal-working industries. For example, a company called Scaw Foundry Ltd was set up in Kitwe and incorporated on 30 March, 1960 to serve the needs of the mines.⁷⁹ The owners of this foundry known as Scaw-Tow Foundries Ltd of Kitwe went into partnership with Scaw Metals Ltd of South Africa and the Ndola Foundry Ltd to manufacture grinding balls and castings which were sold to the copper mines. Apart from grinding balls and castings, the foundry manufactured high-chrome and low-chrome forged grinding media balls,

⁷⁷ PACRA, *Second Companies' Register*, pp.59-69.

⁷⁸ PACRA, *Second Companies' Register*, pp.69-76 and GRZ, *Ndola City*, p.13.

⁷⁹ PACRA, *Second Companies' Register*, pp.69-76.

iron and steel castings, deformed bars and industrial gases for the mines.⁸⁰ Other metal working industries incorporated in 1960 were the Rhodesian Bolt and Rivet Company Ltd at Ndola, a subsidiary from Southern Rhodesia and Roan Engineering Ltd. At the same time, a company called Industrial Plastics Ltd was set up at Ndola and began to manufacture a variety of plastic products for the mines using an injection moulding technique.⁸¹ Besides, a company called Ndola Sweet Confectionery Ltd was set up in 1960 to manufacture sweets at Ndola. Outside the Copperbelt region, another company called Lusaka Mineral Water Ltd began to manufacture bottled water at Lusaka.⁸²

Since the majority of industrial firms were based on the Copperbelt province, the Northern Rhodesia government decided to carry out a survey of the Lusaka-Kafue area in 1960 to determine the most suitable place for the establishment of state-owned heavy secondary industries. After assessing the local materials, it was discovered that the Kafue area was potentially the most suitable place for the establishment of an electro-chemical industry, including the manufacture of nitrogenous fertilizers, explosives, acetylene and its derivatives.⁸³ However, the government explained that such establishments needed to be done gradually.⁸⁴ The Northern Rhodesia government therefore, decided to carry out another regional survey of the Copperbelt province in 1960 to determine the extent to which the manufacturing sector was contributing to economic growth in the country. The commission which was appointed to carry out this survey published its report on 1 February, 1960 where it was discovered that no real alternative source of profit existed in Northern Rhodesia besides the copper industry. The report stated that:

Apart from copper, cobalt and uranium, lime and perhaps a little citrus, not much is produced on the Copperbelt for markets outside of the Copperbelt. Our economy is still, broadly speaking, at the extractive stage. Secondary and light manufacturing

⁸⁰Sutton and Langmead, *An Enterprise Map of Zambia*, p.170 and PACRA, *Second Companies' Register*, pp.69-76.

⁸¹ PACRA, *Second Companies' Register*, pp.77-78.

⁸² PACRA, *Second Companies' Register*, pp.77-78.

⁸³ FRN, *The Development of Manufacturing Industry within the Federation of Rhodesia and Nyasaland Report*, p.70.

⁸⁴ FRN, *The Development of Manufacturing Industry within the Federation of Rhodesia and Nyasaland Report*, p.127 and NRG, *Legislative Council Debates; Second Session of the Eleventh Legislative Council, 14 June – 5 August, 1960*, (Lusaka: Government printers, 1960), p.726.

industries are not established here. The local people are too few, and too poor. Transport charges are too high. There is an absence of specialized skills and equipment. The Copperbelt moreover has its own well-hackneyed reason for not being a mushroom bed of manufacturing industry. The region is 1,500 miles from the coast. The real wages in the mining industry set a standard of living so high as to constitute a positive deterrent to any other. An entrepreneur must invest too large a part of his capital to provide houses and services for his workers.⁸⁵

The situation described in the quotation above led to prolonged debates among the local merchants and members in the LEGCO calling for the dissolution of the Federation. The local merchants complained that the country had continued to be used as a dumping place by well-established industrial countries, Southern Rhodesia and South Africa. Earlier in 1955 for example, the Lusaka Chamber of Commerce and Industry were the first to express their disapproval of the Federation for having favoured Southern Rhodesia in setting up a lot of secondary industries at the expense of Northern Rhodesia. They argued that:

Our experience with the Federation to date has shown a considerable leaning towards the benefit of Southern Rhodesia by the Federal government. One thing is clear; it is their intention to build up industries in Southern Rhodesia. We must be energetic in fostering our own development to the utmost of our ability.⁸⁶

Similar sentiments were also expressed in the LEGCO debates in Northern Rhodesia in 1960 by V.D. Mistry who asked, “What has been done for Northern Rhodesia as far as secondary industries are concerned? Nothing at all, Northern Rhodesia has been the biggest loser in the Federation.”⁸⁷ More pressure was exerted on the government in the LEGCO so that the imbalance in industrial development which the Federal state had created could be removed. Mr. H. Stanley (Member for the Kitwe East Electoral Area) made a clarion call during the LEGCO debates in 1960 saying, “we must attract industry, otherwise this country will wither away and die.”⁸⁸ A lot of emphasis was stressed by members in the LEGCO that the government had to take more stringent steps towards the setting up of local secondary industries in the country. It was argued that the most tangible step in this direction was for the government to even set up

⁸⁵ NAZ, SEC 1/2/64, DOC. 19, Report on a Regional Survey of the Copperbelt 1 February, 1960.

⁸⁶ NAZ, SEC 3/236, Lusaka Chamber of Commerce and Industry Minutes, 19/07/1955.

⁸⁷ NRG, *Legislative Council Debates; 1 November-23 November, 1960* (Lusaka: Government printers, 1960), p.251. V.D. Mistry was a nominated unofficial member and a delegation leader of the Indian Commercial Association which came to visit Northern Rhodesia in 1960. While in the LEGCO, Mistry expressed his opinion on industrial development during the Federal period.

⁸⁸ NRG, *Legislative Council Debates; 24 November 1959 – 3 February, 1960*, pp.240-242.

parastatal secondary industries or companies which could be subsidized as a way of removing the imbalance which the Federal state had created in favour of Southern Rhodesia.

In August 1960, the Minister of Finance in Northern Rhodesia, Mr. Ralph Nicholson lamented in the LEGCO during his reporting on finances that, “We are the main provider in the Federation but with our reserves running out and our commitments rising, we simply cannot continue supporting other territories on this massive scale.”⁸⁹ By this time, the government of Northern Rhodesia had already felt the pressure and decided to take more steps to address the constraints on the country’s industrialisation process. Before the year 1960 came to an end, the government set up a parastatal company known as the Industrial Development Corporation Ltd (INDECO) as the successor to the ILB which was set up in 1951. The government began by appointing a special Ministerial Committee on Industrial Development which received inquiries from local merchants and other commercial organisations on possible industrial proposals.⁹⁰

4.4.1. Formation of INDECO

The INDECO was a limited liability parastatal company which government formed simply because of pressure from a lot of people in the country and in the LEGCO. People denounced the Federal state’s policies of favouring industrial development in Southern Rhodesia even when Northern Rhodesia was the main provider to the Federation. The paid-up capital of the INDECO was £850,000. The colonial state had envisioned that the formation of the INDECO could be one of the government’s agendas in promoting local industrialisation as it would participate through direct equity investments in industrial establishments.⁹¹ Thus, from the launch of the INDECO, the government was clever enough to explain that, its participation in local industrial development through the INDECO would not invalidate the role of private capital in the industrialisation process.⁹²

⁸⁹ Ralph Nicholson, “Financial Report of Northern Rhodesia”, *Nshila Magazine*, 2 August, 1960, p.35.

⁹⁰ FRN, *Economic Report, 1961* (Salisbury: Government printers, 1961), p.97 and FRN, *Economic Report, 1962* (Salisbury: Government printers, 1962), p.92.

⁹¹ FRN, *Economic Report, 1961*, p.97.

⁹² Young, “Industrial Diversification in Zambia”, p.23.

The corporation had many functions. First, it had to ensure that the government promoted local industrialisation by intentionally setting money aside for such. Also, the INDECO had to encourage the promotion of import substitution industrialisation. It equally had to provide loans and any other useful assistance to private manufacturing firms and also provide finances for research into possible industrial establishments in the country. Where possible, the corporation was also mandated to establish local secondary industries which could later be bought by private entrepreneurs. The other function was to provide both management and technical assistance to industrial firms. In 1960, the INDECO had managed to take over from ILB loans amounting to £435,963 and had received 119 enquiries and loan applications. Out of these, the INDECO only approved 14 loans valued at £85,376. Before the year ended, the INDECO had 20 projects under active consideration.⁹³ In 1961, the INDECO approved loans for 15 projects valued at £306,000. About 38% of this amount was given to private manufacturers who had proposed to set up steel, engineering, metal and vehicle assembly industries. Also proposed were accessories and parts, furniture manufacturing, transport and contracting industries.⁹⁴ The census on industrial establishments conducted in 1961 revealed that there were 315 small industrial firms in Northern Rhodesia.

The first weakness of the INDECO was that in 1962, white owned private capital had taken over 90% of the corporation's shares. In other words, the INDECO had come under the control of private foreign capital. The private owners of capital in the INDECO included: Anglo-American Corporation Ltd, the BSACo, the Commonwealth Development Corporation and the Roan Selection Trust Ltd.⁹⁵ The general views of the people in the country during this period were that the INDECO, just like the ILB was biased in that it favoured minority white settler industrialists as the only people eligible to access the loans. When independence was granted in 1964, the INDECO's inexplicable motives were further brought to light. The first Chairman of the INDECO after independence, Andrew Sardanis explained that:

⁹³ FRN, *Economic Report, 1961*, p.97.

⁹⁴ FRN, *Economic Report, 1962*, p.92.

⁹⁵ Mwanza, *Chasing the Winds and Dependency Syndrome*, p.8.

When we inherited the INDECO, the business sector in the country was entirely composed of foreign and settler businesses both of which distrusted Zambia, the Zambians and the Zambian government.⁹⁶

He pointed out further that when it was announced after independence that the INDECO was going to make the Africans (Zambians) have the same businesses which the private, foreign capital owners had in the country, most of the whites resigned from the corporation.⁹⁷ This clearly shows that the INDECO which existed before independence was an imperial tool whose task was to promote imperial, capitalistic businesses which excluded the ordinary indigenous Africans. The participation of Africans in the sector was vital if local markets were to be created for manufactured goods. The other weakness of the INDECO was that in 1963, it had only managed to approve 46 projects which were valued at £658,000.⁹⁸ We argue here that this was still a poor record of performance for the INDECO because the number of projects approved for industrial undertaking was still too small for the country.

Despite the formation of the INDECO, the country continued to lag behind in establishing major local secondary industries. Between 1961 and 1964, small, subsidiary industries continued to be established in the country. In the Food processing industry, Hybrid Poultry Farm Northern Rhodesia Ltd in Lusaka was incorporated in 1961 and began the production of day old chicks, eggs and processing of broiler chickens.⁹⁹ Other companies incorporated in 1961 included: National Breweries Ltd in Kitwe, which began manufacturing traditional African beer under the banner of *Chibuku shake shake* sold in carton packs, Broken Hill Wheat Flour Mill Ltd started manufacturing flour and Heinrich's Syndicate Distillers Ltd opened another distillery at Fort Jameson (now Chipata).¹⁰⁰ At the beginning of 1962, industrial mining capital was still not willing to invest in local secondary industries. For example, Lord Robins while addressing shareholders of the BSACo in London in 1962 pointed out that:

⁹⁶ Interview, Andrew Sardanis, 16/02/2018.

⁹⁷ Interview, Andrew Sardanis, 16/02/2018.

⁹⁸ M.R. Bhaghavan, *Report on Impact of Industrial Strategy on Regional Imbalance and Social Inequality in Zambia* (Uppsala: Scandinavian Institute of African Studies, 1978), pp.11-12.

⁹⁹ PACRA, *Second Companies' Register*, pp.79-82.

¹⁰⁰ PACRA, *Second Companies' Register*, pp.79-82.

We shall continue to seek profitable outlets, but have resisted, and will continue to resist suggestions that it would benefit the country [Northern Rhodesia] or its People to invest in failures and squander capital for propaganda purposes.¹⁰¹

International industrial capital which had invested heavily in the country's copper mines could not invest back their profits into the country by setting up local secondary industries. Instead, they preferred externalizing them outside Northern Rhodesia where they believed a potential market for manufactured goods existed. They also cited low population per capita income of the local African people as constraints on local industrialisation.¹⁰² It was in this regard that small, subsidiary industries continued to be established and incorporated in the country. Although the government was fully aware that the solution to developing local secondary industries lay in its intervention and collaboration with the owners of foreign private capital, nothing much was done to achieve this goal.

When the INDECO was formed, the government had committed itself by saying that it would be involved when no private investors were available to establish local industries or when the proposed industrial establishments were too big for private investors.¹⁰³ In 1962, other small industrial firms involved in food processing were incorporated and registered in the country. The first two to be incorporated were the Nkana Milling Ltd and Kitwe Millers Ltd on 1 January, 1962 and they were involved in the production of mealie-meal. The other two industrial firms incorporated on the same date and year were the Copperbelt Steel Manufacturing Company Ltd at Kitwe which provided an important service to the mines, Monarch Ltd at Kitwe which manufactured a wide-range of metal products such as trunks and Supa Baking Company Ltd at Lusaka.¹⁰⁴

On 1 January 1963, other new and small subsidiary industries were incorporated in the country. Packaging Company Ltd, Monterey Printing Ltd and Crown Cork Ltd which were

¹⁰¹ Quoted in David.A. Ailola, "Regulation of Commercial Banks in Zambia and Their Role in Development", PhD thesis, University of Warwick, 1988, p.157, [Northern Rhodesia] my emphasis.

¹⁰² Ailola, "Regulation of Commercial Banks in Zambia and Their Role in Development", p.157.

¹⁰³ Ailola, "Regulation of Commercial Banks in Zambia and Their Role in Development", p.366.

¹⁰⁴ PACRA, *Second Companies' Register*, pp.82-86.

based at Ndola, began to manufacture boxes, cartons and labels for packaging different types of goods for local companies. Crown Cork Ltd (a subsidiary of the USA-based Crown Cork and Seal Inc.) also manufactured closures for Ndola Brewery Ltd as well as closures for other beer, cool-drink and carbonated drink manufacturers. The company also supplied cup wrappers, and corrugated packaging for the cigarette industry particularly Rothmans of Pall Mall Ltd which later changed its name to British American Tobacco Plc. at Lusaka after independence.¹⁰⁵ British American Tobacco Company Plc. started manufacturing different types of cigarettes in 1963. Although tobacco was sourced locally, other materials like paper were ordered abroad. Crown Cork Ltd also produced cans for packaging of oil and paints for local companies.¹⁰⁶

Plascon Paints Ltd (based at Kitwe) and Titanium Paints Ltd (based at Ndola) began to manufacture different types of paints. At the same time, UNILEVER South-East Africa Ltd (based at Ndola and a subsidiary of the UK based UNILEVER) began to manufacture and distribute soaps, detergents, edible fats, oils, Pepsodent and margarines. In addition, Colgate was manufactured by Palmolive Company Ltd a subsidiary of an American Company.¹⁰⁷ Essential materials to manufacture these products were all imported from the parent companies outside Northern Rhodesia thereby leading to high importation costs.¹⁰⁸ Besides, IMCO industries Ltd at Lusaka began to manufacture tissue papers using imported materials. Another company AMBICA Ltd at Ndola used foreign materials to manufacture suitcases. Furthermore, Northern Breweries Ltd which later changed to Zambia Breweries Ltd after independence opened a Brewery at Lusaka while African Explosives Ltd at Mufulira manufactured commercial explosives, initiating systems and blasting services for the mines. All these companies were incorporated on 1 January, 1963.¹⁰⁹

There were also industrial companies which were involved in the distribution of foreign vehicles such as Toyota Northern Rhodesia Ltd and Dulys Northern Rhodesia Ltd all based at Lusaka. In the quarry industry, Chingola Brickfield Ltd and Crushed Stones Ltd in Kafue

¹⁰⁵ PACRA, *Second Companies' Register*, pp.82-86.

¹⁰⁶ Sutton and Langmead, *An Enterprise Map of Zambia*, p.101.

¹⁰⁷ www.zambiawatchdog.com>a-... Accessed on 08/02/2021.

¹⁰⁸ PACRA, *Second Companies' Register*, pp.82-86 and GRZ, *Ndola City*, p.39.

¹⁰⁹ PACRA, *Second Companies' Register*, pp.82-86.

were incorporated and produced bricks and other quarry products. These companies were all incorporated in January, 1963.¹¹⁰ When the Federation of Rhodesia and Nyasaland was dissolved on 31 December, 1963, Northern Rhodesia had not made any significant achievement in setting up secondary industries of its own. Instead, the Federation had left the country with a national debt of £97 million as compared to £22 million owed before its imposition.¹¹¹ Subsidiary industrial companies registered and incorporated in 1964 are listed in table 7 below.

Table 7: Industries incorporated and registered in 1964

Name of industry	Place	Incorporation year	Type of business
Dunlop Ltd	Ndola	01/01/1964	Making & distribution of tyres/tubes.
Johnson & Johnson Ltd	Ndola	01/01/1964	Distribution of cosmetics.
Reckit Benkiser Ltd	Ndola	01/01/1964	Distribution of polishes.
Drake & Gorham Ltd	Lusaka	01/01/1964 (Active up to now)	Distribution of refrigeration gases /accessories.
Land Rover Assembly Plant Ltd	Ndola	01/10/1964	Assembly & Distribution of Land Rover vehicles.
National Milling Ltd	Lusaka	01/01/1964 (Active up to now)	Manufacture of mealie-meal.
Plywood & Timber Ltd	Ndola	01/01/1964	Sawn timber, furniture, veneer, plywood, parquet flooring/tiles.
Neon Ltd(subsidiary of Neon lights south Africa)	Lusaka	01/01/1964	Distribution of industrial cold cathode lighting, fluorescent tubes.
Zambia Bottlers Ltd	Lusaka	01/01/1964 (Active up to now)	Bottling & distribution of soft drinks & beer.
Canvas Ltd	Ndola	01/01/1964	Manufacture of

¹¹⁰ PACRA, *Second Companies' Register*, pp.82-86.

¹¹¹ Martin, *Minding Their Own Business*, p.36.

(subsidiary from Britain)		(Active up to now)	ropes, bags & tents for the mines.
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Source: PACRA, Second Companies' Register, pp. 87-96.

4.5. Conclusion

This chapter explored the extent to which the colonial state and industrial capital tackled the constraints on industrialisation from the Federal period up to independence. It has been pointed out that there were several ways in which both the colonial state and industrial capital tried to tackle the constraints on industrialisation during this period. For instance, the government encouraged the formation of the Federation, encouraged the incorporation of the major mining companies AAC Ltd and RST Ltd locally by introducing a standard company income tax of seven shillings six pence (in British pounds) and an additional 20 percent territorial surcharge tax. The mining companies were made to qualify for tax relief locally. Besides, the government provided communication services for the mining companies. The government further encouraged the construction of the Kariba hydro-electric power station, established the INDECO, supported the closed townships policy and enacted the private sector driven industrialisation policy. However, it has been argued that even though the government advocated for the private sector driven industrialisation policy, it did not create a conducive environment for private capital to invest in local secondary industries. It was argued further that due to lack of tariff protection and the unfavourable tax charges, foreign industrial capital confined itself to the establishment of small, subsidiary metal-working industries which mostly supplied the needs of the copper mines. Thus, up to independence, Northern Rhodesia had not yet developed state-owned heavy secondary industries.

CHAPTER FIVE: CONCLUSION

The aim of the study was to identify significant constraints on industrialisation in colonial Zambia between 1894 and 1964. Since 'industrialisation' is a broader word in meaning, in this study it was specifically used to mean the development of secondary or manufacturing industries. A number of conclusions emerged from this study. In chapter two, the first conclusion was that the major constraints on industrialisation during the early years of colonial rule (1890-1924) were the economic policies which the company enacted. Under the Lochner treaty (1890), the British South Africa Company had the obligation to establish secondary industries in the country but purposefully dishonoured the terms of the treaty. Instead, the Company enacted economic policies which hindered local industrialisation.

The study concluded that one of the economic policies which the Company enacted was to regard the development of secondary industries as a field of endeavour for private enterprise. Thus, the establishment of local industries was entirely left in the hands of private enterprises. This was known as the *laissez-faire* policy. However, despite this policy (*Laissez-faire*) in place, the Company could not attract foreign capital investment in the country. Instead, it intentionally discouraged foreign capital investment in the country through its debilitating economic policies.

The study also concluded that the Company deliberately failed to take advantage of the opportunities offered during and after the First World War through import substitution industrialisation. During the war, the country experienced disruption of supplies of foreign manufactured consumer goods. Instead, the Company stimulated the production of base metals like copper, zinc and lead used in the manufacture of bullets, automobile and electrical parts in Britain to generate profit and not to spend on industrial establishments. The other conclusion drawn was that the Company regarded the entire country as a reservoir of cheap labour for the capitalist mines and commercial farms in Southern Rhodesia and South Africa rather than as a manufacturing base.

Chapter three was focused on the first twenty eight years of the Crown government in Northern Rhodesia, 1924 to 1952. The first conclusion drawn was that this period witnessed the perpetuation of BSA Company's economic policies in the country. The significant constraints on industrialisation under the Crown government were the deliberate delay to develop hydro-

electric power stations for industrial purposes, unfavourable customs and tariff agreements, declaration of Ndola as the commercial, industrial and distribution centre, formation of the Trade Development Board (TDB), *laissez-faire* policy and loss of tax income. Double taxation by the British government also hindered industrial development. Loss of tax income, deprived the Northern Rhodesia government of financial resources that could have been invested in secondary industrial projects. The other conclusion was that government deliberately failed to take advantage of the opportunities which the Great Depression, the Colonial Development Fund Act (1929) and the Second World War offered. In addition, the study concluded that the formation of the ACID in 1946 did not lead to industrial development in the country. Although the formation of the latter was a good step taken by the government, it did not bring about the much needed local secondary industries. The ACID was in a hurry to recommend its own dissolution to the government in 1948 before thorough investigations into possibilities of local secondary industrial development that could be carried out.

The study further demonstrated that the Crown government prioritised the development of the copper mines as a primary export industry. Despite persistent pressure from local merchants and traders on the need to establish local industries in the early 1930s, no step in that direction was taken. Government policy led to the development of small, subsidiary industries which served the needs of the mines mostly while the rest of the country continued to depend on imported foreign consumer goods. The other conclusion drawn was that despite unprecedented opportunities for import substitution industrialisation created by the Great Depression, the Second World War and its aftermath, the government intentionally failed to make use of these opportunities.

The other conclusions drawn were that the bureaucracy involved in filling in a questionnaire before accessing funds coupled with the process of applying for financial assistance were too involving and hectic, and therefore acted as major constraints to local industrialisation. Lastly, the chapter concluded that the only industries which could be set up during this period were either those focused on the manufacture of local consumer items (soap, cement and textile products), those aimed at meeting the demands of the war (cold storage, manufacture of munitions and other military hardware) or those that provided services to the mining industry (lime, oxygen and acetylene).

Chapter four explored the extent to which the colonial state and industrial capital tackled the constraints on industrialisation from the Federal period up to independence. The first of the ways by which the government tried to tackle the constraints on industrialisation was to enact the private sector driven industrialisation policy. The first conclusion however, is that the colonial state did not create a conducive environment in terms of favourable tariff and tax regimes upon which private capital could invest in local secondary industries. As a consequence, foreign industrial capital confined itself to the establishment of small, subsidiary metal-working industries which mostly supplied the needs of the copper mines. Even though the Northern Rhodesia government advocated for a private sector driven industrialisation policy, it did not put in place measures to facilitate such development. There was for example, lack of capital for requisite infrastructure for the establishment of local secondary industries.

The other conclusion drawn was that, contrary to colonial state's projection that the formation of the Federation would be one of the ways to tackle the constraints on local industrialisation, Northern Rhodesia did not benefit as much as Southern Rhodesia did in developing local secondary industries. Considerable inflow of foreign capital in the copper mines during the Federal period and the consequent huge profits made by the major copper mining companies did not lead to increased investment in local industries. Northern Rhodesia did not need Federation in order to progress economically because the country was already fiscally rich from its proceeds from copper except that the money went into the Federal pool account and to Britain in form of income tax, royalties and dividends. It can therefore be concluded that the creation of the Central African Federation rather than promoting secondary industry in Northern Rhodesia became yet another significant constraint on industrialisation in colonial Zambia.

The study concluded that the colonial state tried to tackle the constraints on industrialisation by encouraging the incorporation of the major mining companies (AAC Ltd and RST Ltd) locally. The government had envisioned that once these companies relocated their head offices from London to Northern Rhodesia, they were going to pay income tax which was reasonably lower than they were paying to the British government. The government also hoped that these mining companies were going to make surplus profits which could be invested in local secondary industries. Therefore, to achieve this, the government amended the Income Tax Bill Number Two of 1953 in which the standard company income tax was fixed at seven shillings and six

pence (in British pounds). This Income Tax Bill mandated all the overseas shareholders of AAC Ltd and RST Ltd who were British citizens to claim refund on tax which was paid on the companies' profits and on their personal rates of tax. In addition, the government introduced the Territorial Surcharge Ordinance Tax (TSOT) of 20 percent on all companies registered and incorporated locally. The TSOT empowered the Federal Commissioner of Taxes to collect income tax and other forms of revenue in Northern Rhodesia throughout the Federal period. However, the study concluded that members in the LEGCO opposed the imposition of the 20 percent surcharge tax on companies because it did not encourage the development of local secondary industries. In order to make operations easy for these mining companies locally, the government further provided a telegraphic address, a private post office box number, a private wire telephone and a tele-printer service.

It was concluded in the study that the government encouraged the construction of the Kariba hydro-electric power station, established the INDECO and supported the closed townships policy as a way of tackling the constraints. The study argued that the closed townships policy did not lead to industrial development because it excluded the indigenous Africans from participating in the retail and wholesale trade on the Copperbelt. In addition, the study concluded that contrary to what the government had anticipated, power supply from Kariba did not spark industrial development because more than 60 % of power output was sold and supplied exclusively to the copper mines only. It was also concluded that INDECO, just like the ILB was biased in that it favoured minority white settler industrialists as the only people eligible to access the loans to set up proposed industrial projects in the country. Thus, the main conclusion was that the participation of Africans in the sector was vital if local markets were to be created for manufactured goods.

In a nutshell, this study posits that Northern Rhodesia achieved independence in 1964 with an impoverished manufacturing or secondary industry sector as a result of the unfavourable colonial economic policies.

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APPENDICES

Appendix 1: The Lochner Concession 26/06/1890 and clauses on establishment of manufacturing industries in Barotseland.

That I, Lewanika, paramount chief or king of the Barotse nation or people, for myself and my heirs and successors and for my people, with advice and consent of my nation at a full meeting held at Lealui on the 26 day of June, 1890, have agreed and do hereby agree for the considerations mentioned below, to give to Frank Elliot Lochner, as the representative of the British South Africa Chartered Company or to its agents, the sole, absolute, and exclusive and perpetual right and power to do the following acts free of any royalty or deduction, over the whole of the territory of the said nation, or any future extension thereof, including all subject and dependent territory:

- A. To carry out any manufacturing, commercial or other trading business.**
- B. To search for, dig, win and keep diamonds, gold, coal, oil and all other precious stones, minerals or substances.
- C. To construct, improve, equip, work and manage public works, railways, tramways, roads, bridges, waterways, lighting and all other works and conveniences of general or public.
- D. To carry on business of banking in all its branches.
- E. To buy, sell, refine, manipulate, mint, and deal in precious stone, specie, coin and all other metals and minerals.
- F. To manufacture and import arms and ammunition of all kinds.**
- G. To do all such things as are incidental or conducive to the exercise, attainment or protection of all or any of the rights, powers and concessions hereby granted.

The company further agrees that it will aid and assist in the education and civilization of the native subjects of the king by the establishment, maintenance and endowment of schools and industrial establishments and by the extension and equipment of telegraphs and of regular

services of postal and transport communication and as a sign of the amicable relations between the king and the company, they hereby undertakes and agrees to appoint and maintain a British Resident, with a suitable suit and escort, to reside permanently with the king.

And the company undertakes and agrees to pay the said chief or king and to his successors in perpetuity an annual sum of (2000) two thousand pounds sterling or the equivalent thereof, in trading goods at the option of the king.

And the company binds itself to respect the feelings of the people by not commencing mining operations in the country between the wagon road and the river from Sesheke and Lealui without the consent of the king.

WITNESS: FRANCOIS COILLARD

ADOFE JALLA

SIGNATURES: FRANK ELLIOT LOCHNER

LEWANIKA

LITIA- the king's eldest son and heir

Source: National Archives of Rhodesia and Nyasaland, *Occasional paper*, pp.8-10.

Appendix 2: Questionnaire to be filled in by applicants for Government assistance for establishment of secondary industries in Northern Rhodesia 1947.

MATERIALS AND MANUFACTURE

1. What raw materials will you use?
2. What quantity of each will you require in a year?
3. What quantities will come from---- (a) Northern Rhodesia? (b) Imported from outside Northern Rhodesia?
4. What proportion (a) of your intake and (b) of your output must be carried as stocks?
5. Give a short outline of the manufacturing process you will employ.

COSTS

6. What are the costs of transport on your raw material?
7. What will be the cost of transport from factory to market on your finished goods?
8. Give an estimate of your: (a) Monthly operating expenses (b) Monthly wages and salaries.
9. What is your estimated consumption of power?
10. What is your estimated - cost of production for factory?

PRODUCTION AND MARKET

11. What will be the normal output of your plant?
12. What is the maximum output that will enable your plant to work at profit?
13. What quantities of your product are consumed in the territory?

14. Give quantities and values over a period of years of imported articles of a competitive nature.
15. What are the present rates of customs or excise duties on your product?

RISKS

16. What are your chief risks?
17. If your market fell away, could you convert your plant to any other use?
18. Does your business carry any insurance?
19. What will be the number of (a) Salaried experts (b) Skilled labourers (c) Unskilled labourers, European and African, employed differently by you in business?
20. Have you any (a) Technical qualifications (b) Training or previous experience in this business?

FINANCE

21. Give bank or commercial references.
22. What is the issued capital of your company?
23. What large blocks of shares are held and by whom?
24. Can you produce a recent audited statement of accounts?
25. How much in the way of site, buildings, plant and stocks does your company already possess?
26. What capital is required for buildings, plant and working capital?
27. How much of this can your company provide?
28. What is the extent of the assistance you request?

29. What security can you offer for a loan?

30. Have you requested any of the commercial banks or financial houses to accommodate you?

Source: NRG, *Advisory Committee on Industrial Development, Second Report*, 1947, p.12.

Appendix 3: NAZ, SEC 1/1534, extract from the Bulawayo Chronicle 13/08/1935 on Ndola as the Commercial Capital.

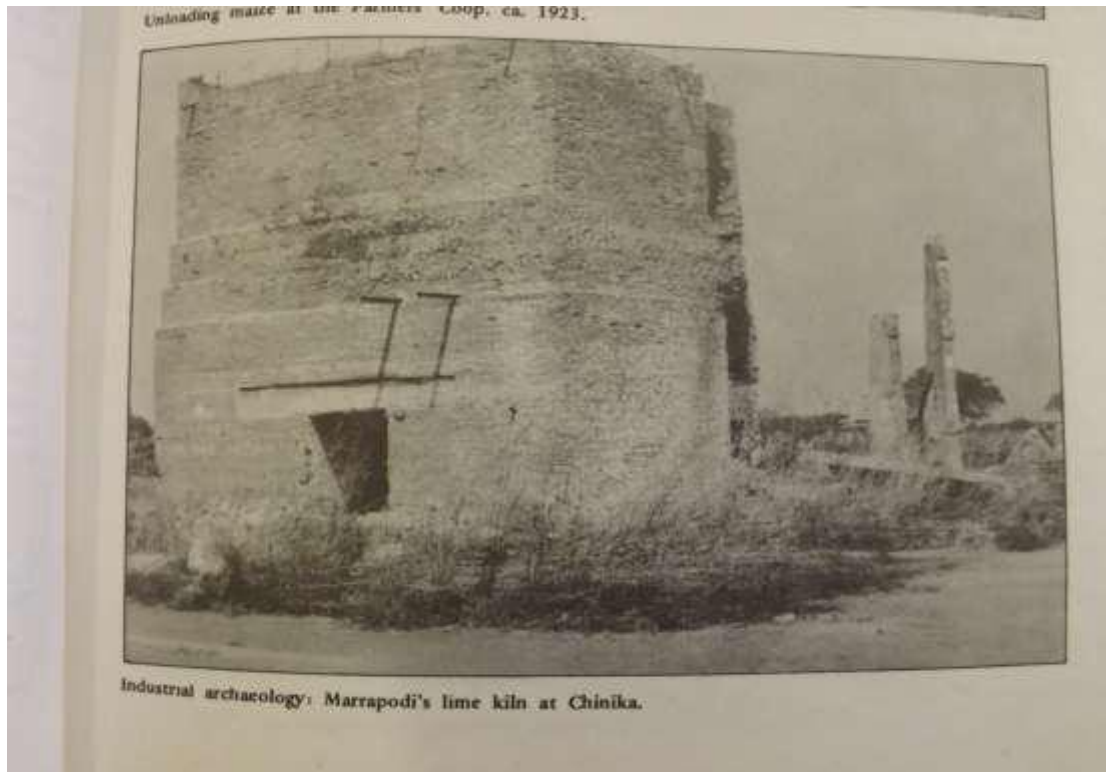
The notice which appeared in a recent Northern Rhodesia Government Gazette is extremely interesting. The declaration of the Government's policy to maintain Ndola as the commercial, industrial and distribution centre of the Copperbelt is of great interest. It was reported recently that the Ndola Municipal Council were going to make representation to the Government that the spirit of the Government's policy of maintaining Ndola as the distribution centre was being evaded.

It was claimed that this evasion was made possible by the nature of the general dealer's licence and a recommendation that this licence be revised was put forward at a recent Ndola Council meeting. The crux of the matter was whether the Government intended to continue to support the policy of maintaining Ndola as the commercial, industrial and distribution centre or whether the recent development of the Copperbelt had made it impossible for the Government to do so. The Municipal Council decided that it would be desirable to obtain a definite statement from the Government which would eliminate doubt as to the present and future policy in this respect. Section 4 of General Notice 191 which appeared in the recent Gazette and which reads in part:

It is the policy of the Government to develop Ndola as the commercial, industrial and distribution centre of the Copperbelt and to provide only retail trading facilities elsewhere to the extent required to meet the day to day needs of the inhabitants and to secure healthy competition.

It cannot be doubted that the Government's policy in this respect has much to justify it. The establishment of industries in Ndola has gone ahead by leaps and bounds. Nine new and not inconsiderable industries have been established in Ndola recently. Ndola is the junction of the Railways to the mines and will shortly be a port of call on the air mail route. It is the provincial headquarters of what is now the most important province in the territory and boasts its own High Court. This would appear to be a formidable array of assets for a town in which there are approximately 800 people. However, it must be remembered that the most important of her assets industries, is in the fundamental stage.

Appendix 4: Marrapodi's Lime Kiln at Lusaka, 1911-1924



Source: Williams, "The Early Years of the Township", in Geoffrey Williams (ed.), pp.72-90.