PRIVATE FOREIGN INVESTMENT AS A VEHICLE FOR DEVELOPMENT: A CASE STUDY OF THE VOLTA RIVER PROJECT AND THE VALCO SMELTER IN GHANA

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DEDICATION

To my daughter, Naa Abena Afaaley, who was born back home in Ghana while I was pursuing this Course, and to my son, Nii Okai, who endured the absence of a loving father at such a tender age.

And to my beloved wife, Naa Nye, for holding the fort, in my absence.

And last but not the least, to my Honourable Father and Mother.

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All faults herein are entirely mine.

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LIST OF ABBREVIATIONS

CRACKER	Crocker National Bank of America
PEFCO	Private Export Forwarding Corporation of America
VALCO	Volta Aluminium Company Limited
VRA	Volta River Authority
VRP	Volta River Project

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ABSTRACT

The past three three decades have witnessed the evolution of diverse theories of development, each positing a particular approach which would lead to the solution of development problems.

One such theory is that since developing countries are too poor to generate their own savings, private foreign investment can act as the missing link in the development cycle and thus contribute towards their overall development.

This dissertation seeks to test the efficacy or otherwise of this highly controversial theory as a developmental strategy with regard to the VALCO smelter investment and its related Volta River Project in Ghana.

The case study approach has been adopted, enabling a detailed empirical study of a specific case to be carried out. Even though the development literature abounds with writings on the pros and cons of private foreign investment, empirical data on specific cases of private foreign investment are relatively scarce.

On the attainment of Ghana's independence President Nkrumah decided to dam the Volta River to generate electricity as a basis for the country's industrial development. In particular, he intended to use the power to develop the country's large bauxite deposits, as the basis for the establishment of an integrated

aluminium industry. Faced with the lack of capital and expertise as well as the loss of interest in the project by the British, who were the originators of the idea, Nkrumah had no alternative but to turn to the U.S. for assistance. As a pre-condition to assisting Ghana, the American Government recommended that for the project to be viable the Ghana Government should build the dam, partly from the latter's own resources and partly with assistance from the U.S. Government and international lending institutions. Private American corporations would invest in the building and management of an aluminium smelter which would consume a substantial proportion of the hydro-power to be generated. The U.S. Government argued that this would enable the host country to get a constant source of scarce foreign exchange to pay off the huge debt to be incurred from the hydro-electric project.

The net effect of this development was that the original integrated aluminium industry idea, as envisaged by the British and Nkrumah, was jettisoned. In its place, VALCO, a consortium of two U.S. multinational aluminium companies, built an aluminium smelter which currently consumes about 65 per cent of the power, at one of the lowest rates in the World. VALCO had previously been granted generous concessions, including a 30-year exemption from the payment of duties and tariffs and a long tax holiday.

While Ghana imports all her aluminium requirements to feed her factories, VALCO exports all the 200,000 tonnes of aluminium ingots produced by the smelter to overseas markets. VALCO also imports alumina from Jamaica and the U.S. to feed its smelter, while Ghana's extensive bauxite deposits remain untouched.

Meanwhile, the Volta River has flooded large expanses of previously farmed land, and adversely affected the lives of the majority of the 80,000 people who originally lived along the river basin. Apart from the loss of livelihood many of these people have become afflicted with water-borne diseases.

Ghana's industrial revolution has at best only remained a dream, as there is not much power left to enable other industries to be established.

On the whole, the benefits of the VALCO investment to Ghana has been marginal. The main beneficiary has been the American companies.

Nationalization and joint ventures are among some of the policy options open to policymakers in the developing world to counteract the negative aspects of private foreign investment.

INTRODUCTION

Since the attainment of independence a large number of the so-called Third World countries have run into serious problems of development[1]. As a result of this state of affairs, many theories of development have evolved over the past few decades, each prescribing a particular cure for the ills of these developing societies. These range from the trickle-down strategy[2], through Growth-with-Equity[3] and the Basic Needs Approach[4] to the "dependency" school[5]. Yet another theory has it that the inflow of private foreign capital to these countries will greatly enhance their development prospects.

It is with the last theory of development - private foreign investment - that this dissertation is concerned. The role of private foreign investment in the "less developed" countries is a most contentious issue in development policy, as will be seen later, and it is important that we investigate its mechanics with a view to ascertaining its efficacy or otherwise, as a development strategy for developing countries.

My basic aim in undertaking this study is to discover, as accurately as possible, the background to a particular private foreign investment as well as the agreement reached between the host country and the investor, leading to the investment. In addition, the socio-economic impact of this investment will be evaluated and the nature of the relationship created between the two parties highlighted.

The case study approach has been adopted as it enables a detailed empirical study of a specific case to be carried out. Even though the literature abounds with writings on the supposed "costs" and "benefits" of private foreign investment[6], empirical data on specific cases of private foreign investment are quite scanty. The dearth of such works is partly due to the difficulty of obtaining relevant information, but it also reflects a failure by many writers to carry out detailed studies of individual projects and/or companies.

Soon after independence in March, 1957 Ghana, under Dr Kwame Nkrumah, embarked upon her most ambitious project to date - the Volta River Project (VRP) - that involved the damming of the Volta River to generate electricity as a basis for the country's industrial development. As a pre-condition to offering financial assistance to carry out the giant scheme the Government of the United States of America insisted that Ghana should negotiate with major multinational American aluminium companies for the establishment of an aluminium smelter in the country to consume the bulk of the hydro-power to be produced, the rationale being to guarantee power purchases and thus provide a constant revenue to ensure the viability of the hydro-power project through purchases by the smelter. Thus in 1962, after the British had become disinterested in the project, Ghana entered into a series of agreements with the Volta Aluminium Company (VALCO) - a joint subsidiary of Kaiser Aluminium and Chemicals Corporation and Reynolds Metals Incorporated, both of the United States, and incorporated in Ghana - in relation to the establishment of an aluminium smelter in the country.

The background to the VRP, the negotiations and ultimate agreement reached between the two parties leading to the construction of the aluminium smelter, together with the socio-economic impact of both the VRP and the smelter and their implications for policymakers in developing countries, constitute the subject-matter of this dissertation.

My thesis is that behind many private foreign investments in developing countries there is often strong official support from the investor's home government. Usually the investor's home government grants official aid to the developing country so that the latter can lay the infrastructure necessary for the foreign investment to materialize. Although private foreign investment has the potential of contributing positively towards the overall development of Third World countries, there is the need for the leaders of these countries to be aware of its many negative aspects and to be guided by them when negotiating with private foreign investors. At the same time, it has to be recognized by these leaders that foreign investors should naturally expect a fair return on their investment. There is therefore the need for the two parties to cooperate in order to obtain a fair deal for themselves. In the absence of such cooperation, there are many other strategies, to be discussed later, open to the host country, to offset the side effects of private foreign investment.

Chapter One deals with the theoretical framework on which this dissertation is based. It outlines the kinds of effect, both positive and negative, which are considered in analysing the impact of private foreign investment in Third World countries. This seeks to provide a broader perspective against which the analysis of the VALCO investment can be conducted.

Chapter Two traces the chequered history of the VRP which eventually led to the investment in the aluminium smelter by VALCO.

Chapter Three discusses the form, content and the repercussions of the major terms of the Agreement reached between the Ghana Government and VALCO, while Chapter Four considers some of the major implications of the whole VRP-VALCO venture for policymakers in the developing World, with regard to private investment.

CHAPTER ONE

THE FRAMEWORK OF ANALYSIS

This chapter attempts to outline, in general terms, the analytical framework used in this dissertation. First, the kinds of effect, both positive and negative, considered by various schools of thought are sketched. The validity of these supposed effects of private foreign investment in regard to the VALCO smelter will unfold as the analysis of the project progresses in subsequent chapters[7]. Second, some of the theories regarding the nature of host country - foreign investor relations will also be treated briefly. This would enable us to understand the present relations between the Ghana Government and VALCO and help us to make suggestions as to how these could be improved for the mutual benefit of both parties. It has to be emphasized, however, that these areas have been separated for convenience of analysis only. In practice they are closely related. The nature of physical transactions, to a large extent, determines the outcome of host country - investor relations. Likewise, the attitudes and policies adopted by the recipient country can also greatly influence the nature of the physical transactions.

Two interpretative approaches to the role of private foreign investment in Third World countries are relevant to this dissertation. These approaches may be labelled the "orthodox" and the "radical anti-imperialist"[8].

The orthodox school attributes mainly positive effects to private foreign investment, and advocates the ultimate replacement of government loans and grants to developing countries by a flow of private financial resources[9]. The main tenet of this approach is that developing countries are too poor to generate their own savings and therefore private foreign investment provides the essential missing link in the development cycle[10].

In sum, it is posited that private foreign investment leads to (a) a reduction of the perpetual shortage of domestic savings that confronts Third World countries; (b) an increase in the amount of foreign exchange available to the recipient country; (c) brisk economic activity through linkage development[11]; (d) higher social returns, provided the amount of money that accrues to the host country does exceed what is appropriated by the investor; (e) higher real wages for the domestic labour force; (f) more employment; (g) lower prices for consumers; (h) better quality products if the investment is product-improving; (i) the transfer of non-monetary resources to the recipient country, namely, technological knowledge, market information, managerial and supervisory personnel, organizational experience and production techniques[12].

The alternative radical anti-imperialist interpretative approach takes into account the fact of the exploited and humiliating position of developing countries in the international capitalist division of labour. Two forms of economic imperialism have been recognized by this school.

The first, often referred to as the "colonial type" of investment, basically covers the pre-independence period of the new nations. The thesis of this sub-school is that with the rise of industrialization in Europe by the beginning of the nineteenth century the need for both raw materials and markets became very acute. In addition, the economies of Western European countries suffered from over-accumulation of capital, leading to a drastic fall in the rate of profit. It therefore became imperative for these metropolitan countries to seek sources of raw materials as well as markets and investment outlets in order to stabilize their economies.

Essentially, therefore, capital was exported to what is often termed the "periphery" from the metropolitan "centre" or "core". Under this type of imperialism the economy of the "periphery" was characterized mainly by mineral extraction and the export of timber and cash crops, while the "centre" exported mainly manufactured products to the "periphery". Clearly, under such a system a fully integrated economic development of the colonies was impossible. Any development that occurred was said to be in furtherance of the system. Thus, even the construction of harbours, roads and railways only served to facilitate the exploitation of the colony by making it easier for raw materials to be brought within exploitable reach of the colonial administration[13].

Lenin succintly sums up the salient features of this type of "economic imperialism" as being (a) the concentration and centralization of production in the hands of a few firms leading to the creation of monopolies; (b) the fusion of such monopolies with banks to undertake large investments and the consequent accumulation of capital that assumed gigantic proportions; (c) the export of capital from the metropolitan centres for investment in the "backward" countries, and (d) the division of the World among the major monopoly groups to serve as markets for the exported capital to the metropolitan capital centres[14].

The second pattern of investment is what Magdoff refers to as the "new imperialism"[15]. This is the rapid expansion of private foreign investment in developing countries after the independence of these countries. According to the proponents of this thesis, this type of investment is characterized by the replacement of the monopolistic position of the former colonisers' capital with investment by the giant multinational corporations, often based in the United States[16].

This approach sees nothing but negative consequences in private foreign investment and discounts supposed beneficial effects. In broad outline, it has been charged that foreign investment[17] (a) creates external diseconomies by absorbing local resources which could have been used in more beneficial pursuits[18]; (b) siphons away, through various mechanisms, huge profits from the host country jurisdiction[19]; (c) introduces inappropriate technology, while often the imported skills are not imparted to the local labour force[20]; (d) adversely affects domestic consumption and income distribution; (e) tends to impinge on the sovereignty of the host country[21]; (f) tends to be capital-intensive rather than labour-intensive, resulting in the employment of relatively few people; (g) seldom leads to a situation whereby the investment is integrated into the host country's economy[22]; (h) leads to balance of payment difficulties[23]; and (i) creates social and economic dualism, resulting in social injustice[24].

Relations between host country and private foreign investor

The relative bargaining positions of host country and investor is an issue of considerable debate. In the opinion of Raymond Mikesell, bargaining power shifts from the foreign investor to the host country as the investment matures. In other words, the foreign investor is in the greatest bargaining position before the investment is made, and in the weakest position after it has proved profitable, because once the investment is implemented political and other forms of pressure can be exerted on the investor to make concessions.

The only way to mitigate the resulting conflict, argues Mikesell, is to introduce provisions for renegotiations in the original agreement and/or allow for higher state revenues in the event of unexpected high profitability of the venture.

However, T. H. Moran[26], finds Mikesell's approach inadequate. While conceding that the shifts identified by the latter do occur he nevertheless points out that Mikesell ignores the political, economic and technical elements involved in the bargaining process.

To Moran, then, three elements of considerable importance ought to be recognized in regard to the bargaining process: First, initial enourmous risks[27] and monopoly power on the part of the investor lead to an insistence on extremely favourable conditions as a pre-condition to the commitment of funds. But as the initial investment becomes successful the uncertainty, in particular, is reduced considerably, enabling renegotiation to take place. Second, the host country itself often lacks the technical, accounting and economic skills needed to analyze the investment proposal, and third, in some cases the recipient country simply fails to exercise its full bargaining power either because its officials have been corrupted by the investor or that the leaders simply want to maintain the status quo which favours their lifestyle[28].

CHAPTER TWO

BACKGROUND TO THE VOLTA RIVER PROJECT (VRP)

In order to understand fully the final agreement that eventually led to the private investment in the aluminium smelter by VALCO, it is important to unfold the chequered history of the VRP, which can be traced as far back as 1914. Two main phases - British and American - can be discerned in this regard.

The British Phase

The gold rush of the 1914-22 period in the Gold Coast[29] led to an official investigation of other possible areas of mineral wealth. In the process, extensive bauxite deposits were discovered in some parts of the country[30] by the Geological Survey Department, under its Australian first director, Albert Kitson. These discoveries led to the genesis of the idea of an integrated aluminium industry based on power from the Volta River and from other river valleys.

However, financial difficulties, coupled with the disinterestedness of the gold mines, which consumed large quantities of electricity, in hydropower at the time led to the freezing of the idea. Also, the outbreak of the Second World War did not help in the advancement of the proposal.

It was not until 1945 when commercial investigations were resumed by a private company, the West African Aluminium Limited.

In 1949 another British firm, the British Aluminium Company Limited, also became interested in the scheme and begun to explore its commercial possibilities. In the same year, the colonial administration appointed Sir William Halcrow and Partners to investigate the economic potentialities of the Volta River. The firm presented a favourable report in 1951, and in 1952 serious negotiations were conducted between the Government of the Gold Coast - now under self-government and headed by Dr Kwame Nkrumah - and the UK Government on the one hand, and the two interested aluminium companies on the other. The parties reached an agreement on the technical and economic feasibility of the scheme, and thereafter the UK Government published a White Paper setting out the outlines of the project[31].

The outline set up by the 1952 White Paper estimated the capital cost of the project at £144 million for the full scheme, to be shared between the two governments and the aluminium companies. As a condition to the UK's participation the White Paper suggested that British buyers should have the option at the ruling market prices to buy 75 per cent of any aluminium produced for thirty years from initial production.

The White Paper envisaged the construction of a major hydroelectric installation at Ajena, about 70 miles from the mouth of the Volta; the opening of a bauxite mine at Yenahin; the construction of an alumina plant, a smelter, and a township at

Kpong near the dam site; and, the building of two railway lines, about 70 miles in all, connecting the mines and the smelter to a new port at Tema.

The reason for the immense interest shown in the project at the time by the British Government was due to the fact that there was an acute global shortage of aluminium, and what aluminium was obtainable came mainly from the dollar area. In fact, British imports of the aluminium metal at the time were costing that government £18 million annually[32]. Thus the British government saw the project as a means of securing a reliable supply of this scarce metal from a soft-currency source. As paragraph 2 of the White Paper stated,

> At present the UK obtains 4/5 of its virgin aluminium from the dollar sources and it is important that the additional supplies should come from a sterling area.

The White Paper also recognized that the world demand for aluminium by 1975 would be between four to five times greater than that of 1950.

Following the 1952 White Paper, the parties agreed that a Preparatory Commission[33] should be set up to follow the work already done and examine the problems in greater detail. In particular, the Commission was also to (a) investigate the phasing of the project; (b) determine the constitution and powers of a Volta River Authority (VRA); (c) prepare a draft Master Agreement as well as an agreed timetable and cost estimates of the project.

The Commission went beyond the original terms of reference and virtually carried out a detailed re-investigation of the whole scheme. In July, 1956, after three years' work, the Commission confirmed that"the Volta Project can be regarded as technically sound and could be carried out successfully"[34]. Apart from the possibility of an integrated aluminium industry utilizing hydro-electric power from a dam across the Volta to refine nearby deposits of bauxite, the Commission also recognized subsidiary possibilities of irrigation and the development of an inland fishing industry.

The Commission's Report indicated that costs would exceed the 1952 estimate of £144 million by a large margin. The new estimate was £231 million to which were added allowances for inflation during the period of construction and for unforeseen engineering hazards, bringing the grand total to £325 million.

Despite the exhaustive work carried out by the Preparatory Commission and the general consensus as to the VRP's viability, it was nowhere near the take-off stage at the time of Ghana's independence in March 1957. Several factors were responsible for the floundering of the project at this time.

First, there was a growing opposition to the project from both the opposition parties as well as extreme leftists in Nkrumah's party, the Convention People's Party, who saw the VRP as an instrument of neo-colonialism designed to ensure the continued stronghold of Western powers over the affairs, especially the economy, of the country on her attaining independence. One government Member of Parliament referred to the VRP as "economic enslavement" while a second member said pointedly,

> You will find we have been asked to bear the whole burden in the non-economic sections of the scheme but we are asked to have only 10 per cent of the equitable capital of that section of the scheme which will bring in revenue. The UK will have a greater hold on the economic power of the country.

The Leader of the Opposition at the time, Dr J. B. Danquah, commented: "I said in 1943 and I say it again in 1953 that the Volta River is not for sale!"[35] This in-fighting contributed in no small measure in delaying the project.

Second, by the time of Ghana's independence the British, who had initially played a major role in the proposed project had, for some reasons lost interest in it. It is hard to understand the sudden loss of interest by the British, considering the earlier computations of projected future demands by the White Paper. In fact, that document in paragraph 8 urged that,

> there is every reason to expect that the demand for aluminium will continue to increase rapidly throughout the years. <u>There may be setbacks but these should only be temporary interruptions to the</u> upward trend. [36] (Emphasis added)

A few reasons have been offered for the loss of interest by the British in the VRP at this time. One theory is that by early 1956 there had been a glut in the World supply of aluminium resulting from over-production of the metal. Second, that the size of the investment required - £325 million - robbed the project of its attractiveness to the British Government and companies. Related to this was the fact that the Bank rate had increased from four-and-a-half per cent to seven per cent in Britain, thus discouraging the Metropolis from undertaking the project. Also, that the acute dollar shortage had by 1956 eased considerably and the British government had become less concerned about securing supplies of aluminium from the Sterling area.

It has also been suggested[38] that Nkrumah himself did not like the British connection with the project and had preferred the Americans. He was said to have expressed his misgivings about the British to some Americans, notably Dr. Horace Bond. This might have leaked out to the British.

We are tempted to suggest that British interest in the VRP was based on the project's location in a Sterling area, but with Ghana's independence imminent in 1956 there was no guarantee that an independent Ghana would still remain in the Sterling area.

The American Phase

In spite of the above enumerated problems which the VRP had to grapple with by the time of Ghana's independence, Dr. Nkrumah's government still had immense faith in the desirability of the project as an instrument for transforming the colonial economy of Ghana, characterized by primary production, to one of a self-sustaining industrialized economy. Addressing the National

Assembly on the VRP Dr Nkrumah said:

> Ghana must progress towards a balanced economy and this means the creation, where nothing existed, of an industrial sector ... Newer nations such as ours which are determined by every possible means to catch up in industrial strength must have electricity in abundance before they can expect any large scale industrial advance ... This is basically the justification for the Volta River Project. 39

and in Africa Must Unite the late President declared:

> ... a constant fundamental guide is the need for economic independence. An important essential is to reduce our colonially produced vulnerability ... Every time we import goods that we could produce we are continuing our economic dependence and delaying our industrial growth. 40

To the Nkrumah administration, then, the answer to the imbalance and the dependency of the economy lay in embarking upon industrialization. Since adequate power is the catalyst for any rapid industrial development the administration saw the construction of the Akosombo Dam as a sine qua non to any meaningful industrial development in Ghana.

Yet by 1956 only 230 megawatts of power was produced in the country, and as late as 1959 only 339 megawatts was produced. In almost all cases the mines were the major consumers[41].

Therefore, seven months after independence approaches were made to the Government of the United States which began to review the situation and to investigate the possibility of providing financial assistance[42]. To be sure, even before the newly independent country approached the US for assistance, Vice-President Richard Nixon, who represented his country at Ghana's independence celebrations, had on his return to Washington reported to President Eisenhower that US private investment had excellent prospects in Ghana in particular, and Africa in general. Apart from the obvious super-profits which would accrue to US firms, Nixon urged, such investment would also effectively pre-empt potential Russian influence in the region[43].

It could therefore be said that Ghana's approach to the US for assistance in regard to the VRP happened to have coincided with US contemplations about investing in that country. This would seem to have been a very happy coincidence for the US.

Be that as it may, the linkman between Nkrumah's government and the Americans was one Dr. Horace Bond[44]. Bond set up a non-profit organization - the Ghanus Corporation - to facilitate discussions between the American aluminium companies and Nkrumah and also to generate interest in the project in the US.

Unfortunately, Bond did not achieve much as a large number of the US multinationals he approached had each established strong contacts with various powerful political leaders and state organizations, to ensure that if the American Government wanted to recommend a company for the project it would be nominated. For example, the Ghanus Corporation, which comprised mainly of

Republicans was rebuffed by the Reynolds Metals Corporation because the latter had already made its own contacts, and was reputed to have the backing of Adlai Stevenson, who had been trying to persuade Nkrumah that if the Democrats came to power in 1960 they would offer the necessary assistance to enable the project to take off[45]. One commentator summed up the lobbying by the various US corporations in this way:

> By mid-1957 four separate US corporations excluding the BAC and Alcan, were at various stages of negotiations with the independent Government of Kwame Nkrumah. Each had its own group of political acquaintances and well-placed friends to ensure that if the project ever got started the necessary US security and financial backing would be found. Reynolds was working through Adlai Stevenson; Anaconda through Bond and the Ghanus Corporation; Kaiser through Calhoun[46], the International Cooperation Administration, and the State Department; and Leith's[47] maverick consortium to press its case...[48]
>
> (Emphasis supplied)

As a result of Nixon's recommendations and the interest shown in the project by various US multinational corporations, a technical cooperation agreement was signed between the Ghana Government and the US State Department. It was agreed that an International Cooperation Adminstration team be sent to Accra to assess the project and consider what assistance could be offered by the US Government.

The team arrived in January 1958 and reported that the VRP was viable. On the question of finance the team concluded that a US loan and Ghana's own resources should finance the Akosombo Dam, while the Tema smelter was to be constructed by private US firms with official assistance provided.

Nkrumah himself visited the US that year, and was introduced to Edgar Kaiser by the State Department. In August the Kaiser Corporation[49] and the Ghana Government signed an agreement for an engineering reassessment of the VRP[50].

At this stage, it is pertinent to find out the reasons for American interest in the VRP when British interest had evaporated due to factors which we have already enumerated, and in view of a June 1957 World Bank Report which had stated bluntly that the project was "not justified" at that stage of Ghana's development[51]. The Bank's assessment had been based on the original proposal of an integrated aluminium industry. The Bank came to the conclusion that since Ghana did not have sufficient funds to undertake the project singlehanded she would necessarily have to approach international lending institutions and governments for the necessary capital. But considering the monumental size of the investment required and the initial negative cash flow, the project was certain to cause repayment difficulties to the young nation.

One reason for America's keen interest in the VRP was that a report of 1952 President's Materials Policy Commission had also indicated that America's projected demand for aluminium by 1975 would be 300 per cent greater than her 1950 demand. The American Government therefore saw in the VRP a chance to control a major source of the world's aluminium. A second reason was that the major US aluminium companies were faced with rising power costs in the US and were becoming increasingly interested in operating abroad to take advantage of cheap power. Another reason was that the US did not think it was strategically wise to alienate the newly independent and promising African state and to repeat the Aswan Dam situation where Russia had stepped in when American support was withheld from Egypt.

The Kaiser Reassessment of the VRP

Kaiser Engineers presented their report in February 1959. The project as proposed in the report differed in many respects from that put forward by the Preparatory Commission. The Report recommended, inter alia, that (a) the site of the dam be changed from Ajena to Akosombo, where the gorge was narrower but deeper; (b) the smelter should be sited at Tema; (c) the alumina to be used in the smelter should be imported till the company to undertake the operation of the smelter had enough revenue to exploit local bauxite; (d) the public utilities aspect should be financially separated from the aluminium industry; (e) the smelter should be financed with private capital while the Ghana Government financed the construction of the dam and its related facilities.

The cumulative effect of the above recommendations was that the overall cost of the VRP was reduced considerably - by 30 per cent. The lower cost was due to two factors: First, by recommending that the project should initially use imported raw materials instead of Ghanaian bauxite, the Report made investments in the mines, railways, alumina plant and a new township of Kpong unnecessary. Second, the building of the dam at a narrower but steeper part of the Volta River meant the construction of a less costly dam in a shorter construction period.

It has been suggested elsewhere that the Kaiser cost estimates did not differ significantly from those of the 1952 Preparatory Commission[52], with Table I being used as evidence:

TABLE I
A Comparison of the Kaiser Engineers' and the Preparatory Commission's cost estimates of the VRP

	Preparatory Commission	Kaiser
	£million	
Power Project	64.0	69.0
Smelter and Mines	57.9	56.7
Public Works	63.0	2.5
	184.9	128.9

Source: Pardy et. al, op.cit. p.139.

Clearly the savings were obtained at the expense of public works such as roads, railways and resettlement. It seems clear, however, that the Report undermined the very essence of the VRP as originally conceived by Nkrumah - as an integrated aluminium industry based on Ghana's bauxite resources. To this extent, therefore, the Kaiser Engineer's Report differed significantly and radically from the Preparatory Commission's Report. The

Kaiser Report, in fact, was similar to the one issued earlier by the US State Department's International Cooperation Administration team, as we have already seen.

The Formation of VALCO

Nkrumah somehow[53] accepted the Reassessment Report and therefore took action to seek outside assistance to cover the foreign exchange component of the cost of the dam and to secure the arrangement of a reputable aluminium producer to finance the construction of the smelter.

With regard to the latter, negotiations were brought to a climax when in September 1959 a consortium of giant aluminium companies comprising Kaiser, Reynolds, Alcan, Alcoa and Olin Mathieson agreed to constitute itself into the Volta Alunimium Company (VALCO), which company was duly incorporated in Ghana in November 1959; and in December of that year a "letter of intent" was signed between the Nkrumah government and VALCO, setting out in very general terms the principles on which the establishment of a smelter could be negotiated in detail.

However, by 1961 Nkrumah, a known socialist all along, had become even more radical in his policies and utterances. This seemed to have created panic among some of the multinational companies who constituted VALCO. Unsure of what policy the President of Ghana might adopt towards them in the future, a majority of the members of the consortium pulled out of VALCO, leaving only the Kaiser Aluminium and Chemicals Corporation and

Reynolds Metals Incorporated with 90 per cent and 10 per cent shares respectively to continue with the hard and delicate bargaining with Nkrumah's government.

The agreements that were finally reached between VALCO and the Ghana Government will be discussed in detail in the next chapter.

The Hydro-Electric Project

Even though as we have already observed, the World Bank's Report of 1957 was unfavourable, with the formation of VALCO in November 1959, the Ghana Government felt encouraged to approach the World Bank again to review the project. Thus in January 1960 Mr. Eugene Black, the then President sent a team to Accra for talks with the Government, and by July that year the Report was ready.

This time the Bank's Report was favourable. It saw the entire project as feasible provided Ghana negotiated with VALCO to sell the power at a fixed rate of 4.5 mills per kilowatt, with a flat rate of 15 mills per kilowatt for all other customers. In arriving at this conclusion the Bank jettisoned the idea of the proposed 800-kilometre national grid which was one of the attractions of Kaiser's package. For Kaiser, the idea of a national grid was justified because the company anticipated an annual electricity demand growth of 19% up to 1980, in which case the smelter power ought to be kept low - 2.5 mills per unit - as other revenues would accrue to the project[54].

As it turned out, the Bank finally recommended a loan of nearly £17 million. The Bank's action in this regard seemed to have influenced other governments and agencies into deciding to offer financial support to the project. Table II shows a breakdown of financial commitments for the construction of the dam[55].

TABLE II

Sources of Finance for the Hydro-Electric Project[56]

Source of Finance	Repayment Period(years)	Rate of Interest %	Amount £m
International Bank for Reconstruction and Development	25	$5\frac{3}{4}$	16.8
US Agency for International Development	30	$3\frac{1}{2}$	9.6
US Export-Import Bank	25	$5\frac{3}{4}$	3.6
UK Export Credits Guarantee Department	25	6	5.0
Ghana Government (Equity Investment)			35.0
Total			70.0

Source: Government of Ghana, Seven Year Development Plan, 1963, p.26.

CHAPTER THREE

THE MASTER AGREEMENT AND OTHER RELATED CONTRACTS

Following the letter of intent and subsequent negotiations a series of agreements was drawn up between the Government of Ghana and VALCO. The objectives of the Master Agreement - hereinafter called "the Agreement" - were stated as being

> ... in furtherance of the national policy for development of our natural resources and diversification of the national economy in pursuance of which the government wishes to utilize the Volta River and to encourage private investment in the country and to increase the opportunities available to the people of Ghana for employment in industry. 58

On the 8th February 1962 the Agreement was signed by the parties[59]. In the following paragraphs we shall highlight some of the principal provisions of the Agreement and its related contracts and subject them to critical analysis, where appropriate, in order to determine their implications for the Ghanaian society and economy.

Financial Arrangements

The shareholders of VALCO undertook to enter into a subscription agreement under which by the period of commencement of operations they would have paid up a share capital of $32 million[60]. VALCO further agreed that it would week loans to supplement its own resources of $32 million and deposit such monies in a voting trust to enable them to meet their obligations under the scheduled contracts[61]. The company was also to establish a

"VALCO Current Accounts Trust" through which it would receive and pay monies to its creditors under the various loan agreements.

On the part of the Ghana Government it was agreed that it would invest not less than £30 million or an amount equal to the cost of construction of the Dam.

The Agreement further provided that if VALCO exceeded its total capital of $164 million raised under various loan agreements the Government of Ghana would lend it such monies as desired to defray any remaining cost for the construction and completion of the smelter[62].

Thus, contrary to popular opinion the construction of the smelter was not wholly financed by VALCO, but also by international banks and even Ghanaian banks! The total cost of the smelter was $201 million, funded by a $146.2 loan and $54.8 million equity. Three American banks - the Export-Import Bank, PEFCO and Crocker Banks - and two Ghanaian banks - the Ghana Commercial Bank and the Barclays Bank(Ghana) Limited, provided the loans[63].

The contribution made by the two Ghanaian bank constitutes a siphoning away of scarce resources which could have been used for the development of more critical areas of the economy such as health and agriculture. In addition, debt charges payable by VALCO on loans contracted under various loan agreements constitute a serious drain on Ghana's surplus in that they are payable in foreign exchange. For example, in 1976 alone, VALCO paid an interest of $8,592,147 to the Export-Import Bank[64].

The Power Contract

This was the heart of the matter. Under this provision, the production and consequent supply of power to VALCO by the VRA was guaranteed at pre-arranged times and rates. Of special significance was the fact that VRA was to supply power to VALCO at a rate of 2.625 mills[65] per kilowatt hour.

This raises many questions. As a matter of fact, the smelting process requires an enormous amount of power, as can be seen in Table III, and it has therefore become fashionable for aluminium companies to locate aluminium smelters only where large quantities of electric power can be made available at a very low price.

TABLE III
The Distribution of Aluminium production costs

Percentage of the total cost	Process	Additional Input	Product	Location of VALCO operations
10%	Extraction Ore	-	Bauxite	Jamaica
10%	Beneficiating	-	Bauxite exported	Jamaica
20%	Conversion to alumina	Caustic soda	Alumina	U.S.A.
60%	Reduction to aluminium	Electricity Cryolite	Aluminium	Ghana

Note: Percentages are approximate; exact figures depend on variable factors that fluctuate over time.

Source: M. Brown and J. Butler, The Production, Marketing and Consumption of Copper and Aluminium, Praeger, 1968, p.5.

The great importance of cheap power to aluminium companies becomes obvious when we consider the fact that "a difference of one mill in power adds some $16-$18 per ton to the cost of ingot metal ... the lowest producers could have up to about $70 a ton advantage in production cost over the highest cost producers"[66], and considering the fact that VALCO produces 200,000 metric tonnes of aluminium annually it is clear that the multinational company is making enormous savings.

The contract rate of 2.625 mills per unit was certainly among the lowest in the world, as a comparison with rates obtainable in other countries at the time in Table IV shows.

TABLE IV

A Comparison of power rates in selected countries as at 1962

Country	Mills per kwh
US	4.0
Canada	3.5
W. Europe	6.0
Japan	8.0
Taiwan	8.0
Malawi	3.5
India	4.0

Source: Birmingham et al, op.cit. p.201.

In fact, a 1972 World Bank survey indicated that the VALCO tariff was less than half of that in force in any other country[67]. It is estimated that in one decade alone VALCO saved over $100 million in smelting costs alone[68]. Little wonder, then, that VALCO has expanded its smelter to operate at maximum capacity, consuming at the present time sixty-five per cent power capacity, to maximize profits[69].

Another far-reaching implication of the power agreement was that had the price of power been a little higher, a smelter would have been a sound economic proposition only on the basis of local bauxite deposits, thus compelling VALCO to install an alumina plant.

The basic <u>raison d'être</u> of the power contract was that Ghana would use the foreign exchange realized from the sale of power to VALCO to repay the loans she owed to foreign governments and banks as a result of the VRP. Nkrumah himself declared in 1962 that

> ... the guaranteed price of power [by VALCO] is the key to the government's investment in the power development at Akosombo. 70

because the VRA would then be able to pay its debt charges without any strains on the country's foreign exchange.

The rate of return to VRA from power sales was estimated at £2½ million per annum. But at a return of £2½ million per annum and a total debt of £144,710,000, it has been estimated that it would take 29½ years to settle the amortization of the entire project[72]. Clearly, Nkrumah overestimated the time within which the debt incurred from the VRP would be paid off.

Meanwhile VALCO continues to make substantial profits. As far back as 1968 the company had recorded a net profit of $4,267,939 and by 1969 this had increased to over $7.0 million and to over $18 million in 1972. By 1976 VALCO's total net earnings since it started operations in 1967 stood at $78,397,546[73].

The Agreement, by making it compulsory for the VRA to notify VALCO about any intended sales of power to other industrial consumers, ties the hands of the Authority. In effect, the Ghana Government cannot use cheap power to attract other industries, without the consent of VALCO. The result is that many industrialization projects remain at the drawing board stage due to power shortage.

As for the private domestic consumer he has to subsidize the low price that VALCO consumes, by paying three to four times the VALCO rate.

Importation of Alumina

Under the Agreement, VALCO is to import alumina and anything required to operate the smelter, free of charge. For a period of 30 years the importation of alumina would be duty-free. VALCO was also allowed to enter into tolling contracts with its shareholders or other parties for the provision of alumina for processing into aluminium for a fee not less than 56 per cent of the UK or US basic price per ton. However, if by the tenth year of operation VALCO did not produce its alumina from local bauxite it would be required to increase its tolling charges to not less than 60 per cent of the basic US/UK delivered price per ton.

The Agreement contained no legal commitment on the part of VALCO for the establishment of a plant to convert Ghana's mined bauxite into alumina. Because of this non-committal provision[74] VALCO seems to have rejected the idea of developing Ghana's large bauxite deposits.

With the availability of cheap power and substantial bauxite deposits Ghana unquestionably possesses almost all the ingredients necessary for an integrated aluminium industry. That such a development would go a long way to ameliorate the country's serious foreign exchange position need not be over-emphasized. It has been estimated that the export earning power of bauxite processed into aluminium ingots is at best seven times as large as unprocessed bauxite[75].

Nevertheless VALCO continues to import alumina from the US and Jamaica to feed the smelter. Why, one might ask, does the company continue to import alumina in view of Ghana's extensive bauxite deposits? Several reasons have been given by VALCO[76]. The first is that the main raw material for the smelter is alumina, not bauxite. Moreover, a plant to process Ghana's bauxite into alumina would cost as much as the smelter. Another reason given is that long new transport routes would be needed to bring Ghana bauxite to the Tema smelter and this would only add costs. Yet another explanation is that for an alumina plant to be an economic proposition it must have an output at least twice the 270,000 tons required by the smelter[77].

It has been claimed that the Agreement contained a clause that provided an incentive to VALCO to use local bauxite[78]. The particular reference here is the provision in Article 17B that if after 1977 VALCO still imported all its alumina it would have to increase the charge that it levied for the conversion of imported alumina from 56 to 60 per cent of the ruling world price for alumina, to which we have already referred. But, in our view, this is hardly a significant incentive. For one thing, the extra four per cent charge - which at today's ingot price of $1750 per ton amounts to $70 per ton or using VALCO's capacity of 200,000 tons per annum amounts to $14 million - does not even accrue to Ghana but to the company only, since Ghana gets only a portion of it only when VALCO has declared its chargeable income on which a 40 per cent company tax is then levied.

In the face of obvious vascillation on the part of VALCO to develop the country's bauxite deposits the Ghana Government in 1975 endorsed the formation of the Bauxite Alumina Study Company Limited (BASCOL) to conduct feasibility studies into the possibility of establishing an alumina plant in the country[79].

But this company was doomed to failure right from the start, as Kaiser and Reynolds had vested interests in the VRP and the status quo, in that the two companies use VALCO as an outlet for their alumina from Jamaica and the US.

The behaviour of VALCO with regard to the importation of alumina is hardly surprising. Fully integrated aluminium plants are rarely located in developing countries. For example, Jamaica, Guyana and Guinea have bauxite mines and aluminium plants but no smelters; Cameroon has a smelter but has no bauxite mines or alumina plants even though that country has bauxite deposits. Ghana has a bauxite mine and a smelter but no alumina plant. On the contrary, Western countries such as the US, France, and recently Australia have all the five stages of aluminium production - bauxite, alumina, aluminium, semi-fabricated products and fabricated products. So far perhaps the only developing country to have had the "honour" of having a fully integrated aluminium industry is Surinam[80].

Export of Aluminium

As regards the export of VALCO's aluminium, the government agreed to impose no restriction, directives or control as to the disposition, purchasers or destination of such aluminium. The exports, according to the terms of the Agreement, would be tax-free, regardless of whether VALCO owns the aluminium or other parties to the tolling contract on it.

It sounds strange that in a country in which over 200,000 tons of aluminium ingots are produced annually, local fabricators still have to depend on imported ingots to feed their factories[81]. In 1979 alone these consumers imported over two million dollars worth of aluminium ingots from Britain[82]. Meanwhile VALCO, because it is under no legal obligation to supply the local market, continues to export all its locally produced aluminium to the US, Japan and the Far East.

Related to the importation of alumina and export of aluminium is the provision that allowed VALCO to employ shipping lines of its choice. Even though Ghana's Black Star Line has a large fleet of ships VALCO has on no ocassion used any of the Line's ships for its imports or exports.

Tax Exemptions

VALCO was granted pioneer company status which exempted it from income tax for a minimum period of five years and a maximum of ten years. As a tax-stablization concession, it was further agreed that after the ten-year period the chargeable income tax would be the relevant rate obtaining in 1961[83]. And while no other fiscal charges were to be levied on VALCO the dividends of the shareholders of the company were to be non-taxable.

These generous tax exemptions granted to VALCO was to enable the shareholders to recoup all sums they had invested in the project. Table V below attempts to show the amount of money lost to the Ghana Government as a result of these concessions, for only some five selected years on which information was available.

TABLE V
Money Value on Income Tax Exemptions to VALCO for Five Selected Years (in $ dollars)

Year	Adjusted Profit	Tax Due *
1967	1,783,733	713,493.2
1968	8,999,835	3,599,934.0
1969	11,808,818	4,723,527.2
1972	13,585,326	5,543,330.4
1975	23,613,710	9,445,484
Total		24,025,768.8

Source: Central Revenue Department (Ghana). Annual Reports

* The tax due is my own computation based on 40 per cent corporate tax.

It is clear from the above Table that for a ten-year period, all things being equal, the loss to the Ghana exchequer would be in the region of $50 million - and this excludes tax exemptions on imports and exports of alumina and aluminium respectively not to mention the insignificant stamp duties and vehicle taxes that the company pays currently.

Even when the tax holiday ended in 1973 VALCO still remained virtually insulated from company tax due to high capital allowances granted to it by the government.

Exemptions from the payment of Duties and Tariffs

Indirect taxation is the largest source of revenue for most governments in developing countries. By denying the Government of Ghana this source of income from its operations, therefore, VALCO has contributed in no small measure in the country's present financial crisis.

While such fiscal concessions are incentives often granted to certain industries in critical sectors of the economy, they are hardly stretched to the absurd thirty years limit that the Agreement does for VALCO. In Ghana the usual period granted by the Investment Code is five years.

At the time of the conclusion of the Agreement the US was charging 1.2 cents per pound on imported ingot, while the duty on imported alumina was ten dollars per short ton[84].

Also, Article 20 by allowing the duty-free import of alumina by VALCO explicitly encouraged the non-development of Ghana's bauxite deposits by the company.

Other Special Guarantees and Privileges

Foreign Exchange Control

VALCO was exempted from foreign exchange control obligations and prohibitions. The company was therefore free to hold and receive foreign currency in accounts outside Ghana provided that it showed that such monies were not greater than what was required to meet its foreign obligations.

Expropriation

The company was given freedom from expropriation for a period of 30 years[85].

Immigration Quota

VALCO was granted an immigration quota of up to 250 employees for the construction and operation of the smelter. This was ten times above the immigration quota available to other foreign firms. Such workers were to be allowed to transfer abroad, without any restriction whatsoever, any part of their unspent salaries.

Provision of Water (Schedule F)

This provided for the delivery by the Government of Ghana to the VALCO smelter 315 gallons of water per minute, increasing in three years to 1075 gallons per minute, at a payable rate of only three shillings per 1000 gallons[86].

Tema Port (Schedule G)

This schedule allowed VALCO to lease land for a 160 metre long quay at Tema, for a storage silo and rights of way to and from the smelter. It also empowered the company to use its own staff and facilities for the loading and unloading of cargoes.

Even with regard to harbour dues the Ghana Government could only levy a tax of one shilling per ton on VALCO!

Smelter Site

VALCO is a typical enclave industry, isolated from the rest of the Ghanaian community. It was allowed to build its own roads, security, port, school and hospital. Social, economic, cultural and technological contact with the mainstream of Ghanaian life was thereby minimized ab initio.

Thus the company was allowed for example, under Schedule E, a lease of 475 acres at an annual rate of £616,658 for the construction of the smelter at the site. The company was given the right to fence off any road that it constructed and make use of a large area near the sea for the disposal of the waste from the smelter, without any environmental protection obligations.

In addition, the company, under Article 24, was empowered to provide its own internal communications system.

Expansion of Operations (Article 13)

This article allowed VALCO to expand its operations without any further authorization by the Ghana Government. This provision obviously is an affront to the sovereignty of Ghana.

Dispute

The Agreement provided that in case of any dispute arising from the investment it would be referred to the

International Bank for Reconstruction and Development for arbitration.

Related to this was the provision that any existing law that was inconsistent with the terms of the Agreement or those of the related schedules was to be repealed by the Ghana Government. Clearly, this was, again, an infringement of the host country's sovereignty.

VRA Board of Directors

Article 9 stipulated that for a minimum period of 30 years VALCO would have a representative on the VRA Board. However, while a member nominated by VALCO serves on the VRA Board, no reciprocal arrangement was made for a VRA representative to serve on VALCO's Board.

It is clear from the foregoing analyses that the whole VRP-VALCO venture is a typical example of what the "radical" school of thought would call "neo-colonialist exploitation". Behind the investment lay, as we have seen, the concentrated use of bargaining power and machinations by the US State Department, the multinational aluminium companies and, to some extent, the World Bank itself. This reinforces the proposition that it is often difficult to draw a sharp line between private foreign investment and official "aid". Often official aid is used as a back-up for private foreign investment.

Thus the US Government provided some financial support for the construction of the hydro-electric dam and apparently used its influence to get the World Bank in particular to offer financial assistance as well. As already observed, the US Government was motivated by economic and political considerations into giving its support to the VRP. American support for the Scheme was summed up by G. Mennen Williams, Assistant Secretary for African Affairs when he appeared before the US Senate Committee on Foreign Affairs, in connection with the project.

> ... it is our estimate that in the long run there are favourable factors that will prevail. This is an area where the British developed a very sound based civil service, a well-trained military ... the middle class is a sizeable one, and the amount of free enterprise is considerable. Their most important crop is cocoa. These are all middle class, independent farmers. I think when you put the thing in balance that over the long run we could hope for government which would at least be non-aligned. 87

American support for the Scheme was so strong that late in 1961 President Kennedy is said to have met with British Prime Minister Harold McMillan and persuaded the latter to offer assistance[88].

As for the World Bank its role in the whole venture is fraught with suspicion. When Ghana wanted an integrated aluminium industry it ruled that the project was not feasible. When VALCO, an American consortium, got involved the Bank then saw the VRP as a viable proposition. With Edgar Kaiser's strong political contacts in Washington the possibility of his having lobbied the World Bank through top American officials cannot be ruled out.

In fact, there is evidence to suggest that the Bank's President, Executive Director and Chairman between 1947 and 1962, Eugene R. Black, knew that the VRP, as re-shaped by Kaiser, with American backing, was not in the best interest of the young nation. In 1961, when negotiations were still going on for the loan for the project, he wrote

> In the long run these projects may well be the foundation on which an industrial Africa rises. But now the major benefit to the new African nations is simply the rent or royalty or taxes that accrue to the government. I am the first to admit that, desirable as these projects are, they do not by and large provide great numbers of new jobs, particularly skilled jobs for Africans; they do not produce goods for the local market and thereby encourage the learning and spread of modern business practices; they have not succeeded in stimulating local African enterprises. 89

Yet during the negotiations over the VRP he is reported to have stated that

> ... our [World Bank] foreign aid programs constitute a distinct benefit to American business. The 3 major benefits are: (1) Foreign aid provides a substantial and immediate market to US goods and services; (2) Foreign aid stimulates the development of new overseas markets for US companies; (3) Foreign aid orients national economies towards a free enterprise system in which US firms can prosper ... 90

It is contended here that the Bank's demeanour in the whole affair is not a good commentary on the reputation of the international lending institution[91].

Kaiser's machinations in the project are clear enough. Having first lobbied into the position of engineering consultant, Kaiser eventually became the builder of the smelter and the prime power user of the power generated by the Dam. In this regard Kaiser was "prosecutor, judge and executioner", shaping the project and discarding whatever was not in its interest.

The net effect of the various fiscal exemptions is that urgently needed revenue is siphoned away to already-rich America, thus seriously affecting Ghana's developmental plans. Most serious of all, the deal, in typical multinational corporation fashion, effectively changed the original conception of an integrated aluminium industry to one which almost entirely benefits VALCO and not the people of Ghana. Ghana is at best only an incidental beneficiary.

Apart from being more financially advantageous to VALCO the package is also an affront to the sovereignty of Ghana to the extent that VALCO, by virtue of various provisions in the Agreement, <u>can</u> interfere in the affairs of the VRA, one of the most successful and respectable corporations in Ghana.

One might ask why Dr Nkrumah, well-known for his radical views with regard to foreign capital and neo-colonialism should have succumbed to the package. For example, in his <u>Neo-Colonialism: The Last Stage of Imperialism</u>, he stated forcefully that

> ... the essence of neo-colonialism is that the State which is subject to it is, in theory, independent and has all the outward trappings of international sovereignty. <u>In reality its economy is directed from outside</u>. 92
>
> (emphasis ours)

To understand why the radical Nkrumah became a party to the deal, one ought to understand the special prevailing circumstances at the time. By 1962 a sharp drop in the price of cocoa, Ghana's major export commodity[93], had put the country in economic straits, resulting in a serious debt-position. In addition, Nkrumah's ultra-leftist pronouncements and policies did not seem to go down well with the international lending agencies to whom requests for financial assistance had been made[94]. Finally, at that time many European countries which were potential helpers in the project were themselves just beginning to emerge from the post-war economic doldrums and were therefore not eager to invest in such a gigantic venture.

The United States was therefore an obvious choice for financial assistance, and her insistance that the young developing country should enter into an agreement with an aluminium company to set up a smelter to consume the prodigious amount of power, put Ghana in a difficult position. Ghana seemed to have accepted the conditions in the hope that although her dream of an integrated aluminium industry would be frustrated, VALCO would, in the near future, make use of local bauxite and also assist in the development of the integrated industry. Furthermore, Nkrumah decided to accept the deal in return for 300MW of power for domestic and industrial purposes, in the interim.

The annual revenue from the power to be sold to the smelter, which was estimated to be enough to cover the debt-service of the VRP and also finance future infrastructural development seemed to have offered an appealing prospect to Nkrumah's government.

Another important factor to be considered is the fact that aluminium and hydro-electric potential were, as they are even today, reasonably plentiful world wide. Ghana was also in a weak bargaining position because she probably did not have experienced economists and development experts at that time to put forward the alternative integrated industry idea in a forceful way. Moreover, Ghana was negotiating mainly with a super-giant multinational - Kaiser - whose empire covered many countries, including the US and many European countries.

Later in his exile days Nkrumah rationalized his acceptance of the package deal in this way:

> It was considered in the circumstances of the time that the undertaking of joint ventures with already operating capitalist concerns was better than the alternative of economic blockade by the West and the consequent lack of development until the assistance of socialist states could be procured and become operational. 95

Although it is conceded that Nkrumah found himself in a tight corner, it is submitted that had Nkrumah not embarked on a large-scale power development as the backbone to a complex integrated aluminium industry the problem may not have arisen in the first place. He was naive in believing that the VRP was the only key to industrialization, when small hydro-electric schemes are even more suitable for Ghana's circumstance[96].

Large-scale industrialization became a vogue among some leaders of the Third World in the fifties and sixties, and probably Nkrumah was only being fashionable when he adopted the strategy.

It must be pointed out that in dropping the original integrated aluminium industry idea, the American multinationals offered a number of inducements to Nkrumah to compensate for the loss of his dream. These included a lake transport industry, a lake fishing industry and, perhaps most important of all, irrigation from the large expanse of water to be created by the Dam.

However, while the Dam and smelter are operating at full capacity most of these other projects are yet to take off, as was expected originally. The agricultural revolution stemming from irrigation has at best remained a dream. Only 49 per cent of the previous 94 per cent of the residents around the lake are currently engaged in farming[97]. Moreover, the Volta Dam has in recent times been affected by serious drought conditions with the result that since 1972 no water has been released through the spillways to enable any serious irrigation to be carried out by the few farmers who live around the lake.

The planned cheap lake transport has not fared any better. In spite of the creation of a Volta Lake Transport Company in 1969, the venture continues to remain virtually on paper only. Currently the West Germany Government is offering technical assistance in a bid to make the project a reality.

The fishing industry is perhaps the only bright spot in the attractions offered by Kaiser in lieu of the original plan. If the irrigation and lake transport aspects have woefully failed, the fishing industry has been a fantastic success, generating an income of some 40 million cedis[98] ($35 million) in 1976 for local fishermen who caught over 40,000 tons[99] of fish that year. The lake contains some seventy species of fish. However, the shortage of spare parts and of other inputs is militating against the realization of the full fishing potential of the Volta Lake.

As already mentioned, the prospect of a 300 MW national grid of electricity was appealing enough as it was envisaged that a large proportion of the population would have access to electricity. A critical analysis of the power situation in Ghana however reveals that as a result of VALCO's consumption of about 65 per cent of the total power generated, only about five per cent of the total population of over eleven million people have this access. The national grid necessarily serves only the major towns and cities in Southern Ghana since this part of Ghana is nearer the Dam than the Northern part. This accentuates the long-existing North-South regional imbalance in the country. It also reinforces the urban-rural dichotomy which some writers on development have rightly lambasted[100].

With regard to industrial users who currently consume about 100 MW, it has been estimated that state organizations consume 47 per cent while foreign joint ventures account for 37 per cent. Levantine businesses consume 12 per cent and industries fully owned by Ghanaians take only eight per cent[101].

While many industries wait in the queue for electricity, Ghana finds it necessary to export five per cent of the power to neighbouring countries, namely Togo and Benin, to secure foreign exchange to pay off the huge debt incurred from the VRP.

Another incentive was the setting up, by VALCO, of a Special (VALCO) Fund which would guarantee more revenue from the project than would normally be expected. Under the terms of the VALCO Fund, the company is committed to share its profits, after tax and specified deductions, fifty-fifty with the Fund. The money is used for the advancement of education, science and for carrying out social development projects in Ghana. So far total payments into the Fund amount to about 60.5 million cedis ($22 million)[102].

Social Impact

At this stage it is necessary to take a brief but critical look at some of the significant social impacts of the VRP and VALCO venture. With the creation of the Volta Dam a large number of people, estimated at 80,000[103], in the immediate vicinity of the Volta River had to be evacuated and resettled. Even though

Nkrumah had declared that no Ghanaian

> ... should be worse off as a result of having to leave his present place and move to a new area 104

this exercise has been fraught with difficulties for the resettled people. Most of the people involved had emotional attachments to their flooded lands and have never liked their new settlement. Moreover, they have often received a hostile reception from the host communities. Houses provided for the settlers were poorly designed and constructed as they did not take into account the varying cultural backgrounds of the affected people. The settlers, in many cases, have lost their way of life and sometimes their livelihood[105]. David Hart aptly summed up the resettlement experience when he wrote that resettlement was

> ... seen as peripheral to the 'main' part of the VRP, the aluminium and electricity ventures. The VRP did not aim to ameliorate the lot of the ordinary Ghanaian villagers, and consequently in the case of those 80,000 displaced people it made life worse. 106

In the field of health, the experience is no different. The formation of the Lake has led to a high incidence of a number of diseases in the area covered by the Lake, namely, malaria, Tuberculosis, yaws, bilharzia and river blindness and so on. It is estimated that the infection rate for bilharzia, which was about five per cent before the formation of the Lake, has risen to between 80 to 100 per cent in some areas since its formation[107]. Over 70,000[108] people are totally blind from river blindness in the Volta Basin alone, while maleria remains endemic in the area.

VALCO employs 2,500 Ghanaians at the smelter. The number might seem significant at first, but a critical analysis would reveal that a large majority of these workers are employed in the lower rungs of the company. Only a handful of Ghanaians have been promoted to executive positions or even supervisory grades in VALCO. Admittedly, the company pays very lucrative salaries and wages to its workers, but this has led to the creation of a labour aristocracy in the country, with VALCO employees getting far in excess of what the majority of Ghanaian workers earn. This has sometimes resulted in social friction between the company's workers and other workers in the country. For example, in 1976 when the Ghana Government announced a salary increase of up to 11 per cent for workers in the public service, VALCO offered its already highly paid workers a 200 per cent wage increase, much to the chagrin of Trades Union officials.

CHAPTER FOUR

THE IMPLICATIONS OF THE VRP-VALCO VENTURE FOR POLICY-MAKERS IN DEVELOPING COUNTRIES

The foregoing catalogue of some of the negative affects of the VRP-VALCO investment on the Ghanaian economy and social life is to enable policymakers in developing countries to recognize some of the serious dangers inherent in private foreign investment and, to some extent, large-scale industrialization projects, as in our case study the two issues are inter-related, and to be guided by them when considering similar proposals in the future.

This is not to say that VALCO, and the VRP for that matter, has not made any beneficial contribution toward the development of Ghana. Some of the few contributions of the VRP-VALCO venture may be enumerated here. First, it is claimed that the hydro-power project which has provided electrical energy to both VALCO and some parts of Southern Ghana currently saves Ghana over $80 million per year which would otherwise be required to import oil to generate electricity for local consumption, excluding VALCO[109]. Second, the direct employment provided by VALCO has helped, to some appreciable extent, in easing the unemployment pressures on the Ghanaian economy. Third, VALCO has so far contributed about 376 million cedis (approximately $138 million) in the form of income tax payments[110], payments to the VRA for power supplies, transfers to the Bank of Ghana for salaries and wages, supplies and materials obtained locally and contributions to the VALCO Fund[111].

Although private foreign investment has a lot to offer to developing countries, there is the need on the part of policy formulators in these countries to carefully appraise investment proposals submitted by foreigners.

What, then, is the "right" strategy to counteract the many negative effects of improperly negotiated private investments? It has to be pointed out from the outset that there is no single strategy. Various strategies are available, and which particular one is suitable would depend on the investment as well as the country concerned. We shall now attempt to look briefly at some of these strategies and analyse them for their efficacy.

Nationalization

One strategy is to lure a private investor into the country by making substantial concessions, as was done in the case of VALCO, and when the project has taken off to nationalize it and pay reasonable compensation.

However, this strategy could have serious international repercussions. There is a strong probability of an international conspiracy on the part of the investor and his home government and its allies to mount an economic blockade against the host country. Thus, for example, aid from the US is not available under the Hickenlooper Amendment to countries which nationalize US-owned properties and fail to rectify the situation within six months[112].

Nationalization could also lead to serious management and technical problems, as more often than not developing countries do not possess managerial capability and know-how necessary for the successful running of this type of investment.

One theory that goes on in Ghana is that Dr. Nkrumah, who was himself very critical of multinationals, knew exactly what he was doing when he conceded so much to VALCO and that but for the military coup d'êtat that overthrew his socialist government in February 1966 the late President would have adopted this strategy. There is no evidence to support this proposition, however, although the possibility of this happening could not have been written out entirely.

Nationalization, it must be stressed, is not necessarily a bad proposition[113]. Where the host country has acquired a certain level of technical know-how it could nationalize the investment and pay reasonable compensation. It would seem that where a reasonable compensation is paid there would be less furore on the part of the investor and his home government, although it is recognized that they could initially resist the loss of privileges.

Joint Ventures

Another strategy open to the recipient country is to insist on local equity participation in the investment. The local participants can be either the government itself or private entrepreneurs, or both. Professor Paul Streeten adduces the following as the main objectives for joint ventures:

> The objectives of the new arrangements are, first, to reduce the political tensions that arise from large foreign-owned enclaves in less developed countries and the fears of expropriations which deter foreign enterprises; second, to establish a framework which would change the policies of foreign companies so that they do not necessarily subordinate the policies of the local companies to the interests of the parent companies; third, to induce spread effects, so that the beneficial activities of the foreign companies spill over into the less dynamic sectors of the rest of the economy; fourth, to set free, after a period, the scarce foreign capital and skills so that these can be re-employed in pioneering new ventures rather than continuing to be employed in existing activities. 114

Despite the potential advantages of joint ventures excellently outlined above, some of the dangers inherent in this strategy should be recognized.[115] In particular, joint ventures contain seeds of potential conflict because of the unavoidable diversity of the parties to it. A joint venture will not be attractive to the foreign investor if he has enough capital, or if the participation of a local entrepreneur will adversely affect the freedom of operation of an internationally integrated company such as VALCO. In some cases such a strategy can lead to a reduction in the flow of foreign capital.

In regard to VALCO the company rejected Nkrumah's demand that the company allow the Government and local entrepreneurs to buy 40 per cent of the company's shares[116]. Nkrumah was in a weak bargaining position and was therefore compelled to withdraw the proposal. Apparently, VALCO was determined to maximize profits from the smelter and would not entertain any interference in its management.

Cooperation in Promoting Foreign Investments

It has to be recognized that foreign investors face extreme risks in developing countries where political instability together with serious economic fluctuations constitute the major dangers to foreign capital[117]. At the same time one must also recognize that even though developing countries lack the capital and technical expertise to implement many of their development plans, they are sovereign states whose people's interests must be protected.

It is therefore important for private foreign investors and host countries to cooperate in promoting foreign investment, taking into account the interests of both parties. In this connection, the United Nations International Development Organization (UNIDO) has put forward a New International Industrial Development Law and also established a Commission to re-adjust the existing legal regulations which do not work out in favour of the developing countries.

In line with this policy, negotiations are currently underway on the establishment of a code of conduct for multinations - the largest investors in the World Economy. Ultimately it is hoped that a group of experts would draw up a set of model agreements or contracts in specific areas of industrial cooperation. The idea is to get both industrialized and developing countries to agree on a set of measures which are designed to improve the overall investment climate and which would also ensure that in-coming investment and technology fit in with the overall development strategy of the host country.

The main problem for recipient countries with regard to the activities of transnational corporations is that the objectives of these poor countries and of the multinationals are not always necessarily identical, and there is therefore the need to strike out a favourable compromise between the two competing interests.

For any cooperation to be effective it must be based on certain fundamental principles[118]. One, foreign investors should recognize the sovereignty of host countries. Two, the host country has an inalienable right to insist that foreign investments integrate into her development policy. This investment should be compatible with the host country's economic and social priorities, and based on the country's natural and human resources.

Similarly, the recipient country has a responsibility to bring about cooperation. In particular it is important that the investment conditions remain quite stable. Any changes occasioned by new circumstances should be carried out in an orderly manner and should not lose sight of the rights of the investors already established in the host country. In other words, foreign investors should be treated in accordance with international law.

Allowing for severe balance of payments difficulties, it should be possible for the investor to transfer the earnings on his investment. Of course, reinvestment of profits in the host country can also be negotiated.

The recipient country should also take positive steps to mitigate political and economic risks which often lead to higher costs to the host country because the investor, wanting to recoup his investment in the shortest possible time, might ask for many liberal concessions.

As much as possible all disputes arising from the investment should be settled by a local arbitration court, which must itself be equitable. Only in extreme cases should disputes be referred to an international court, as the tendency to resort to international courts undermines the sovereignty of host countries[119].

Renegotiation

Another strategy is renegotiation, as suggested by Mikesell and Moran in Chapter One. Basically it involves making generous concessions to the would-be investor and forcing a renegotiation after the project has taken off. This strategy falls short of expropriation and should appeal better to the investor as well as the host country.

With regard to VALCO it would seem that this is the strategy that the Ghana Government is adopting to reverse the unfavourable terms which it negotiated in the 1960's. Due to various pressures exerted on VALCO[120], the company has made some concessions to the Government, even though it is under no legal obligation to do so.

Of major significance is the fact that the Ghana Government has taken the initiative over the past few years to have the controversial power contract amended. Up to 1980 there had been five amendments to the said contract. Prior to 1972 the rate stood at 2.625 US mills per kwh. This was increased in February 1973 to 2.75 mills, then to 3.25 mills by 1975. The fifth amendment provided that for 1976, 1977 and 1978 the applicable rate was to be 4.75 mills, 4.6 mills for 1979 and 4.75 mills in 1980. From then onwards the rate would be 5.0 mills per kwh for each of the first 370 MW taken by VALCO[121].

The Government has also now successfully negotiated with VALCO for the latter to supply 14,000 tons of aluminium ingots to feed the proposed aluminium rolling mill in the country. In addition, VALCO has agreed to participate in a joint venture with the Government to cultivate vegetables and rice on the Accra Plains, a project covering 30,000 acres[122]. This is meant to boost the country's agricultural programme.

As for the utilization of Ghana's own bauxite deposits, negotiations are currently going on in earnest, and although VALCO is intransigent at this stage[123], insisting that the project would have a negative cash flow for the first seven years, the indications are that ultimately public pressure on the company would make it to succumb to the idea.

CONCLUSION

It is rather ironic that in an attempt to break her dependency on the industrialized countries, Ghana should find herself in an even more serious state of dependence. The abortion of the "dream" integrated aluminium industry has resulted in the deepening of the relations of production that was characteristic of the colonial era, with Ghana's hydro-dam being the source of cheap power for the industrialized countries, represented here by VALCO. In addition, such a relationship is characterized by a massive drain of surplus capital that leaves Ghana even more decapitalized.

The renegotiations currently going on between the two parties augur well for the future if this devious relationship is to be mitigated - if not obliterated altogether.

One consolation to Ghana from her bitter experience with this particular foreign investment is probably that she has learnt one lesson the hard way, and all things being equal she should come out of future negotiations the better for it. In particular, her leaders and top administrators should have learnt that to embark on large capital intensive projects for which the country lacks the necessary capital, expertise and technology puts her in a weak position vis-a-vis the private foreign investor whose investment is a necessary complement to the government's grandiose plans.

NOTES

1. By "development" here we mean the creation of new wealth with social and human objectives. This involves a reduction of poverty, improved health standards, economic independence, and so on. In other words, we have shorn the word of the teleological meaning that is often given to it by writers like David Lerner, The Passing Traditional Society, New York, The Free Press, 1964, and David Apter, The Politics of Modernization, Chicago, Univ. of Chicago Press, 1965, to mention but a few. For some more balanced discussions of "development" see, for example, D. Goldsworthy, Analysing Theories of Development, Monash, Centre for Southeast Asian Studies, Working Paper No.12, 1977, and P.J. Eldridge, "Development and the Role of the State in the Third World", (Unpublished), Hobart, July 1980.

2. See, for example, A.O. Hirschman, The Strategy of Economic Development, Yale, Univ. Press, 1958; W.W. Rostow, The Stages of Economic Growth, 2nd Edition, Cambridge, Univ. Press, 1971, and A. Lewis, The Development Process, New York, United Nations, 1970. In brief, the exponents of this strategy argue that developing countries will optimize growth if investment is concentrated in those sectors particularly suited for development. These sectors will be determined by existing resources available. Particular attention is paid to the creation of viable enterprises and advantages of large-scale production.

3. This strategy is antithetical to the trickle-down strategy in that it stresses equality in development. In other words, the strategy calls for balanced growth, with the benefits of economic growth diffusing through all sectors of the economy. This necessarily entails slower economic development but it also ensures greater equity in the society. For some of the advocates of this strategy see, H.B. Chenery, et al (eds.), Redistribution with Growth, London, Oxford University Press, 1974, and Gunnar Myrdal, Asian Drama (An Enquiry into the Poverty of Nations), Penguin, 1976.

4. The Basic Needs Approach calls for the provision of the basic needs of food, nutrition, health, education and housing, through employment and income-generating activities for the broader masses. Some of the interesting writings on this strategy are provided by Dudley Seers, "The Meaning of Development", International Development Review, 11 December 1969, pp.2-6; Mahbub ul Haq, "The Crisis in Development Strategies" in C.K. Wilber (ed), The Political Economy of Development and Underdevelopment, New York, Random House, 1979, 2nd Edition; and, Soejatmoko, "National Policy implications of the Basic Needs Model", Seminar Paper at the ISS, The Hague, February 1978.

5. This School, made up of "neo-Marxists", insists that the problems of development currently being encountered by developing countries is a result of colonialism yesterday and neo-imperialism today. In particular their engagement into the international capitalist system is not conducive to development. The solution is simple:

disengagement from the present international economic order. See, for example, A.G. Frank, Capitalism and Underdevelopment in Latin America, Penguin, 1971 and M. Barratt-Brown The Economics of Imperialism, London, Penguin, 1974.

6. See, for example, Industrial Policy Group, The Case for Direct Investment, London, Jan. 1970; S.J. Rosen and W.S. Jones, The Logic of International Relations, Cambridge, Massachussetts, Univ. Press, 1974, pp.104-107; Z. Mikdashi, The International Politics of Natural Resources, London, Cornell Univ. Press, 1976, pp.42-3.

7. We recognize, however, that while it is important to discuss the various effects of private foreign investment, it is not possible to arrive at any definite conclusion. For one thing, certain costs or benefits can hardly be quantified and value judgements play a big role in one's assessment of any particular situation. For some of the difficulties involved in attempting to arrive at a definite conclusion, see R. Vernon, Storm Over the Multinationals: The Real Issues, Cambridge, Mass. Harvard Univ. Press, 1977, pp.159-60.

8. The "radical anti-imperialist" school is far from homogeneous. While neo-Marxists like Gunder Frank and Paul Baran contend that private foreign investment always leads to the underdevelopment of the recipient country, the Marxists, for example, Joseph Camilleri, "Dependence and the Politics of Disorder", Arena, No.44-45, 1976a, pp.34-58 and Ernesto Laclau, "Feudalism and Capitalism in Latin America", New Left Review, No.67, 1971, argue that private foreign investment can contribute positively toward the development of recipient countries.

9. See, for example, USAID, Foreign Aid Through Private Initiative: Report of the Advisory Committee on Private Enterprise in Foreign Aid, July 1965.

10. The major exponents of this view include M. Friedman, "Foreign Economic Aid: Means and Objectives", Yale Review, June 1958, pp.12-31; H. Chenery and A. Strout, "Foreign Assistance and Economic Development", American Economic Review, Sept. 1966, pp.679-733; L. B. Pearson et al, Partners in Development: Report of the Commission on International Development, New York, 1969. Chapter 5; G.D.A. MacDougall, "The Benefits and Cost of Private Investment from Abroad: A Theoretical Approach", Economic Record, March 1960, pp.13-35.

11. What this means is that projects financed by private foreign investment tend to induce economic activity in other areas of the economy by creating demand for goods and services (backward linkage) and by supplying inputs to other industries (forward linkage). See Hirschman, op.cit., Chapter 6.

12. For a more detailed discussion of the transfer of non-monetary resources to developing countries through private foreign investment see A.K. Caincross, Factors in Economic Development, London, Allen and Unwin, 1962, Chapter 11, and J.B. Quinn, "Technology Transfers by Multinational Corporations", Harvard Business Review, Nov-Dec. 1969, pp.147-61.

13.More detailed analyses of this phenomenon can be found in many writings, but the most prominent include Andre Cunder Frank, op.cit.; Walter Rodney, How Europe Underdeveloped Africa, Dar-es-Salaam, Uhuru Press, 1973; Samir Amin, Accumulation on a World Scale: a critique of the theory of underdevelopment, Middlesex, Penguin, 1974; Theotonio Dos Santos, "The Structure of Dependence", American Economic Review, Vol.60, (May 1970), pp.12-23; and, Frantz Fanon, The Wretched of the Earth, New York, Grove Press, 1966.

14.V.I. Lenin, Imperialism, the Highest Stage of Capitalism, New York, International Publishers, 1971.

15.Harry Magdoff, The Age of Imperialism: The Economics of US Foreign Policy, New York, Praeger 1969, p.14.

16.In fact, there is already a wide range of literature on the increasing role of multinational corporations and their impact on developing countries as sell as on some "developed" countries like Australia and Canada. See among others, Magdoff, "Notes on the Multinational Corporations", Monthly Review, October 1969, pp.16-22; S. Nymer and R. Rowthorn, "Multinational Corporations and International Oliogopoly: the American challenge", in G.P. Kindleberger (ed), The International Corporation: A Symposium, Cambridge, M.I.T. Press, 1970 pp.20-26; M. Kidron, Foreign Investments in India, London, Oxford Univ. Press, 1965; A.K. Essack, "200 super corporations which dominate the capitalist world", Africa and the World, 54(6), 1970, pp.18-26; G. Arrighi, "International Corporations, labor aristocracies and economic development in tropical Africa" in D. Horowitz (ed) The Corporations and the Cold War, unpublished papers, Univ. of Dar-es-Salaam, 1975; Paul A. Baran and Paul M. Sweezy, Monopoly Capital, New York, Harmondsworth, 1968, and Kari Levitt, "Dependence and disintegration in Canada", New World Quarterly, 4(2), 1968, pp14-21.

17.Here I am heavily indebted to C.O. Faircheallaigh, "The Role of Foreign Investment in Mineral Development: A Comparative Analysis", Ph.D Thesis submitted to the Department of International Relations, ANU, Canberra, July 1981.

18.Y. Aharoni, The Foreign Investment Decision Process, Boston, Howard Univ. Press 1966, pp166-7 has shown that this practice is widespread, while A. Mack, "Theories of Imperialism: The European Perspective", Journal of Conflict Resolution, Vol XVIII, No.3., (Sept. 1974) p.519, has estimated that US-based multinationals raise 60 per cent of their capital in the recipient countries.

19.C.Vaistos, "The Process of Commercialization of Technology in the Andean Pact", in H. Radice (ed), International Firms and Modern Imperialism, London, Penguin Books, 1975, pp183-214 reveals that the most common method of doing this is by transfer pricing - over- or underinvoicing - as well as book-keeping manipulations. See also, C. Brundenius, "The Anatomy of Imperialism: The Case of Multinational Mining Companies in Peru", Journal of Peace Research, 3, 1972, pp202-4.

20.The issue of inappropriate and appropriate technology has received quite an enthusiastic treatment in the literature. For some of the more serious writings, see J. Ramesh and C. Weiss, Jr. (eds) Mobilizing Technology for World Development, New York, Praeger, 1979 and E.F. Schumacher, "Industrialization through 'Intermediate Technology'" in G.M. Meier (ed) Leading Issues in Development Economics, New York, Oxford Univ. Press, 1970.

21.For some interesting treatment of the threat to the sovereignty of the host country by the invester, see R. Vernon, Sovereignty at Bay: The Multinational Spread of US Enterprises, New York Basic Books, 1976, pp137-9 and L.T. Wells, Jnr, "The Multinational Business Enterprise: What kind of International Organization?", International Organization, Vol. XXV, No.3., Summer 1971, pp447-9.

22.An excellent exposition of this view is given by H.W. Singer, "US Investment in Underdeveloped Areas: The Distribution of Gains Between Investing and Borrowing Countries", American Economic Review, Papers and Proceedings, Vol. XL, May 1980.

23.See, for example, Joseph Grunwald, "Foreign Private Investment: The Challenge of Latin American Nationalism", Virginia Journal of International Law, Vol. 11:2, 1971, pp 235-6.

24.See J. H. Bocke, Economics and Economic Policy in Dual Societies, New York, 1960, who discusses sociological dualism, and B. Higgins, "The dualistic theory of underdeveloped areas", Economic Development and Cultural Change, Jan 1965 discusses "technological" dualism.

25.Mikesell, Foreign Investment in Petroleum and Mineral Industries: Case Studies of Investor-Host Country Relations, Baltimore, John Hopkins Press, 1971, Ch.2.

26.Moran, Multinational Corporations and the Politics of Dependence: Copper in Chile, Princeton, Univ. Press, 1974.

27.The issue of uncertainty and risks that face the investor are well discussed by R. Ganaut and Ross Clunies, "Uncertainty, risk aversion, and the taxing of natural resource projects", Economic Journal, 85, June 1975, pp 272-87.

28.For documented cases of bribery of the local elites by the foreign investor, see F.B. Weinstein, "Multinational Corporations in the Third World: the case of Japan and S.E. Asia", International Organization, Vol.30, No.3., Summer 1976, pp377-9.

29.Before independence, Ghana was called the Gold Coast, and was a British colony.

30.These deposits are at Nyinahin, Kibi, Awaso and Ejuanema.

31.The Gold Coast, White Paper on the Volta River, Cmd. 8702. HMSO, London, 1952.

32.Tony Killick, "Volta River Project", in Walter Birmingham, et al, A Study of Contemporary Ghana, Vol.1, London, George Allen and Unwin, 1966, p.408.

33.The Commission was under the chairmanship of Sir Robert Jackson, an Australian with wide experience of hydroelectric development. He had been involved in the Snowy Mountains scheme in Australia.

34.The Commission produced three volumes: I: Report of the Preparatory Commission; II - Appendices to the Report of the Preparatory Commission; III - Engineering Report (by Sir William Hakrow and Partners). They were published by HMSO, London, 1956. The quotation is from page 3 of Volume I.

35.All references to members of Parliament can be found in Gold Coast, Legislative Assembly Debates, Vol 1 1953, cited in Rob Pardy et al, Purari: Overpowering Papua New Guinea, Fitzroy, International Development Action, 1978, 1.133. For some interesting account of the Legislative Assembly's debate on the VRP see, David E. Apter's The Gold Coast in Transition, Princeton, Univ. Press, 1955, Chapter 11.

36.Op.cit., p.13.

37.In this regard see Killick, op.cit., p.392.

38.See W.M. Kinsey "The US and Ghana, 1951-66", Ph.D Thesis, Texas Technical College, 1969, p.47.

38.Government of Ghana, National Assembly Debates, Vol.22, Feb 1962, p.125.

40.Nkrumah, Africa Must Unite, London, New International Press, 1970, p.14.

41.Ghana, Economic Survey, 1961, p.17. All electricity at the time was generated by diesel plants.

42.It must be pointed out that even before this time there had been secret negotiations between Nkrumah and the Americans which led to the setting up of a consortium - The Africa International Corporation, as it was known - to finance and construct the VRP. It was set up by one L.E. Setwiller in 1952. However, these negotiations fizzled out in 1953 as Nkrumah apparently did not want in any way to openly annoy the British and thus possibly endanger the prospects for Ghana's imminent independence. Apparently Nkrumah took a cue from the experience of the then British Guiana, in which case the British Government revoked the independence constitution of that colony after Jagan's radical party which had won an overwhelming victory at general elections began displaying extreme leftist tendencies.

43.See Pardy, et al, op.cit., p.137.

44.Bond was one-time President of Lincoln University, Nkrumah's alma mater in America.

45.See Pardy et al, op.cit., p.137.

46.Calhoun was a top aluminium industry executive whose expertise the US State Department had often tapped when discussing the VRP.

47.Fraser Leith was a flamboyant American entrepreneur who in early 1957 convinced Nkrumah that he (Leith) could introduce Nkrumah to sources of finance in the US. Actually it was Leith who got Kaiser involved in the VRP in the first place.

48.Pardy et al, op.cit., pp.137-8.

49.The Kaiser group of companies, which includes Kaiser Engineers, Kaiser Aluminium, Kaiser Steel, and many other interests, was until 1976 the property of the Kaiser family.

50.Earlier, Nkrumah had rejected proposals from Ghanus/Anaconda for an exclusive option for the VRP in favour of the US Department's suggestion that an independent firm be engaged to reassess the economic and engineering aspects of the scheme. It was here that Kaiser clinched the deal.

51.See World Bank, Assessment Report of Ghana's Volta Project, 1957, p.10.

52.See David Hart, "The Political Economy of a Development Scheme: The Volta River Project", International Relations, Vol. VI, No.I, May 1978, pp 245-56.

53.It would seem that although the Reassessment Report was quite at variance with Nkrumah's plans, he was becoming desperate at this time and had to accept it in a "half-a-loaf-is-better-than-no-bread" fashion.

54.The Report led to friction between the Bank and Kaiser. Ultimately, the latter, using its strong political and financial contacts in Washington as well as pressure on Nkrumah was able to get the World Bank and Ghana to agree to the lower rate.
See J. Roberts et al, The Mapoon Books, Fitzroy International Development Action, 1975-76, for a detailed discussion of Kaiser's strong political and financial contacts in Washington.
G. Lanning and M. Mueller, Africa Undermined, Middlesex, Penguin, 197[illegible] pp 432-3, discuss the threats used by Kaiser on Nkrumah.
For details of the Bank's Report see International Bank for Reconstruction and Development,"World Bank Operations: Sectoral Programs and Policies", John Hopkins Press, Baltimore, 1972.

55.The project involved the erection of a rock-filled dam at Akosombo for the generation of electricity. At the present, the dam rises 244 feet above the level of the Volta River and has a crest length of 2100 feet. After an initial generating capacity of 589 MW it today has a capacity of 833 MW. Behind the dam is a man-made lake, extending for 250 miles with a surface area of 3275 square miles.

56.The money went to the newly created Volta River Authority (VRA) which had been charged with the initiation and supervision of the construction of the dam.

57.The British Government's assistance here involved merely guaranteeing the payment of £5 million worth of hardware exported to Ghana by various British manufacturers and exporters.

58.From the Preamble of "the Master Agreement between the Republic of Ghana and the Volta Aluminium Company Limited".

59.Dr Nkrumah signed for Ghana while Edgar Kaiser signed on behalf of VALCO.

60.Any reference in this dissertation is to United States dollars.

61.The related contracts included the Lease Agreement, the Port Agreement, the Power Contract between VALCO and the VRA, the Water Agreement and the Immigration Quota Agreement.

62.See Article 8A of the Agreement.

63.Unfortunately, it was not possible to find out how much exactly the Ghanaian banks contributed towards the construction of the smelter, during my research here in Australia even though this fact was mentioned by a Special Correspondent, "Volta River Project, VALCO and Bauxite Development", The Legon Observer (Ghana) 29th May 1980, pp 170-7.

64.From the Profit and Loss accounts submitted to the Ghana Central Revenue Department by VALCO in 1977.

65.A mill is one-thousandth of a dollar.

66.Brown and Butler, op.cit., p.12.

67.Cited in Anon, "Imperialism and the Volta Dam - 2", West Africa, No.13, 31 March 1980, pp.571-3, p.571.

68.Ibid.

69.Ibid.

70.Government of Ghana, National Assembly Debates, op.cit., p.21.

71.This figure includes both principal and interest.

72.See Kwamina Barnes, The Economics of the Volta River Project, Legon, University of Ghana Press, 1974, p.11. David Hart, op.cit., even estimates that it would take 50 years!

73.VRA Annual Reports, 1970-76, The latest reports are not yet available here in Australia. But it is important to stress that VALCO has never operated at a loss since its inception.

74.Article 11O.

75.See Birmingham et al, op.cit., p.405.

76.This issue has been well discussed in Anon, "Giant Industry for Ghana", West Africa, August 13, 1966, p.909.

77.This has been controverted by Professor Hans Bachman in his "Aluminium as an Export Industry", a paper presented to the 1964 UN Conference on Trade and Development. He stresses that although there are substantial economics of scale up to an output of 330,000 tons of alumina a year, a plant with an output as small as 30,000 tons could still be economic as part of an integrated aluminium industry in a developing country.

78.See Ghana Government, White Paper, No.3/63, 1963, p.6.

79.BASCOL comprised Kaiser, Reynolds, the Aluminium Resources Development Company Limited (ARDECO, an agency of the Japanese Government) and the Ghana Government.

80.Special Correspondent, op.cit. rationalizes that this happened only because Alcoa never imagined that the Butch would grant independence to that country. Even here, the Government of Surinan was made to bear the cost of all intrastructure associated with the project, while the multinational corporation owns the hydro-electric plants, bauxite mines, alumina plants and the smelter.

81.Major aluminium consumers in Ghana include the Ghana Pioneer Company Limited, the Ghana Flag Aluminium Company Limited, and the Ghana Household and Utensils Limited. There are also small manufacturing firms engaged in the production of cooking utensils and baking pans.

82.Central Bureau of Statistics (Ghana), External Trade Statistics of Ghana, 1979, This figure would have been higher but for the fact that from 1976 onwards Ghana was faced with foreign exchange constraints which necessitated the imposition of import restrictions. As a result most of these firms were operating at 25 per cent capacity.

83.The taxation provisions were consolidated into the Pioneer Industries and Company (Amendment) Act, 1961. In 1961 the corporate tax in Ghana was 40 per cent, compared with 65 per cent today.

84.See "Special Corespondent", op.cit., p.173.

85.In addition, the Ghana Government had to give guarantees against nationalization to the US government.

86.In these inflationary times three shillings is a paltry price to pay for 1000 gallons of water, by any standards.

87.C. Allen and R. W. Johnson, "African Perspectives", CUP 1970, p.263, cited in David Hart, op.cit., p.248.

88.See Pardy, et al, op.cit., p.141. This may be the reason for the £5 million guarantee given to British manufacturers towards the realization of the VRP.

89.Eugene R. Black, Tales of Two Continents, Harper and Row, 1961, quoted in Bob Fitch and Mary Oppenheimer, Ghana: End of an Illusion, New York, Monthly Review Press, 1966, p.124.

90.Cited in H. Magdoff, op.cit., p.176.

91.The political economy of the international lending institutions is well treated in Teresa Hayter, Aid as Imperialism, Middlesex, Pelican, 1971 and The Institute for Food and Development Policy, The Aid Debate, San Francisco, 1979.

92.Kwame Nkrumah, Neo-Colonialism: The Last Stage of Imperialism, New York, International Publ., 1966, p.ix.

93.Cocoa contributed, as it still does today, two-thirds of all her foreign exchange earnings.

94. For a detailed account of how Nkrumah antagonized the international lending institutions see B. Beckman, *Organizing the Cocoa Farmers*, Uppsalla, 1976, pp.26-8.

95. Quoted in Anon, "Imperialism and the Volta Dam, -2", *op.cit.*, p.571.

96. For a summary of the various arguments for and against large-scale industrialization in developing countries see, among others, Dudley Seers, "The Role of Industry in Development: some fallacies", Journal of Modern African Studies, i, 1963, pp 461-5, and R. Robinson (ed), *Industrialization in Developing Countries*, Cambridge, University Overseas Committee, Cambridge, 1965

97. See Pardy, et al, *op.cit.*, p.151.

98. Ibid.

99. Ibid.

100. See, for example, Michael Lipton, *Why Poor People Stay Poor*, London, Temple Smith, 1977.

101. Pardy, *op.cit.*, p.154.

102. Anon, "Valco Operations to Earn Ghana 75m dollars", *Business Weekly* (Ghana), June 21 1981, p.4.

103. Pardy, *op.cit*, p.148.

104. Cited in Pardy, *op.cit.*

105. For a very good account of these issues see Robert Chambers *The Volta River Resettlement Experience*, New York, Knopf Press, 1977, and D.P. Lumsen, "The Volta River Project Village Resettlement and Attempted Rural Animation", *The Canadian Journal of African Studies*, Vol VIII, No.1, 1973, pp 115-132.

106. Hart, *op.cit.*, p.254.

107. Pardy, *op.cit.*, p.150.

108. Ibid.

109. See Ward B. Saunders' rejoinder to accusations of VALCO in various Ghanaian papers in *The Legon Observer* of 19th September, 1980, pp 229-232. Saunders is the Managing Director of VALCO.

110. VALCO paid no taxes from 1967 to 1978 when they were legally due because of normal allowances provided under the Income Tax Ordinance for the initial plant, two subsequent expansions and other capital additions. Furthermore, two power outages in 1977 and 1978 were said to have seriously affected VALCO's operations. It was not until 1979 that the company effectively started paying income tax.

111. See Anon, "Valco Operations to earn Ghana 75m dollars", *op.cit.*

112. Witness the political and economic seige of Allende's Chile by the US after the leftist President had nationalized American mines in that country in the early seventies.

113. Natiolization is a most controversial issue in the development literature. While the capital exporting countries have called for "prompt, adequate and effective compensation", the recipient countries have often claimed that it is they who have to be paid compensation. For some examples of the two views, see, G. White, Nationalization of Foreign Property, London, Allen and Unwin, 1961, and N. Girvan, "The Question of Compensation: A Third World Perspective", Vanderbilt Journal of Trade Law, 3, 1972, pp 340-51.

114. Paul Streeten, "Commonwealth Trade and Investment: Conflicts and New Approaches" a paper presented to the Malborough House Seminar on 'World Problems Facing Commonwealth Countries', May 1969, jointly sponsored by Queen Elizabeth House, Oxford, and the Trade Policy Research Centre, London.

115. The advantages and disadvantages of joint ventures are well expounded by Geoffrey Chandler, "Private Foreign Investment and Joint Ventures" in Peter Ady (ed), Private Foreign Investment and the Developing World, New York, Praeger, 1971, pp 207-241.

116. See Pardy, op.cit., p.139.

117. For a good treatment of this subject see R. Ganaut and R. Clunies, op.cit.

118. Here we are indebted to Professor Henri Schevaman's "Foreign Investments in developing countries", Business Weekly (Ghana), June 8, 1981, pp 4-5.

119. Recently the World Bank has set up an International Centre for Settlement of Investment Disputes (ICSID) to arbitrate on disputes involving investors and host countries. It has 80 members of whom 50 are developing countries.

120. Examples of such pressures include articles in journals and newspapers, like Anon, "Imperialism and the Volta Dam -2", op.cit., and writings by academics like G. Kay, The Political Economy of Colonialism in Ghana, Cambridge, Univ. Press 1972. Considerable pressure has also been exerted by speakers at symposia, workshops, and at student demonstrations. Radio and television discussions have also helped.

121. The fifth amendment provides a mechanism for working out the remainder after the first 370 MW.

122. Hart, op.cit., p.251.

123. VALCO estimates that to process Ghana's bauxite into alumina in Ghana would cost at least $600 million, (1980 estimate).

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