Diamond Mining and Underdevelopment in Sierra Leone-1930/1980

Babatunde Zack-Williams

Résumé: Cet article est une analyse historique de la manière dont l'extraction du diamant à conduit au développement du sous-développement. Cette expression telle qu'elle est utilisée dans cet article renvoie à l'exploitation mais aussi à l'implantation de structures du sous-développement. En considérant l'ensemble de l'industrie du diamant, il est possible d'identifier deux modes de production distincts: le mode capitaliste dominant qui était dominé par le capital de la métropole, et le mode non-capitaliste où figure le capital sierra léonais. La majorité des ressources (capital, personnel qualifié, et gisements riches) qui entrent dans l'industrie allant au secteur privé, la tendance était à la consolidation de l'hégémonie de ce secteur. Le besoin de maintenir cette domination avait également conduit à l'atomisation du secteur non-capitaliste. Dans des cas tels que celui de Leone Trial Mining ou la terre était consolidée et le personnel qualifié utilisée, l'expansion de ce secteur était telle que les salaires étaient devenus un moyen de rémunération par contraste avec le partage proportionnel de bénéfices dans le cadre du mode non-capitaliste. Le Contract Mining Scheme est l'analyse d'un exemple où le travail dans le secteur non-capitaliste était utilisé (sans être prolétarisé) en vue d'extraire des pierres qu'il n'est pas possible d'obtenir par la technique à forte intensité de capital du secteur capitaliste. En examinant la relation entre l'agriculture et le secteur minier, on peut observer que le secteur agricole a dû disputer la terre au secteur minier dans une compétition où le premier est l'éternel perdant. La réussite du secteur minier dans cette compétition a eu des conséquences incalculables sur le travail agricole et la production alimentaire dans leur ensemble.

Introduction

For the past fifty years diamonds have been one of the most important exports of Sierra Leone, and in recent years the single most important source of Government revenue¹. In spite of these "benefits", I shall argue that diamond mining has led to the development of underdevelopment. This term as used in this paper has a dual meaning; firstly, it refers to the generation and maintenance of the structural imperatives of underdevelopment. By underdevelopment, I refer to the structures which lead to capital drain from the satellite to the metropolis, the blocking of local initiatives, and the reproduction of structures of mass inequalities. Secondly, the term is used to connote exploitation. By exploitation, I mean "the use of surplus by a group for an aggregate) which has not provided the corresponding labour"².

In 1954, diamond export accounted for 37% of the total value of mineral exports. See R.G. Saylor - The Economic System of Sierra Leone. Duke University, Durham, North Carolina, 1967, p. 128.

² G. Dupre and P. P. Rey - "Reflections on the Relevance of a Theory of the History" in D. Seddon (ed) Relations of Production: Marxist Approach to Economic Anthropology, Frank Cass, 1978, p. 196.

Africa Development

In what follows, I shall argue that within the diamond industry we can identify two modes of production; capitalist and non-capitalist. I shall try to show how the coexistence of these modes of production leads to the devalorisation of labour power within the industry, as well as the atomization of the non-capitalist mode. The Contract Mining Schemes is analyzed as an example of how non-capitalist producers are utilized for the accumulation needs of capitalism.

A Brief History of Diamond Mining in Sierra Leone

In an earlier work³ I have presented a detailed history of diamond mining in Sierra Leone. Here only a condensed form will suffice. Diamonds were discovered in the country in the 1930's, together with other minerals such as gold, platinum, chromite and iron ore. The diamond discovery was brought to the attention of the Consolidated African Selection Trust (CAST), who by this time was operating diamond mines in the then Gold Coast. In 1934, CAST formed a subsidiary company, the Sierra Leone Selection Trust (SLST), a private company wholly controlled by CAST, to exploit the Sierra Leone deposits. In 1935 the company was given sole right to mine diamonds in Sierra Leone for a period of 99 years. Since 1935 when actual mining started, SLST held a monopoly in diamond mining and prospecting until 1956 when this was breached with the establishment of the Alluvial Diamond Mining Scheme (ADMS)⁴. Under this scheme private individuals were empowered to carry out alluvial mining activities within certain designated areas. Most of these areas were only marginally diamondiferous, since good quality diamonds could only be found within SLST's lease

Two types of mining activity were provided for under the scheme: "individual licensed miners", and "native firms". Under the latter non-Sierra Leonean capital was welcomed provided it was not more than 49% of share capital⁵. The ADMS also legalized the purchase and sale of diamonds by private individuals; these being referred to as alluvial diamond dealers. In 1970, after prolonged negotiation with SLST, the Sierra Leone Government took over 51% of the shares of SLST, and a new company, the National Diamond Mining Company (NDMC) of Sierra Leone was formed. However, SLST retained the remaining 45% of the shares, as well as being responsible for corporate decision and the day-to-day running of the mines.

³ See A.B. Zack-Williams - "Merchant Capital and Underdevelopment in Sierra Leone", African Review, Vol. 10, No. 1, 1983.

⁴ See the Alluvial Diamond Mining Ordinances and Rules, 1956.

⁵ Ibid.

Modes of Production Within the Diamond Industry

Within the industry, we can identify more than one mode of production, i.e. a capitalist (SLST) mode, and a non-capitalist (ADMS) mode. In what follows, I shall argue that the capitalist mode does not constitute an enclave⁶, i.e. it is not isolated or independent of the non-capitalist mode. Indeed, I shall try to show that the very structure of the non-capitalist mode is determined by the dominant position of the capitalist mode within the industry.

SLST and the Capitalist Mode of Production

Since 1935, SLST has carried out large scale alluvial diamond mining in two separate areas in Sierra Leone; at Yengema, Kono District; and Tongo Field, Lower Bambara Chiefdom, Kenema District. In recent years the company has started mining Kinberlite dykes at Koidu, Kono District; and Sumbuya, in the Kenema District. The company's operations are much more capital intensive as compared to the ADMS, as can be seen from the figures of estimated capital invested in the ADMS from 1956-77 and figures for SLST (Tables 1 & 2).

Table 1 - Total yearly in	nvestment for SLST 1970/71-1976/77
Year	Amount (in le'000)
1970-1971	2,100
1971-1972	2,400
1972-1973	2,000
1973-1974	2,330
1974-1975	2,540
1975-1976	8,500
1976-1977	6,700
TOTAL	27,370

Source: Ministry of Development, Freetown.

Table 2 - Total amount invested within the ADMS 1956-77 excluding "Surface Rent"

Total sales by mines division	= Le 723,641.4
Total loan under the AARLF	= Le 274,875.24
Total expenditure on mining equipment (1956-71)	= Le 1.985,541.2
Grand total	= Le 2,984.057.8
Source: Estimated from the Eatd	

Source: Estimated from the Field.

6 As theorists of dualism have argued.

SLST prices itself on its systematic mining. The company unlike miners under the ADMS has the canacity to employ specialists such as geologists and mining engineers. Much of the prospecting done within the ADMS is based on hunch. SLST's labour force constitutes a proletariat in the true sense of the word. The relations of production is defined by the "free" labourer's sale of his labour power in return for wages. The worker has no claim to the final product of his labour, since this is the property of the shareholders of SLST. By contrast as we shall see presently, under the ADMS, the mode of remuneration does not constitute "wages". but assumes the form of "percentage sharing", with the labourer having a legal claim to the final product. Thus under the "SLST Mode", there is a class of labourers divorced from the means of production, and from whom surplus value is expropriated by a class of non-producers, the shareholders of SLST. We shall see below, that this kind of distinction (proletariat divorced from the means of production and capitalists owners of the means of production) is very difficult to draw for production under the ADMS.

Furthermore, not only does surplus labour assume the form of surplus value under SLST production but, it is appropriated through commodity exchange. This presupposes the existence of labourers who are willing and "free" to sell their labour power. By contrast, we shall see that this description does not hold for the "tributors" under the ADMS, most of whom could at best be described as "worker-peasant", since they migrate between the diamond fields and the peasant family farm. In short, they are not "free" in the sense that they could not stay all the year round with their mining employers, since they have commitments to the peasant family farm. Remuneration from mining is not the sole source of the reproduction of labour under the ADMS.

SLST Contract Mining Scheme 1959-70

In 1959, SLST embarked upon a scheme which came to be known as the "Contract Mining Scheme". Under this scheme, the company selected certain areas within the Yengema lease which were unsuitable for its own large-scale mining operations and gave them to miners from Kono District who would mine them under-contract. The reason for this scheme is not quite clear. Van der Laan has described it as "an attempt to improve the methods of the diggers"⁸. Much earlier in the same book he suggested yet another reason:

⁷ P. Raikes - "Rural Differentiation and Class Formation in Tanzania". Journal of Peasant Studies. Vol. 5, No. 3, April 1978.

⁸ H.L. Van der Laan - Sierra Leone Diamonds, Oxford, 1965, p. 73.

This plan was to increase the area where Konos could work legally and rend the belief that the interests of the company and of the Kono diggers were always conflicting⁹.

Whilst this latter reason oscillates around what I consider the objective reason, the whole argument of Van der Laan is premised on a naive assumption of a benevolent capitalist. The relevant question is why SLST failed to establish this scheme earlier? Two events occurred in Sierra Leone around this time which must have influenced the company's decision to try and enlist the support of the people of Kono.

The first was the conflict between SLST (through its "parent" company CAST) and De Bears' Diamond Corporation over the price the former was receiving for diamonds sold to the latter¹⁰. As a result SLST decided in 1960 to by-pass the Diamond Corporation and instead sold its diamonds to two independent American dealers. The second was the radical political agitation that took place in Kono District between 1957-1960, through the Kono Progressive Movement, which tried to articulate the interests of those in Kono who could only join mining operations as "tributors", and for whom diamond mining operations brought little, if any reward. The movement too was supported by chiefs from the non-diamondiferous chiefdoms in Kono District. With these events in mind we can suggest that the creation of the Scheme was an attempt to win over allies in Kono for the cause of the company.

However, it is important to note that the Scheme satisfied a number of basic economic problems for the company - i.e., the need to employ the most marginally diamondiferous areas within the leased area. Most of the sites had already been mined by SLST, basically the Scheme entailed that certain sections of the lease would be opened for controlled use by local Kono miners. All diamonds won from the sites were to be sold to SLST. The company was not responsible for hiring labour, nor the provision of equipments, although some equipments were rented to contract miners at a specified rate. Contracts were awarded to Paramount Chiefs of Chiefdoms in which the contracts were awarded or their nominees. Clearly, the scheme provided an avenue for traditional rulers to accumulate wealth and consolidate their power. Furthermore, it provided SLST with cheap labour, hence with diamonds from areas which were unprofitable for it to mine.

This latter point can be substantiated by Appendixes 1 & 2. The most important columns are: column 4 of Appendix 1 and column 5 of Appendix 2. These show that for all the years for which figures were available SLST

⁹ Ibid, P. 35.

¹⁰ For details of the conflict, see Van Der Laan, ibid.

Africa Development

winning were on average higher than those of the contract miners. The tables show that by using contract miners whose "form" of production was essentially the same as the ADMS, and hence non-capitalist, the capitalist institution was able to gain 53,413.5 carats of diamonds without investing any amount of money in the scheme.

ADMS and the Pre-capitalist Mode of Production within the Diamond Industry

In order to understand the history and the present structure of the ADMS, I will pose and try to substantiate a number of hypotheses:

1) that at the time of the establishment of the ADMS, SLST had a fairly good knowledge of the diamond deposits of Sierra Leone;

2) that SLST was in a position in 1956 to opt for the richest deposits;

3) that most of the capital that went into the industry were invested in the SLST sector;

4) that the very structure which the ADMS assumes, in particular its pre-capitalist structure, is the result of the dominant position of SLST within the industry, and the need to perpetuate this dominance;

5) that the ADMS is not only a pre-capitalist mode, but in spite of the development of productive forces, its old relations of production remains relatively unchanged, and that this is the product of SLST's dominance of the industry.

Hypothesis I

In another work I drew attention to the strenuous efforts made by SLST to find the limits of the Sierra Leone deposit¹¹. By the early 1940's the Sierra Leone field was considered one of the richest in the world. By 1953, the two primary sources of the field had been located, one in Koidu Town, and the other in Lower Bambara Chiefdom; Kenema District. It should also be noted that throughout this period, the Geological Survey Department continued with its prospecting to which SLST had access.

Hypothesis 2

That SLST opted for and obtained the best deposits can be substantiated empirically. However, this does not mean that by analyzing production figures from both sectors one would expect to find SLST's towering above those of the ADMS. In fact this cannot be the case since the rate of exploitation between the sectors differed. With fixed installations and heavy equipments, SLST had to plan its operations to the capacity and life-time of its installations. Furthermore, as Van der Laan has argued, the profit taxes which companies pay act as an incentive for the companies to smooth out

¹¹ See my "Merchant capital and underdevelopment in Sierra Leone", op. cit.

their profits over the years¹². By contrast the diggers under the ADMS had only a small outlay on capital. Some of their tools were farm equipments which had been converted to mining tools without much expenditure. Furthermore, taxes do not penalize fluctuating operation or profit as it does to a large organization such as SLST. Finally, the operation of illicit diamond miners (IDM) has always tended to inflate the total sales figure in ADMS production. Much of this illicit mining takes place within SLST's lease.

Apart from controlling the deposits in the source areas, SLST was also given the option to select a further 200 sq. miles. This option was later reduced to 100 sq. miles after much resentment from the people of Kono District, where SLST had by then created a betribgemeinschaft. Van der Laan a writer who could not be described as critical of SLST's role in Sierra Leone observed:

Licensed digging in Kono was handicapped in two ways. The 1965 agreement (setting up the ADMS) meant that SLST had first choice in Kono and that only the poor diamond bearing land would be left for licensed diggers...¹³. (Emphasis mine)

This point is again reiterated by Rosen. He argued that after the ADMS had been introduced. SLST still had control over the original lease in Kono some 450 sq. miles of some of the richest diamond areas in Africa, Roser continued:

... many of the areas surrendered by the SLST were only marginally diamondiforous and given the heavy capital requirements, unprofitable to mine. Local diggers on the other hand, using simple equipment and carrying limited cost in overheads, could achieve a high return rate in these marginal areas since their investment was primarily labour¹⁴

It can also be argued that since SLST was an important export earner for the country, there was the perceived need to preserve the hegemonic position of the company, in order to avoid de-stabilising the country's expontrade.

Hypothesis 3

The fact that most of the capital that entered the industry was invested in the SLST capitalist sector should not be in dispute. We have pointed to the fact that SLST is relatively capital intensive in its operation. Most individual

¹² Van der Laan, op. cit., p. 78. 13 Ibid. p. 127.

¹⁴ D.B. Rosen - Diamonds, Diggers and Chiefs: The Politics of Fragmentation in a West African Society, unpublished Ph. D. Thesis, Urbana-Champaign, 1973.

miners could not afford the means to purchase large diggers and excavators such as caterpillar and draglines. The fact that SLST received most of the capital that entered the industry enabled it not only to purchase expensive labour saving machinery and equipment, which helped to reduce handling and hence pilfering, but also meant that the company could attract some of the best personnel. Investment figures for SLST is not always available, largely because of the secrecy which surrounds the industry. However, figures are available for the period 1970/71-1976/77, which together with those of the ADMS tend to substantiate our hypothesis (see Table 1).

It is almost impossible to know the exact amount of capital that has been invested within the ADMS. However an attempt has been made¹⁵ using; 1) The American Aid Revolving Loan Fund (AARLF)¹⁶; 2) Total number of finances issued: 3) Estimated cost of digging materials. The Fund has provided us with a useful source of information on investment within the ADMS. Since only a proportion of licensed miners patronized this scheme the data will be supplemented by further estimates.

Between 1960-76 a total of Le723,641.4 sales were made under the Revolving Loan Scheme¹⁷. During the same period a total of Le274,875.24 loans were offered under the Scheme. This gives a total figure of Le998,516.64. However, this gives us only a partial idea of the total capital that went into this sector. To have a more comprehensive picture we have to take into consideration the amount of capital sunk into the ADMS in the pre-AARLF era, as well as those unsuccessful miners who did not patronize the fund. In order to achieve this, we need to know the implements that these miners used, and to try to cost them. These included; shovels, pick-axes, jig-sieves and washing pans. Furthermore, we will like to know how many labourers were employed under the scheme since it is labour intensive. Between 1956-71, some 63,128 licences were issued and some 461,145 laborers were employed within the ADMS¹⁸. This gives an average for the 15 years of 4,208 licences issued and 30,743 labourers per year. Now we have to assume that each labourer had a set of mining equipments. This in fact would be an exaggeration of the real situation, since not all tributors used new equipments. However, these figures give us a rough idea of the amount of money invested in the ADAMS. Thus if we take the total cost of equipments and multiply it by the number of tributors, we find that over the

¹⁵ See my Underdevelopment and the Diamond Industry in Sierra Leone, unpublished Ph. D Thesis, Sheffield University, 1980.

¹⁶ This was set up in 1960 with A grant of \$100,000 from the American Government to assist miners to purchase mining equipments.
Zack-Williams 1980, op. cit. p. 205-207.
M.S. Deen - As Appraisal of the ADMS, Mines Division, Kenema, 1972.

period 1956-71 some Le1,985,541.2 was spent within the ADMS as Table 2 shows.

Hypotheses 4 & 5

These constitute the essence of the rest of the paper. The history of the ADMS can be divided into two; the period 1956-62; and the period 1963-77. The former can be described, for lack of a better word as the "honeymoon period". This period was full of all kinds of unrealistic assumptions. Many licensed miners over-estimated the extent of diamond deposits in the country. To a certain extent this unrealistic approach was compounded by the fact that there were reports of diamond discovery over a wide geographical area.

The second period marked the emergence of the "supporters" i.e., the emergence of entrepreneurs who were not simply dealers, but were responsible for the maintenance of the tributors. By this time some degree of realism had entered the industry, and many of the miners who remained in the field realized that in order to mine their plots, they needed more than pick and shovel. Since most of the areas declared for ADMS were marginally diamondiferous, and in many cases these were areas which had been mined by SLST. It soon became clear that to mine these deeper deposits a greater capital outlay was needed. From now on most licensed miners came to be dependent upon a "sponsor", a "supporter" as they were called, who provided mining materials of capital for various considerations such as a claim to a proportion of the value of all winnings. It is interesting to note that virtually all the supporters were licensed dealers, the majority of whom were Lebanese.

Early Method of Labour Recruitment

The task of labour recruitment often follows upon the procurement of a mining lease, though the process may be reversed. In the early days, the licence holder or his appointee "the Gang-Master" toured villages in order to recruit tributors. Once in a village, gifts were presented to the village head, and the purpose of the visit then quickly explained. The best time for such a visit was often after the harvest when activities were at their lowest. A "village crier" will be summoned to broadcast the news. The gang master would then offer to pay all the debts owed by the potential tributors, as well as their local taxes. From now on, the security of the labourers was his responsibility. For this reason, the credential of the gang-master or licence-holder is thoroughly scrutinized by the village head. In order to make an impression on the village, usually someone who had "made it good" during the illicit diamond mining period (i.e. pre-1956). While the recruitment lasted, the accomplice was given every encouragement by the

gang-master to dress above the average village inhabitant and to spend freely in their presence, with a view of enticing as many of them as possible¹⁹.

This method of labour recruitment has its origins in the illicit mining days when there were only gang bosses who were employers. In those days, the only items of expenditure were the recruitment and maintenance of the labour force. In most cases the labourers came with their tools, i.e., picks and shovels, though it was not uncommon for these to be provided by the gang-master.

Since this early system of labour recruitment had its origins' in the illicit mining period, it is interesting to answer the question, why did recruitment in the illicit period assume this form? To answer this question it is important to point to the hazards involved in illicit diamond mining (IDM) in areas which were always dominated by SLST's security force, as well as the Sierra Leone Police Force. To entice workers into such confrontational situations with authority called for a good assurance that in the event of being caught there would be a "patron" who would look after their welfare and those of their family. Clearly, one can argue that had the company's monopoly not been in force, it is quite possible that the emergence of this form of "patron-client" relationship would not have been so prevalent in the industry.

Early Method of remuneration of labour

We have shown that it was quite common for the direct producer to enter the industry with his own tools²⁰. This unity of the direct producer to his means of production is an important determinant of pre-capitalist modes of production. If the relations to the means of production render the ADMS as pre-capitalist, the method of remuneration does nothing to challenge this view of the pre-capitalist nature of the ADMS.

The first point to note is that the workers under the ADMS were not wage-labourers, they were tributors²¹. Though the form of remuneration varied, yet the category "wages" did not exist²². If the licence-holder himself had recruited his labour force, then the winnings are distributed as follows: two-thirds for the licence holder and one-third for the tributors. Where a gang-master was involved, the distribution was 60% for the licence-holder, 30% to the tributors and 10% to the gang-master. Superficially, tributing

¹⁹ T. L. Balewa - The System of Reward of Labour under the ADMS, Government Engineer's file, Mines Division, n.d.

²⁰ But he did not own the land.

Since they owed their protection to the gang-master.
 The social relations between the tributor and the gang-master is one of client-patron relationship.

seemed to be a symbiotic relationship, as it provided incentives to both employer and employed. In practice, tributing was highly exploitative with the burden falling upon the tributors.

For example, the winnings were frequently under-valued, since the tributors had no means of establishing their true value. Occasionally, even the gang-master would be ignorant of the market value of winnings. However, very often both gang-master and licence-holder colluded and deliberately under-valued the winnings. It is interesting to note that no serious consideration was ever given to the idea of providing a regular wage structure in the industry outside the SLST sector. One writer has suggested that it is:

... probably due to the unwillingness of both the labour force to forego the proceeds of their labour if there are particularly large wiping and the employer to take on an added expenditure burden which might not be recoverable if the production was $nil...^{23}$.

Now this explanation is inadequate since it fails to look at the underlying structure of the industry, instead it is premised on some short term outlook on the part of both employee and employer. The relevant question why their counterparts in SLST were willing to forego the proceeds of their labour if and when there were particularly large winnings was never posed. The reason for these differences in the mode of remuneration is due largely to SLST's abundant resources (physical capital to undertake wide scale prospecting and forward planning. Thus it was possible to take workers on a wage basis without jeopardizing the company's existence. This type of forward planning was beyond the reach of most miners under the ADMS who had neither the rich ground to mine nor the wide geographical area to enable forward planning²⁴. Thus, the reason for the pre-capitalist nature of remuneration must be sought neither in the psychological make-up of licence-holders and tributors, nor simply within the ADMS. Instead we must look at the industry as a whole, in particular the dominant position of SLST within the industry.

The Supporter Period 1973-77

The need to mine the deeper deposits meant that sophisticated machinery had to be brought into the ADMS. With the help of their supporters, many alluvial miners invested in such mining equipments as diesel water pumps and in a few cases even in mechanical diggers. In spite of these

<sup>Balewa, op. cit.
The size of holdings vary according to the type of mining to be carried out; river licence</sup> restricted to 2000ft x 50ft; and land licence to 200 ft x 200ft.

developments in productive forces and of relations to the means of production, yet the mode of remuneration of the direct producer remains largely pro-capitalist. Remuneration in the supporter period assumes the form of percentage sharing of the final sales values.

Unlike the situation within SLST, under the ADMS as it later developed, the direct producer continued to lay claim to the final product of his labour until it is finally sold to a dealer. The mode of remuneration under the ADMS - percentage sharing is a characteristic of the feudal mode of production - or in the absence of the tie of servitude is more a feature of modes of production were the surplus generated is appropriated collectively, such as under syndicalism.

The system of percentage sharing varied according to the parties involved. For example, in the case of a tripartite agreement, the most common ratio was:

Tributors	25%
Licence holder	25%
Supporter	50%

In the case of quadripartite agreement, the distribution was as follows:

Tributors	20%
Mines manager	10%
Chiefs or Wardens	10%
Licence holder/supporter	60%

The mines manager was in theory an employee of the supporter who was there to ensure that diamonds were not with held from the supporter. The warden was an employee of the Government's Mines Division, responsible for demarcating mining plots.

As we have noted earlier, the ADMS provided for both individual mining and that of "native firms". Through this ordinance a small number of Sierra Leoneans were able to establish thriving mining ventures. The most successful of these was *Leone Trial Mining* (LTM) wholly owned by Alhaji Abdulai Sesay. The success of this mining venture substantiates our point that the dominance of SLST in the industry, and the need to protect the company's lease area have led to the atomization of the ADMS. Once a relatively large and "rich" lease was provided for alluvial miners, it was then possible for forward planning to take place. But the hiving off of such relatively rich deposits posed a serious threat to SLST's hegemony in the industry, as well as its ability to remain the largest earner of foreign exchange.

Alhaji Sesay first entered mining as an alluvial gold miner in 1934, and remained in the industry right through to 1977 except for the period 1941-45 when he was conscripted into the colonial army. In 1956 with the beginning of alluvial diamond mining, he moved into this sector and carried out both

river and land mining on his own until 1965, when he had cause to resort to the supporter system due to increased costs of mining operations. However, in 1970, he decided to abandon the system when it became clear to him that the supporter system was eating deeply into his profit margin. By 1971, he had come to the conclusion that the only form of mining that will be viable in the areas newly released from SLST was large scale mining. However, in order to achieve this goal, it was necessary for these atomized plots to be consolidated - a new kind of "enclosure" in mining. His major task was to try and convince other licence holders that the best way forward was to try and pool resources, in particular to bring all nearby leases under one roof. The task of convincing miners was not an easy one, many licence holders were worried about being entangled in new forms of supporter relationship. But it soon became clear to most miners that the only way forward was to accept the idea of land consolidation. By 1973, agreements had been signed with all interested parties, and the Mines Division had given its blessing to the project 25 .

Now with resources (both Land and capital) pooled, it was possible for forward planning to be done. Furthermore, it was also possible for mechanical devices such as draglines and caterpillars.

The method of remuneration of labour varied according to whether LTM was working on contract basis with other licence holders or on its own. In the case of the former, winnings were distributed equality between LTM, tributors, and the landowner who had contracted for his plot to be mined. When no contracting party was involved, one-third of winnings went to the tributors, and two-thirds to LTM. The mines manager shared with the tributors.

However, there was one additional feature; LTM paid its machine operators wages. As far as I could establish, only one other native firm paid its operators wages. Another miner from Yomandu who was building a dam on the Bafi River, rented a dragline excavator from the Ministry of Works and as such was not responsible for the wage of the operators.

The question we must now pose is why was LTM able to enter into a wage relation with its operators unlike most native firms? The answer could be found in the fact that LTM was able to employ large mechanical excavators. But this answer begs the question; why was LTM able to employ mechanical devices? This is due to the fact that LTM had large enough area, and one that was relatively proven. This tended to reduce the risk of losing ones capital since recovery rate was relatively high. Thus the problems of the native firms hinged on a cyclical thesis. They did not have

²⁵ For a detailed discussion of the project see U.B. Usman, Leone Trial Mining mimeo, Mines Division Koidu, n.d.

Africa Development

enough resources (capital and land) to engage in long term prospecting which meant that they had to do with small plots, which in turn called for labour intensive techniques which could not efficiently recover stones from the deeper deposits.

The Nature of labour under the ADMS

We have argued that the category wage-labour is not applicable to the mode of remuneration under the ADMS. If we compare the methods of recruitment and remuneration of tributors with the modern wage-labourers (within SLST), we find that one important respect in which they differed was the degree of economic freedom they enjoyed. Wage-workers freely entered into contract of employment with employers and are free to move from one employer to the other. By contrast, the tributor had to be coaxed out of the peasant family farm, thus suspending their usufructuary right to land until their return at the end of the mining season²⁶. This meant that the tributor unlike the wage-labourer was not totally dependent on his employer in the diamond field for his livelihood. This fact affected the final benefit which tributor received from his productive efforts, one which was only designed to provide for part of his reproduction.

Furthermore, percentage sharing of the final sale of the product of labour of the direct producer (with the tributor laying claim to these products), has nothing to do with capitalism. On this point Marx was quite unequivocal:

... the product is the property of the capitalist and not that of the labourer, its immediate producer. Suppose that a capitalist pays for a day's labour power at its value; then the right to use that labour power for a day belongs to him, just as much as the right to use any other commodity, such as a horse that he had hired for a day. To the purchaser of a commodity belongs its use, as the seller of labour power, by giving his labour, does no more, in reality than part with the use-value that he has sold. From the instant he steps into the workshop, the use-value of his labour power and therefore its use, which is labour, belongs to the capitalist. By the purchase of labour power, the capitalist incorporates labour, as a living ferment, with the lifeless constituents of the product. From this point of view, the labour process is nothing more than the consumption of the commodity purchased, i.e. labour power; but this consumption cannot be effected except by supplying the labour power with the means of production. The labour process is between things that the capitalist has purchased and things that have become his

²⁶ The mining season coincided with the dry season when farming activities are least demanding.

property. The product of this process belongs, therefore, to him, just as much as does the wine which is the product of a process of fermentation completed in the cellar²⁷.

If we look at the relations of production of all the "native firms" and individual mining ventures within the ADMS, we find one common feature, i.e. the method of remuneration. We have already noted that this has nothing to do with wage-labour, and hence the relations of production is not capitalist. On examination it resembles a version of the *metayage* system, in particular, the share-cropping system of the Southern United States.

The share-cropping system of the USA resulted from the need to link the soil and the cultivator. The former slaves lacked funds to buy land; the slave owners lacked funds to pay wages. Hence the agreement that the landlord would provide the land, the freedman the labour, and each would receive a share of the proceeds from the final harvest. The cultivator, like the tributor under the ADMS, received the necessities of life on credit during the annual periods between harvests. Similarly, we have argued that because alluvial mines were usually restricted to small plots in the marginally diamondiferous areas, it became very risky to try to employ tributors on a wage basis. We have seen that in the most developed sector of the ADMS, namely *Leone Trial Mining*, because relatively small plots, in proven grounds were consolidated into large leases, it was possible to employ skilled workers such as dragline operators in return for wages.

Diamond Mining and Underdevelopment in Sierra Leone

To suggest that diamond mining generated underdevelopment in Sierra Leone is not to deny that certain groups and individuals did not benefit from what was for some a lucrative operation. Many individuals, foreigners and Sierra Leoneans alike, made windfall gains, the industry provided much needed foreign exchange earnings for the Government, it has provided wage and non-wage employment for thousands of Sierra Leoneans. These gains are not being denied, instead three crucial points are being emphasized. Firstly, that Sierra Leone or Sierra Leonians did not do as well as other participants in the industry. Secondly, the damage done to the diamondiferous areas and to agriculture in particular is such that it will take years and a massive injection of capital to rehabilitate these areas. Finally, we try to show that the net effect of diamond mining was to prevent local people from taking the initiative to control their economy. We have also drawn attention to the fact that these negative features were largely the result of SLST's dominance in the industry.

²⁷ K. Marx Capital, Vol. 1. Lawrence and Wisthart, London, 1974, p. 180.

The need to project SLST's lease was the major reason behind the ordinance of 1936²⁸, which empowered the Government to prohibit and restrict the residence of "strangers" and the issuing of store and other trading licences in the diamond areas. Kaniki who has done some study of this period in the country's history has argued that it was through the application of this legislation that SLST's security force harassed non-Kono traders and others, and systematically reduced their numbers in the district²⁹. The relative isolation of this area has led Minikin to suggest that:

The slow pace of economic change in the pre-war period is partly attributable to the deliberate policy or isolation practised by the colonial authorities and the SLST after the discovery of diamonds in 1930^{30} .

The prohibition of "strangers" from setting in the district was a clear interference in the traditional way of life of the people in the area. Furthermore, it blocked opportunities for local entrepreneurs who would have expanded the exchange sector.

The emergence of mining struck a serious blow at the agricultural sector, particularly in Kono where agriculture had to compete with mining for land. In practice the latter usually triumphed, mainly because of the long gestation period between planting crops like cocoa and coffee and profit realization, compared to the relative ease with which compensation could be obtained from would-be miners, and the fact that one good discovery in the diamond field is worth more than a life-time of farming.

The increase in population resulting from migration into the diamond areas put further strain on the distribution of farm land. This led to over-crowding, with the result that many people had to leave the land in search of employment in the towns. Since jobs had always been hard to come by, many one-time farmers joined the ranks of the urban unemployed. It is true that some of these ex-farmers moved into the mining areas as tributors, and others got into the industry as gang-masters. Earlier, we have noted the fate which awaited these tributors which we have argued was the direct result of SLST's dominance in the industry. In this way, we can see how the production and profitability of SLST resulted in the marginalisation of the mass of the people in Kono District. This process of marginalisation has been made more acute by the mining policy of SLST. The company's operations have been carried out with the aid of heavy machines on upland

²⁸ Chapter 196 of the Laws of Sierra Leone 1960, Section 3.1.

²⁹ M.H.Y. Kaniki - The Economic History of Sierra Leone: 1929-39, unpublished rh. D. Thesis, University of Birmingham, 1972, p. 295.

³⁰ V. Minikin - Local Politics in Kono District, Sierra Leone, 1945-70. Unpublished Ph. D. thesis, University of Birmingham, 1971, p. 145.

and swamp areas in both Kono and Kenema Districts. Most of these mined areas were left to perish without any serious attempt at rehabilitating the land. This point has been emphasized by a field worker, who observed that:

The conditions of the people in the Kono and Tongo leases areas are growing worse everyday without proper and adequate rehabilitation... the mining by the company of the swamps and valleys has left the people in the leased areas to concentrate on upland rice and farming. This had caused a lot of strain in producing their staple food in any appreciable quantity... the people are now left with no alternative but to go to the hills, far from their settlement to farm. This (mining) has caused a lot of problems in these areas... lack of good farming land, lack of good drinking water, infestation of mosquitoes, rapid spread of diseases and low earning capacity of majority of the rural people in these areas.³¹.

The need to protect SLST's lease from the activities of IDM posed further problems on the farming community in Kono. For example, permission was heeded to cultivate plots close to or within the leased areas, and this was only granted if the areas were not marked for future mining. Fishing, a major source of protein, was prohibited in streams within the leased areas as diamonds could be found in river beds.

With all these constraints on farming matched by the demand for manual labour in the mining industry, it is not surprising that the percentage of farmers in Kono is the lowest of all the districts in the province. For example, in 1970, only 46% of the labour force was employed in agriculture as compared to between 70-75% for other districts³². This drop in the percentage of agricultural producers could indeed be seen as a sign of progress, provided that those who left the land were able to find paid employment in other sectors of the economy; and also provided that those who remained on the land were able to produce enough to feed the increasing number of non-producers. We have already noted that for most of those who left the land, paid employment was not a feasible proposition. With regards to the productivity of those who remained as farmers, Saylor has argued that as far as subsistence crops were concerned, there was probably an increase in productivity, since these did not suffer the same decline as export crops³³.

³¹ S. Dumbar - Rehabilitation in the NDMC (S.L.) Ltd, Leased Areas in Kono and Tongo Field, mimeo, n.d. Mines Division Kono.

³² Figures from the National Accounts, Central Statistics Office Freetown, 1975.

³³ Saylor, op. cit.

Nonetheless, there were other factors which helped to negate this increase in productivity. These include poor communication, lack of infrastructure, and inflationary pressure- all factors which were more intensified in the mining areas³⁴

Who Benefited from Diamond Mining in Kono

This question can be answered by looking at the benefits derived from diamond mining by major social groups within Kono. We can distinguish three such groups: 1) The Kono masses (i.e. urban/rural poor) who participated in "the pariah-like activities of illegal miners"³⁵. 2) The rich and powerful (i.e. the chiefs and their political allies). 3) SLST and other capitalist interests.

As far as the urban/rural poor are concerned, diamond mining as we have seen tended to exacerbate their predicament. We have pointed to the paucity of employment possibilities outside of either tributing and illicit mining. We have also seen how the policy of protecting SLST's lease led to the persistent marginalisation of the farming population in Kono. In terms of infrastructure, outside of the SLST enclave. Kono had the least infrastructural development of all the regions in the country.

In 1974-75, the Eastern Province which includes Kono and Tongo had the lowest number of secondary school pupils in the country; 8,333 compared to 18,684 for the western area; and 9,941 for The Southern Province. As far as hospital delivery system is concerned, in 1963 the Eastern Province accounted for only 14% of Government hospital beds, compared to 41% for the western area; 23% for the Southern Province and 22% for the Northern Province, Kono had the highest ratio of persons per medical officer (202,000:1) compared to 2,887:1 for the western area. This is also true of the ratio of persons per hospital bed and also persons par health and medical centre³⁶. In short, Kono has served as an internal colony for the accumulation needs of peripheral capitalism in Sierra Leone.

If any indigenous group benefited from diamond mining, it was the chiefs from the diamond mining areas and their political allies. This was possible mainly because the colonial authorities (and later the post-colonial rulers) and SLST needed their confidence in order to facilitate the exploitation of the country's mineral. The pretext for this approach was that since the chiefs were custodians of tribal land, they had to be recognized as such and that all decisions involving land should be channelled through

Household Survey National Accounts 1970-71-1875-76, CSO, Freetown.
 Minikin, op. cit.

³⁶ Figures from Directory of Medical Units. Ministry of Health/WHO Team, Ministry of Health, Freetown.

these "natural rulers". Thus several agreements were signed between the chiefs in the diamondiferous chiefdoms and SLST, whereby the former agreed to exclude strangers (i.e. non-Konos) from their chiefdoms in return for stipends³⁷.

By far the largest beneficiary of diamond mining was SLST and other capitalist interests in the industry. These benefits took the form of profit repatriation, smuggling and robbery³⁸. The loss to the Sierra Leone economy due to profit repatriation cannot be estimated with any degree of certainty due to the paucity of trade statistics. However, by looking at one capitalist institution within the industry we can have a rough idea as to the gains made by metropolitan capitalist interests. From 1960-76, the Diamond Corporation West Africa limited (DCWA) managed the Government Diamond Office (GDO), and bought all the diamonds from the ADMS. During this period, a total of 13,881,039 carats were bought for Le419,971,622; and the Government of Sierra Leone received Le31,4 million in export duties and licence fees. The DCWA received a total of Le54,6 million from its operations within the ADMS³⁹. This figure does not take into consideration the profit made by the DCWA from its purchase and sale of diamonds in Sierra Leone, or profits made through deliberately buying stones below the scheduled price, i.e. by under valuation⁴⁰.

With regards to smuggling, I shall argue that the dominant position of SLST within the industry, which we have seen led to the supporter/tributor system, helped to encourage smuggling⁴¹. Furthermore, I shall try to show that the activities of the Diamond Corporation encouraged and facilitated smuggling.

Prior to the legalization of alluvial mining, two major smuggling networks had been established linking cutters in Europe and North America; through Beirut (Lebanon) and Monrovia (Liberia)⁴². The Beirut connection emerged as a result of citizens of that country illegally exporting Sierra Leone diamonds. In the case of Liberia, the crucial factor was the dollar premium which could be earned by exchanging diamonds in a country where the US dollar is a legal tender. According to Van der-Laan, Liberia

³⁷ Minikin, op. cit.

Multum, op. cu.
 M. Harbottle - The Knaves of Diamonds, London, Seeley, 1976.
 Figures from Mines Division, Kenema; and Zack-Williams Underdevelopment and the Diamond Industry, p. 280-82, Sierra Leone Government share is equivalent to 7% duty imposed on sales at the GDO; DCWA's consists of 12% which SLST paid to the Central Selling Organization and the 1% which it charged as commission fore managing the GDO on behalf of the Government.

⁴⁰ See Zack-Williams op.cit.

⁴¹ Smuggling in this context refers to the patronizing of overseas markets at the expense of the locally instituted market.

⁴² Van der Laan, op. cil.

had no deposit worth mentioning; the success of the Liberian market was based on supplies mainly from Sierra Leone, Guinea and Ivory Coast. Yet, this did not stop the Diamond Corporation from setting up an associated company in Liberia to run the Diamond Appraisal Office on behalf of the Liberian Government.

We now turn to look at two important questions: 1) Why did smuggling continue even after the establishment of the Diamond Corporation in Sierra Leone? 2) Why did the DCWA want to enter the Liberian market?

Some of the answers to the first question included factors which were internal to the Liberian economy, such as the lower effective duty compared to those charged in Sierra Leone and the dollar premium. But a crucial reason was the trading policy of the DCWA. According to Van der Laan, in the period 1956-59, the trading margins of the company proved too high, with the result that buyers who were in a position to compare prices in the Monrovia market and at the DCWA soon found out that their profit margin would be reduced by making sales at the DCWA. This policy of very high trading margins was reversed in the period 1959-67. This change of policy raises the question why the corporation wanted a stake in the Monrovia market. In 1959, when it took over the GDO in Freetown, it embarked upon a policy of buying as much as possible rather than to earn as much as possible⁴³. This policy fitted in well with its strategy on maintaining as large a share as possible of the world's market of diamonds. However, this policy would succeed only if the Central Selling Organization (CSO) was prepared to forego more profit and accept a lower trading margin⁴⁴. The CSO which at the time had become very worried about the Monrovia market (over which it had no control), decided to make good its losses in the Monrovia market. This step was necessary because most of the good quality gem stones from Sierra Leone were channeled through this market, whilst only the poor quality industrial stones were sold through the GDO. The operation in Liberia simply meant that what was lost in Sierra Leone was gained in Liberia.

It is not easy to arrive at an estimate of the value of stones that left Sierra Leone for foreign markets. However, using Van der Laan's formula in particular his assertion of a 1:1 ratio of gem and industrial diamonds for Sierra Leone's deposit⁴⁵, we can arrive at a rough estimate. This estimation is premised on the assumption that the industrial stones were not smuggled

⁴³ Van der Laan has noted that since the discovery of the Sierra Leone fields, Beers (the parent company of DCWA) had been anxious that this field might upset its control of the world diamond market. These policies must be seen in that light.

⁴⁴ The CSO has been the major cartel in the industry since the 1930's, and is largely controlled by De Beers. 45 Van der Laan, op. cit., p. 134.

in any appreciable quantity, so that the volume of recorded industrial diamond exports were taken as representing 50% of actual production under the ADMS. We then subtract the volume of recorded gem exports from the volume of recorded industrial diamond exports to obtain an estimate of the volume smuggled gems. Assuming the same unit per carat as for recorded gem diamond exports, the value of smuggled gem diamond exports was then obtained. The estimated value of smuggled gem diamond averaged roughly Le 15,5 million per annum over the 14 year period 1960-74⁴⁶. The estimated value of smuggled diamonds represented 34% of the value of recorded diamond exports and 21% of the value of total domestic exports. In effect the value of exports could have been boosted by at least one-fifth if effective measures were taken to combat smuggling. In addition, the loss of export duty averaged 33% of actual revenue from export duties over the period under review; and 2.5% of total Government revenue from all sources. To the extent that the exchequer and the economy lost these revenues which could have been used in development efforts, smuggling tended to intensify the problem of capital drain and underdevelopment.

Conclusion

In this paper I have tried to show how diamond mining led to the development of underdevelopment in Sierra Leone. In locating the modes of production within the industry I have argued that the structure of the non-capitalist sector was determined by the hegemonic position of the capitalist sector within the industry. Because most of the resources (capital, trained personnel, and rich deposits) that entered the industry found their way into the SLST sector, the company was able to exercise its hegemonic control over the industry. We also noted that this hegemonic position of SLST largely accounts for the atomized nature of the ADMS. The case of *Leone Trial Mining* showed that with relatively large, and rich deposits as well as capital, it was possible for relations of production in the industry to be transformed. Furthermore, we saw how the company tried to articulate its interests with those of pre-capitalist forces, such as chiefs.

With regards to the surplus that was retained within Sierra Leone; we noted that because of poor infrastructure in the mining areas, the absence of any welfare provisions, these areas could be said to have acted as an internal colony. We also argued that for the majority of the people in these areas, diamond mining has caused more harm than good. We drew attention to how agriculture had to compete unsuccessfully with mining for land.

⁴⁶ This estimate was arrived at from figures from the Bank of Sierra Leone Economic Review, July-December, 1974.

Appendix I

_
5-1970
965-197
196
mining
contract
and
f SLST
g production o
comparing I
i com
Table

	1						
Year	SLST	1965	1966	1967	1968	1969	1970
1	Overburden moved (Cu yds)	3,346.528	3,399.751	3,822.360	4,093.586	5,791.526	7,923.292
5	Gravel treated (Cu yds)	759.714	728.477	812.273	866.883	1,200.743	1,444.996
ę	Carats recovered (in carats)	652,410.1	701,894.5	660,455	655,723	831,488.4	988,196.7
4	Grade of Gravel (Carats per cu yd.)	0.86	0.96	0.81	0.76	0.69	0.69
S.	Overburden (Depth ft.)	8.6	0.6	8.8	10.5	10.6	12.40
9	Average Gravel (Depth ft.)	2.2	1.9	2.0	2.3	2.1	2.2

Year		1965	1966	1967	1968	1969	1970
1	No. of sites	11	16	11	ю	2	5
7	Overburden stripped (Cuvds)	150.649	291.566	57.715	27.521	7.069	, * ,
ŝ	Gravel treated						
	(Cu yds)	33,466	61,260	15,118	6,788	537	* ,
4	Production						
	(carats)	19,660.20	23,638	8,630.70	1,484.60	Ň.A.	*,
Ś	Grade						
	(Ct/Cu yds)	0.77	0.39	0.59	0.22	N.A	* ,
9	Value per carat						
	(Je)	13.22	9.32	11.45\$	16.20\$	N.A	¥
7	Cost per carat						
	(Le)	8.08	6.98	4.06\$	2.20	N.A	*,
œ	Employment	682	650	730	160	328	* ,

Diamond Mining and Underdevelopment in Sierra Leone

117

* Contract Mining was stopped in March 1970

Measures not available
Applicable to end of June
Source: Report of the Mines Division, Ministry of Lands and Mines, Freetown