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Liberalisation, deregulation, state promoted investment – Canadian mining interests in Africa

by Bonnie Campbell

This article explores an apparent paradox of globalisation and liberalisation, with reference to Africa and to Canadian mining interests. On the one hand there is a real danger that the countries of Africa are being integrated into the world economy in the absence of policy instruments necessary to ensure national norms. This may well contribute to the increasing marginalisation of this part of the world. On the other hand this is very much because of public institutional support and governmental assistance that Canadian mining companies are at the forefront of financing and exploration activities in Africa.

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Globalisation as political process and Africa[1]

In order to understand present trends in the development of the mining sector in Africa and notably why foreign corporations have gained such ascendency in this process, it is useful to consider the manner in which the current process of globalisation is presented or conceived.

When one has the opportunity to carry out empirical studies on specific mining sectors or companies and more generally, on the strategies of specific vectors of globalisation, (transnational corporations, multilateral funding organisations, or bilateral agencies), one is struck by the extent to which this process is in fact built and institutionalised by specific actors which are identifiable and which share the responsability for the particular form which the process takes. It entails negociations, bargaining, relations of influence and power. It is consequently as much a political as an economic process.

This view is indeed quite different from that which presents globalisation the result of a series of inevitable adjustments to norms of international competitivity and markets which will bring about an optimal allocation of resources on a world scale.

Moreover, the process of internationalisation of the flows of goods and services, financial markets, productive activities and assets although worldwide, has entailed diffferent forms of integration into the world market and this has implied specific and sometimes different challenges with regard to the possibility of putting forward strategies of sustainable social and economic development.

With regard to the countries of Africa, the current process of commercial, financial and economic liberalisation has been accompanied by a programmed redefinition of the role of the state – withdrawal from certain areas: planning, production, and social reform; a reorientation of state interventions from certain other areas: redistribution, reglementation and mediation, etc.[2] with a view of promoting a particular type of growth strategies which rest above all, on the promotion of private economic interests.

As will be seen below, there is every reason to suggest that this process has led to the delegitimisation and fragilisation of states which were already characterised by a fiscal crisis, notably in the countries under structural adjustment.

While the process of the reconceptualisation of the state is not specific to Africa, the impact of this process has had particularly significant consequences with regard to the possibility of implementing developmental strategies and with regard to the protection of the social and economic rights of the populations concerned.

This may be explained in large part because of the nature of the economic reforms introduced and more recently, the increasing politicisation of the attempts on the part of multilateral institutions to " manage" development and institutional reforms from abroad, as if such processes could be reduced to merely technical issues. The economic reforms which rest above all on the creation of an environment favourable to private economic interests put forward by multi- and bilateral organisations entail new forms of integration into the world market and consequently new relations between private companies and local states and local communities. Internally, to the extent that these reform strategies seek to produce a set of new social and economic relations reflecting international criteria of productivity, profitability and competitivity, these measures necessarily entail a redistribution of resources and revenue. In order to do this, often they attack, directly or indirectly, existing social norms and standards – (employment, social benefits, etc. where they exist) in order to permit a reallocation of resources from certain sectors which are seen as "less productive" – health, education, – towards those which are considered to be more productive. This process has entailed inestimable human and social costs.

It was to mitigate the most extreme social consequences of the structural programmes, (SAPs), that different generations of "social dimensions of adjustment" measures were put forward during the 1980's. Introduced as an addition to the growth model contained in the SAPs, the "social dimensions" represented more of a justification of SAP's than a questionning of the way these measures had been conceptualised. In this sense, the "social dimension" policies masked two interrelated problems:

- the conceptualisation by the multilateral institutions of the struggle against poverty;
- and the particular notion of growth contained in the measures put forward by the same institutions which was presented as synonymous with development, which in turn was equated with adjustment.

To the extent that poverty is rooted in a particularly mode of social and political regulation which is selective and inequitable, the struggle against poverty is at the same time the struggle for the redistribution of power and therefore eminently political. By presenting the question of economic reforms and more recently institutional reforms as a technical issue,– while the reforms are in fact the necessary means to achieve a particular economic project, – as illustrated by the term "capacity building" or if one reads closely the World Bank's proposals on "governance", the reforms put forward by the multilateral institutions avoid raising a series of critical questions concerning the exercise of control over the "development process": Development defined by whom? To what end? Of what? Controlled by whom? And in whose interests?

Concerning the object of the reforms, if one looks to the exprience of a good number of African countries where structural adjustment measures have been implemented, there has occurred a redefinition of the role and functions of the state as the counterpart to growth strategies which have as their aim, the creation of an environment favorable to the promotion of private interests, which in many circumstances in Africa means foreign private interests.[3] In such a context, one may understand the growing importance of the place occupied by multinational companies, their increasing legitimacy, their liberty of action, their influence over the formulation of public policies and consequently their growing power.

Furthermore, what has emerged with the increasingly important and diversified interventions of the multilateral financial institutions in the social and political arena – which in effect puts them in contradiction with their own statutes – is an attempt to reduce political processes to processes of technical management. According to these institutions and their foreign experts, there exist "indiscutable" norms which have their origin in economic theory.[4] The 1997 World Development Report of the World Bank which deals with the state is very revealing in this regard. The result is a process of "depoliticisation" which has the effect of denying the legitimacy of political objectives. It is in this broader context that one can examine the question of human rights, sustainable development and the role of multinational companies.

However, one should not conclude that the social, political or economic consequences of the presence of such companies will be uniform. The patterns of international restructuring and relocation differ enormously from one industrial sector to another. The internal situations in the countries where the companies are active vary as much. What is important is to undertake specific case studies replacing the particular situation in a specific countries in the context of the analysis of the economic, commercial or financial sector of the companies present.

If one looks at the situation of many areas ot the African continent, the process of economic and political subordination of the countries under adjustment initiated by the Bretton Woods institutions and the opening up of their economies to market forces, has entailed very different implications in terms of the violation of human rights. The impact in this area depends on a wide range of factors, among which a very important dimension is the nature of the political regime in power.

By way of illustration of this, one can trace a continuum of situations which illustrate different cases of the abuse of social, political and economic rights and in doing so, underline the importance of different internal political contexts.

These situations range from cases of deregulation, where for example, as a result of the introduction of increasingly liberal mining or investment codes, the local state has withdrawn its role as regulator in key areas such as the management and protection of natural resources. An example of this was the introduction in Guinea, at the recommendation of the World Bank in June 1995 of an increasingly liberal mining code. In the context of the process of deregulation and state withdrawal which has accompanied over a decade of structural adjustment, not only from planning and production but also from regulation and redistribution, there is every reason to quiry whether the degree of openness and generous concessions offered to attract foreign investors in the Guinean mining sector is not more of a strategy of "fuite en avant" which may well morgage the medium and longer term development possibilities of the country, rather than a necessary condition for renewal with economic growth.

A second type of situation with clear human rights implications may be illustrated by certain consequences of the deligitimisation and short-circuiting of state apparatus as has happened in Sierra Leone. Faced with severe economic and political problems, the political leadership of the country opted to attribute to private companies certain functions which previously had been the responsibility of state agencies. For example, the collection of mining receipts and the enforcement of security via a para-military force have been attributed to a foreign company responsable for diamond production, Sunshine Broulle of Dallas, Texas. Similarly, the IMF encouraged the country to entrust to a British company, McAllisten Eliot Fisheries' Maritime Protection Service of Sierra Leone, the responsibility for the supervision of coastal fishing and the collection of royalties in this economic sector. However, these measures have had a direct negative impact in terms of the access of the local population to the resources of their country: "this strategy crowded out Sierra Leoneans who fished local waters to make a living in an otherwise terrible economy".[5] The collection of customs taxes for the port of Freetown has been attributed to a German company, Specialist Services International. The privatisation of agricultural resources, – rubber plantations, forestry concessions – has placed control of certain natural resources in foreign hands. Consequently, because of foreign intrusion into the country's economy, short term negative consequences can be documented in numerous sectors which are vital to the subsistance of the local population – as for example: mining, rice, fishing, agricultural resources and forests.[6] To the extent that this presence depends on the expropriation of entire sectors of economic activity, there is a real danger that in the medium and longer term, it will threaten the rights of the local population over the natural resources of their country.

The process of expropriation can extend further and encompass geographical regions of particular countries. In the absence of a central power which holds internal and local political legitimacy, the process of privatisation in favour of foreign companies may affect not only certain functions of the state but also entire regions of the country. This seems to have been the case in Zaire (now the Democratic Republic of the Congo) just before the downfall of President Mobutu. According to *Le Monde*, in the north-east of Haut-Zaire, where there is abundant wealth in term of natural resources including gold, diamonds and oil: "a concession of 83 000 square kilometers (more than three times the size of Rwanda) has just been granted to an American company whose administrative council includes a former American president, former director of the CIA, and a former Canadian prime minister."[7]

The more a country possesses natural resources which entail large investments and considerable economic rent, the greater the possibility, notably in the mining and petroleum sectors, that the regimes of such countries no longer draw their legitimacy from the local population but depend on the financial, political and military support offered them by large multinatonal companies (Elf in the Congo and in the Cameroun[8]; Shell in Nigeria; Total in Burma, etc).

Through these examples it may be shown that the impact of multinational companies will vary depending not only on the nature of the activities undertaken, but also among other things, on the nature of the political regimes where the companies are present. This point underlines the far-reaching implications for social, economic and political rights of current policies of multilateral funding institutions which attempt to redefine the role of states to that of the subsidiary adjuncts of particular economic strategies. Moreover, the degree of vulnerability of the populations or groups in the countries where multinational companies operate varies as well, and the degree of vulnerability will be all the more important to the extent that local associations such as unions do not have sufficient financial means and support to organise, to inform and to negociate in order to respond to situations of exploitation or the violation of social, economic and political rights.

To summarise, what this section seeks to illustrate is the fact that the impact on human rights of the process of globalisation of which companies are important vectors, is ultimately a political question which entails the creation of relations of power at different levels, relations which are created and institutionalised – the local level where the company operates; the multilateral level which creates the framework facilitating the mobility of capital and trade; the national level, that of the origin of the company. This manner of approaching such issues has obviously implications of primary importance for the initiatives to be taken to defend human rights. The above will now be illustrated more specifically with regard to Canadian mining interests in Africa.

Canadian interests in the context of global restructuring of the mining industry[9]

This section will be divided into two parts. The first will summarize recent trends in the global restructuring of the mining industry generally. The second will reset evolving patterns of Canadian mining interests in the context of global restructuring.

For those who have had the opportunity to look more closely at the wealth of Africa's mineral resources, this is an interesting period of time for there has always been a certain irony concerning the coexistence of one's knowledge of this wealth on the one hand, and the pervasiveness of the images of "African poverty" and the on-going process of impoverishment which characterises this continent on the other.

As Michael Barratt Brown and Pauline Tiffen point out in *Short Changed. Africa and World Trade*: "Sub-Saharan Africa exports gold and diamonds, but also large quantities of copper, bauxite, iron ore, uranium, phosphate rock and manganese; smaller quantities of asbestos, beryllium, cadmium, chromite, cobalt, germanium, lead, lithium, nickel, platinium, tantalite, tin, tungsten, nickel, vanadium, zinc."[10]

In terms of the importance of these resources to the countries concerned, Magnus Ericsson of the Swedish consultancy Raw Materials Group, Stockholm, notes that: "Mineral exports contribute between 25 and 90 per cent of annual export earnings of 13 countries: Botswana, Ghana, Guinea, Liberia, Senegal, Mauritania, Namibia, Niger, Central African Republic, Sierra Leone, Zaire, Zambia, and Zimbabwe. South Africa is also heavily dependent on exporting its ores and metals."[11]

The heavy dependence of these countries on mineral exports means that the lives of very important sectors of their populations are directly affected by the conditions under which these resources are mined, by the impact of mining activities on the environment, by the conditions which surround the exploitation of non – renewable resources and the outcome of price, trade and investment negociations.

Recent trends in the global restructuring of the mining industry

In order to understand the extent to which Canadian interests reflect evolving global conditions of the financing and exploration of mining, and to examine the circumstances which have made this possible, it is useful to summarize briefly certain world-wide structural changes in this key industrial sector.

Stockholm based Raw Materials Group summarised the following recent developments.[12]

The first is a significant increase in the number of mergers and acquisitions in the mining industry world wide. They suggest two reasons for this. Firstly, mergers and acquisitions are ways of avoiding the costly, risky and long exploration phase of a mine project. The more deeply and more remotely new ore bodies are located, the riskier this phase will become and mergers and acquisitions will become more attractive to companies that can afford them. Secondly, more and more of the exploration work is initially done by junior companies.[13] The rise of the "junior" mining companies has in a sense altered the way the mining industry works. As we saw with the Bre-X story, many of these juniors only have the required capital to explore for deposits, and must seek out larger partners to develop the mine increasing the level of mergers and acquisitions throughout the mining industry. Raw Materials Group of Sweden, in a report presented to the Prospectors and Developers Association of Canada in 1997, noted that:

"The 12 month period from June 1995 until May 1996 saw a record breaking number of mergers and acquisitions (M&A) taking place in the mining industry world wide. After this spate of activities a slow down would not have been surprising. In the second half of 1996, however, the pace has not slowed down very much. The number of mergers and acquisitions is still high and the total amount spent on M&A is on same level in the second part of 1996 as in the same period in 1995."[14]

In the last 10 years, we have seen an incredible rise in the number of junior mining companies. These juniors are at the forefront of exploration, and because of their adaptive nature, they have greatly diversified the geographical locations where companies explore for mineral deposits. As will be done below, analysing the factors that have led to the rise of these "juniors" is key to understanding the rapidly changing face of global mining.

With time there comes a transition when the deposit is transferred from the junior to a larger mining company with capital to exploit the potential mine. A small exploration company might be more creative and entrepreneurial and hence more efficient in finding new ore bodies than a major company. However, when the deposit is located and exploited, there are disadvantages rather than advantages in being a small company and the project may soon be up for take-over.

To illustrate this trend, the same analysts note that some companies such as Barrick Gold have a clear strategy for growth that relies mostly on acquisitions. Barrick claims that this is a secure way not only to growth but to keep production costs low. Others are more traditional exploration and mining operation companies. Placer Dome, for example, plans to expand primarily through grassroots projects claiming that this is the only way to get new deposits at a reasonable price.

A second trend noted by Raw Materials Group is the relatively larger share than previously of total acquisition capital that is at present going into gold projects. In this regard, it would appear according to the same source, that the massive investments into copper mergers that were decided during the last few years have made the interest in copper acquisitions decline. Of the other metals, the interest in nickel is clear, while other base metals attract less investment.

A third trend is the increasing presence of South African companies entering the global scene. To illustrate this, one might point to Gencor demerging and moving most of its non-gold assets to the London Stock Exchange and renaming this part of the company Billiton. Anglo American's recent merger with Minorco and subsequently also moving to the London Stock Exchange is another example. During the 1970s and 1980s, only AAC tried but rather unsucessfully to internationalise more than its diamond interests. Its subsidiary, Minorco never became the bridgehead it was intended to be. Domestically, South African mining companies are reorganising as for example Anglovaal, or unbundling as for example AAC, in order to raise capital, refocus on their core business and improve profitability. In the 1990s, it is South African companies which have taken the lead in all of Africa in the internationalisation of their activities.

To return to overall trends, while in global figures the total amount spent on mergers and acquisions is several times higher than the total annual world expenditure spent on exploration, this should not deter attention from another important trend - the boom in mineral exploration. This boom has been fired by the ability of junior companies to raise exploration finance and by a number of notable discoveries.[15]

Geographically, a number of trends are also emerging. While in the past concentration focussed on North America, Latin America and Asia, at present Africa is increasingly and rapidly coming into the picture. In fact, since 1994, note the Swedish based observers: "it has been obvious that the African continent is attracting more and more interests".[16]

More recently, a forthcoming paper produced by the same analysts goes much further: "Africa is continuing its spectacular growth trend and regaining the position as the fastest growing area, up over 50 per cent to reach 660 MUSD (13 per cent of total world wide exploration, (in) 1996 the figure was 9 per cent). With new exploration results being announced by the day this trend will probably continue. The South African mining companies dominate the scene with roughly 40 per cent of the total. Other important actors are Canadian and US juniors."[17]

Evolving patterns of Canadian mining investment

Global exploration. Global mining exploration has expanded dramatically in the last decade. In a report entitled *Canada's Global Mining Presence*, André Lemieux states that: "During 1996, the worldwide mineral exploration market for precious metals, base metals, and diamonds grew by 30 per cent to 6 300 MCAD (million Canadian dollars, 4 600 MUSD), up from 4 900 MCAD (3 500 MUSD) in 1995."[18] Lemieux goes further to point out that of this total of 6 300 MCAD, larger companies, defined as those with annual exploration budgets of more than 4 MCAD, control about three quarters of the global exploration market.[19]

In 1996, the larger Canadian-based companies had budgeted approximately 1 300 MCAD for exploration both within Canada and elsewhere in the world.[20] This represents 28 per cent of the total exploration budgets for all the larger mining companies worldwide.[21]

According to André Lemieux: "In 1996, the larger Canadian-based companies planned to spend 958 MCAD outside of Canada. Over the past five years, the aggregate annual budgets (adjusted for inflation) of the larger Canadian-based companies for exploration abroad have increased at an annual compound rate of 45 per cent, up from 214 MCAD in 1992. The proportion of the aggregate budgets of the larger Canadian-based companies allocated to exploration outside Canada rose to over 70 per cent in 1996. In 1992, 1993, 1994, and 1995, the proportions were 43 per cent, 49 per cent, 58 per cent and 68 per cent respectively. At the end of 1996, companies of all sizes listed on Canadian stock exchanges held interests in some 3400 foreign mineral properties....During 1996, the portfolio of mineral properties held by Canadian companies abroad grew by 650."[22]

As noted above, this trend towards international exploration is not confined to Canadian companies. Many of the worlds' large mining companies are also spending a large portion of their exploration budgets abroad. What is interesting is to understand the conditions which have allowed this to come about in Canada.

With regard to the Canadian experience, one source notes: "The Canadian mining and metals sector has been characterised by a wave of mergers and acquisitions since the middle of the 1990's which has been driven by relatively important availability of cashflows and the necessity to increase profits. The determining factors seem to be the reduction of costs among merged companies or the resulting increase in financial capacities which permit pushing projects to the production stage."[23]

Mining finance and the rise of Canadian juniors. The growth in the number of junior companies represents one of the most important developments in the mining industry in the last fifty years. In his report entitled "International Dimensions of the New Minerals and Metals Policy of the Government of Canada: Partnerships for Sustainable Development", Torsten Strom of Natural Resources Canada notes that, "Canada's major mining companies have been actively involved in overseas mining for the better part of the twentieth century. It is only in the last decade, however, that other segments of the industry – including junior exploration companies – have embraced the opportunities presented by the geological potential of countries beyond North America".[24]

In order to understand how this has taken place, it is important to recognize the role played by corporate financing through Canadian securities markets. During 1996, the amount raised to finance domestic and foreign projects of Canadian mining companies, 7 000 MCAD was an all-time record. Of this, 5 500 MCAD was in the form of equity and 1 300 MCAD was in the form of debt.[25] The amount of equity financing raised for mining during 1996 accounted for about one quarter of all Canadian-dollar equity issues raised in Canada: in the case of debt, however, mining accounted for less than 5 per cent. For the same year, 1996, more Canadian-dollar and foreign-currency equity financing was raised for the mining industry than for any other industry.[26] In fact, the Canadian financial services industry appears to have raised more equity capital for the mineral industry than for the mineral industry than was raised in Australia, the United States and South Africa combined.[27]

As for the mechanisms for trading, Canada has four separate exchange auctions. According to Brewer and Lemieux: "In 1996, more than 39 billion shares of all types of companies were traded on Canadian stock exchanges, with a value of 369 billion MCAD.

- At the end of 1996, there were about 1400 mining companies listed on Canadian stock exchanges. More than 800 companies were listed on the Vancouver Stock Exchange (VSE), about 300 on the Toronto Stock Exchange (TSE), about 150 on the Alberta Stock Exchange (ASE) and about 140 on the Montreal Exchange (ME).
- Mining companies account for more than half of the companies listed in Vancouver, about one-quarter of those listed in Montreal, and about one-fifth of those listed in Toronto and Calgary.
- Many mining companies are listed on more than one Canadian stock exchange, and several are also listed in the United States on the New York Stock Exchange, the American Stock Exchange or the National Association of Securities Dealers Automated Quotation System (NASDAQ). Others are also listed in Europe.
- In addition to four auction stock exchanges, Canada also has one negociated dealer market, the Canadian Dealing Network Inc. (CDN), that provides a market for the shares of unlisted mining companies.
- There are more than 150 mining companies trading on the Canadian Dealing Network."[28]

According to Brewer and Lemieux, the Canadian financial services industry has been very efficient in bringing Canada's junior mining sector to the attention of investors in Canada, the United States, Europe, Asia and elsewhere. Moreover, foreign investors have been a growing source of funds for the Canadian-based resource companies.

Two additional points can be made concerning corporate financing through the Canadian securities market. First, there is an increase – notably since 1992, in the number of new mining companies on all stock exchanges in Canada. During 1996 alone, over 100 mining companies were newly listed on Canadian stock exchanges.[29] Second, there has been an increasing number of foreign-based mining companies listed on Canada's stock exchanges. During 1996 at least eight mining companies with headquarters located outside of Canada were listed on the TSE. The increase in foreign listings is attributable, in part, according to Brewer and Lemieux,[30] to the large pool of capital available in Canada, to the liquidity made available to investors by Canadian stock exchanges, and to the visibility brought to mining companies by Canadian mining analysts.

The readiness of capital markets to invest in mining appears as one factor which helps to explain why in Africa, it is junior companies which have been active in undertaking preliminary exploration. If the prospects are promising, they raise additional capital on their home exchanges to fund further exploration. The more expensive later stages of exploration and the development of mines are generally undertaken as joint ventures with major mining companies with appropriate experience and the capital resources.

This expansion, according to certain sources, has led to Canadian companies becoming among the leading actors in international exploration. Keith Brewer and André Lemieux have attributed this rise to the vast wealth of mining expertise in Canada, developments within the Canadian financial sector and to favourable government legislation pertaining to the mining sector to which further reference will be made below.[31] The same analysts note that, "In 1996, almost 9 000 MCAD of domestic or foreign-currency issues of equity or debt financing were raised in Canada for mining projects around the globe. More financing appears to have been raised in Canada for the mining industry than in any other country".[32]

In this era of economic globalization, and especially with the assistance and guarantees provided by international agencies such as Multilateral Investment Guarantee Agency, the African Development Bank, and Canadian agencies such as the Export Development Corporation, it is now entirely conceivable to hope for assistance if one intends to invest in previously "unstable" regions of the world. Mining companies in general do not depend on these agencies for exploration capital. If one takes for example of the investments of the "Caisse de dépôt et placement" (and one could cite in this regard any number of other investors or pension funds), one can see that in spite of important losses in Bre-X (100 MCAD), the Caisse now owns 57.6 MCAD worth of shares in Cambior, making it one of the mining company's top shareholders.[33]

The close interaction between the finance and mining sectors, coupled with the signing of multi-lateral agreements, and favourable tax legislation for the mining industry have all contributed in making Canada a leader in global mining exploration.

Canadian mining presence in Africa[34]

From April 3rd to 18th 1998, the Honourable David Kilgour, Secretary of State (Latin America and Africa) led a trade mission to Africa. Of the six countries on the itinerary, three in particular are home to the large majority of exploration work conducted by Canadian mining companies in Africa. Within Ghana, Tanzania, and South Africa alone, Canadian companies have interests in well over two hundred mining sites.[35]

In May 1997, the Metals Finance 4th International Conference convened in Toronto. In preparation for this conference, Keith Brewer and André Lemieux, employees of Natural Resources Canada, co-authored a paper entitled *Canada's Global Position in Mining*. This paper emphasized not only the dominant position of Canadian mining companies in global exploration, but also Canada's role as the leading supplier of capital for the mining industry.[36]

The focus of this first sub-section will be on examining the role played by Canadian corporations in African countries where there is a large-scale Canadian mining presence, in relation to emerging global trends in the mining industry.

While foreign interest in Africa's mineral wealth dates back several centuries and activity in this sector has been marked by various surges as during the interwar period, the continent's vaste mineral wealth has been developed in a very fragmented and sporadic manner with emphasis on particular minerals. Other than gold and diamonds, if one takes for example the experience of the regions of Africa colonised by France, during the period 1945–1960, minerals which attracted colonial interests included bauxite, copper, iron ore, manganese, phosphate, petroleum and uranium.[37]

It is only recently, in the context of extensive economic liberalisation acheived through the process of structural adjustment, implemented as of the early 1980's, that wide-scale exploration work has begun. Pressed for foreign exchange and under the obligation to reimburse large debts, African governments have been encouraged by multilateral financial institutions to open their countries to foreign investment, offering large incentives to companies willing to invest. Competition for investment is high, and as André Lemieux and Keith Brewer note, "If current international trends in the flow of ideas, technology, capital, labour and equipment continue, then mineral deposits will be exploited almost exclusively in those locales where they have comparative economic advantage".[38]

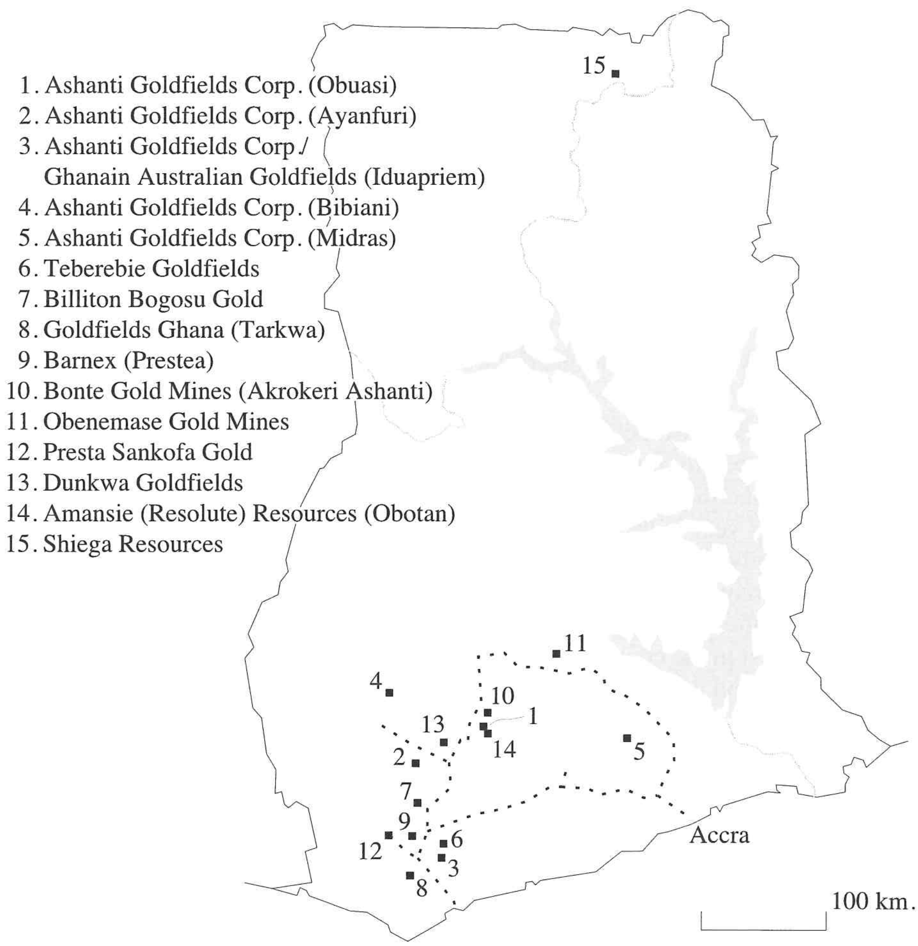
Canadian companies have been particularly responsive to the mineral wealth and economic advantages of Africa. Between 1992 and 1996, the number of properties held by Canadian companies in Africa increased at an average annual compound rate of 75 per cent.[39] By the end of 1996, there were more than 170 Canadian mining companies in Africa with interests in over 440 mineral properties, located in 27 countries.[40] These countries were the following if enumerated in decreasing order, according to the number of properties held at the end of 1996 by Canadian mining companies of all sizes listed on Canadian stock exchanges:

Ghana; Tanzania; Zimbabwe; South Africa; Burkina Faso; Botswana; Mali; Zambia; Namibia; Central African Republic; Côte d'Ivoire; Guinea; Sierra Leone; Uganda; Ethiopia; Niger; Zaire (Democratic Republic of the Congo); Angola; Gabon; Mozambique; Eritrea; Kenya; Liberia; Senegal; Sudan; Swaziland; Tunisia.[41]

By the end of 1996, at least 15 Canadian-based companies planned mineral exploration programmes, each valued at 1 MCAD or more in Africa – mainly in West African countries, as well as in Tanzania and Zimbabwe.

Canadian companies operating in Africa are primarily but by no means exclusively searching for gold and diamonds.[42] Africa has 54 per cent of the world's known gold reserves and produces just over 30 per cent of the world's gold, and its diamond industry dominates the world market.[43] Although South African based companies are the dominant force in exploration in Africa, Canadian based companies have, within the last five years, acquired a rapidly increasing portfolio of properties. The extent of the Canadian thrust into African mining can be clearly seen if one simply examines the differences in exploration expenditures between 1995 and 1996.

Canadian mining interests in Ghana.



In 1995, larger Canadian-based companies had planned African exploration budgets of over 49 MCAD, which represented approximately 11 per cent of the larger company market for Africa. Canadian companies by that time already held interests in about 325 mining properties throughout Africa.[44] In 1996 however, the larger Canadian companies had earmarked over 112 MCAD for exploration, which represented approximately 20 per cent of the larger company market.[45] According to Halifax-based Metals Economics Group's detailed survey of planned exploration, "expenditures for Africa reached 662.6 MUSD in 1997, an increase of over 50 per cent from 1996 and now over 16 per cent of global exploration spending. This represents over half the amount planned for the leading region, Latin America, and more than the Pacific – Southeast Asia (including Indonesia) region, Canada, or the USA. Africa truly emerged on the world mining stage in 1997."[46]

Within Ghana alone, Canadian corporations have interests in almost 100 properties, and are searching primarily for gold.[47] By the end of December 1996, 126 local companies and 77 foreign companies operating in Ghana had been granted gold reconnaissance and prospecting licences.[48] In an article on this subject, Kwabena Mate notes that gold has surpassed cocoa as Ghana's biggest export, and Ghana is now the continent's second largest producer after South Africa.[49] Mate points to: "the institutional and regulatory framework introduced since 1984 as part of the export-led growth strategy", as the key factors driving the revival of the mining industry.[50] These reforms, which will be discussed in greater detail below, included the creation of the Minerals Commission and the promulgation of a new Minerals and Mining Law.[51] The growing numerical importance of Canadian companies operating in Ghana's gold sector and those listed on Canadian stock exchanges, of which forty four are listed in the box on page 28, as well as the role which they may be shown to be playing in globalisation of Ghanaian mining activities explain the choice of the brief case study that follows.

Before however, in order not to minimise the importance of the presence of Canadian interests elsewhere on the continent some of which are the same as are present in Ghana, it is useful to note that Canadian mining interests are highly active in Tanzania with interests in over 70 properties. They also hold interests in 40 or more properties in Zimbabwe, South Africa, and Burkina Faso respectively[52] and 20 or more in each of Botswana and Mali. See box on page 28.[53]

The role and certain consequences of the presence of Canadian gold mining activities in Ghana will be examined below, after a brief presentation of the Ghanaian gold sector in which Canadian interests are increasingly active.

Ghana's gold-mining industry

The historical importance of mining in the economic development of Ghana is considerable. Small scale gold mining in Ghana is known to have taken place since the 4th century B.C. As of 1471, there are records of Portuguese trading in gold dust near the mouth of the Pra river.[54] During the early colonial period, as gold was a migratory and transitory activity within the informal economy, it was difficult to monitor and hence characterized as inefficient and unsafe. Under the pretext of these problems, the colonial authorities enforced draconian laws in 1905 in an attempt to curtail the activity. But active clandestine operations continued, as did the smuggling of gold and diamonds to neighbouring countries.[55] The region's colonial name, the Gold Coast, reflects the importance of this sector of activity which has continued to the present and makes Ghana the continent's second most important producer after South Africa.

Ghana's gold reserves are widespread and run through the country from the Western Region in the southwest, through the Ashanti Region to the Upper East Region in the north. (See map on page 21).

Shortly after the country's independence in 1957, the State Mining Corporation was formed when the Ghanaian government took responsibility in early 1961 for the following five mines:[56]

- Amalgamated Banket Areas Ltd. in the Tarkwa area (Western Region)
- Ariston Gold Mines (1929) Ltd. in Prestea (Western Region)
- Bibiani (1927) Ltd. in Bibiana (Ashanti)
- Bremang Gold Dredging Co. Ltd.on the Ankobra and Offin Rivers; Dunkwa area (Central and Ashanti Regions)
- Ghana Main Reef Co. Ltd. in Prestea (Western Region)

Initially, the object of the SMC was not to run the gold mines directly but to be a holding company for all of the shares of the mines taken over and to oversee policy.

The other two companies in operation at the time were British-owned joint stock companies, the very important Ashanti Goldfields Corporation Ltd, Obuasi (Ashanti Region) and the much smaller Konongo Gold Mines Ltd., Konongo (Ashanti Region).

Faced with the threatened closure of certain of the mines of the SMC, the government made an offer to buy the five companies which made the government recipient of any profits or losses incurred by them. It was the losses that in the early 1960s outweighed the profits.[58]

For a complex set of factors to which it is only possible to alude here, Ghana's gold production fell from about 1 million onces a year in the early 1960s, to approximately only 280 000 in 1983. This decline may be explained by factors such as the reticence of foreign capital to invest in the country; the lack of exploration and development of new ore bodies; the country's severe shortage of foreign exchange; the fixed dollar price for gold in the 1960's and early 1970s, and the overvaluation of the Ghanaian currency.

In the context of Ghana's structural adjustment efforts, the country's Economic Recovery Programme was extended to the mining sector as of the mid-1980s and the SMC's former mines were privatised and managed initially by Continental Construction and Mining Company (Dunkwa) as of 1995, Johannesburg Consolidated Investments, JCI, (Prestea) as of June 1996 and the South African company, Goldfields (Tarkwa) as of July 1993.

In order to discuss the privatisation of by far the country's most important company, Ashanti Goldfields Corporation (AGC), it is useful to provide a brief historical perspective. Incorporated in 1897, its name was changed to Ashanti Goldfields Corp (Ghana) Ltd on 10 October 1972 and its present title Ashanti Goldfields Co Ltd was adopted in 1993. Before looking more closely at the privatisation of AGC in April 1994, certain technical details will help situate the importance of this entity.

The company owns gold mines and timber concessions covering 100 square miles in the Bekwai and Obuasi districts of Ashanti, including one at Obuasi which has been in production for one hundred years. Production from the Obuasi mine in 1996 was 1.8 Mt, a 28 per cent increase on 1995. Underground mining operations at Obuasi produced over 180 000 oz gold during the 6 months to 31 March 1995. An expansion programme was underway in 1998, designed to lift this output to over 750 000 oz gold per annum within five years. During 1995, 16 surface pits were mined for a total material movement of 55.4 Mt, 5.9 Mt of which were ore, 3.4 Mt oxides, 1.5 Mt transition and 1 Mt sulphide mineralisation. The company has five treatment plants which processed 9.3 Mt a 9.6 per cent increase on 1994. The company's treatment plants were in the process of being upgraded as of 1996 to increase their capacity. Outside the 474 sqare km.Obuasi concession, AGC has interests in gold exploration properties elsewhere in Ghana.

The successful takeovers to be discussed below of Cluff Resources and Canada's International Gold Resources and the merger with Golden Shamrock Mines, took AGC from being a single mine gold producer in Ghana to a major international group with several operating mines and a full range of prospects in the main gold belts of southern Africa.[59] As of the end of 1996, AGC was exploring in a dozen African countries including Senegal, Mali, Guinea, Ethiopia, Eritrea, Zimbabwe and Mozambique.

The privatisation of Ashanti Goldfields Co Ltd in 1994 is worth considering in some detail as it provides a synthesis of recent trends and structural changes in the industry, illustrating the increasing internationalisation of operations, the increase of mergers and acquisitions, the growing importance of African mining activities generally and the role played by junior companies, notably Canadian junior companies.

It is also illustrative of the process of liberalisation and privatisation, described earlier, which has accompanied and served as a pre-condition to certain of these trends. In fact, among the reasons Ghana is so obviously attractive to foreign mining interests is clearly the institutional and regulatory framework introduced since 1984 as part of the export-led growth strategies at the core of structural adjustment measures.[60]

Until April 1994, AGC was owned by the government which held a 55 per cent stake and by the UK conglomerate Lonrho (45 per cent). At that time, the ownership structure was changed when a portion of its shares was floated on the London and Accra stock exchanges, leaving the government initially with around 22 per cent. The privatisation of AGC was to be revealing of other structural changes involving important South African interests.[61] In this regard, it was the Ghanaian government which opposed moves by the South African mining house Anglo American to forge links with AGC and it was reported to have used its golden share in the company to prevent a takeover in October 1996. At the time, Lonrho owned 30 per cent of AGC and Anglo, which had a small stake in Lonrho, subsequently bought an option to raise its holding to more than 20 per cent. Simultaneously, Lonrho's chairman, Dieter Bock, sold his own personal 18.3 per cent holding to Anglo. Without the golden share, AGC would have been vulnerable to predatory takeover bids in view of the disappointing output and decline of its share prices at the time of Anglo's renewed interest in AGC, as compared to sales prices registered during the first days after the government's divestment in April 1994.[62] Anglo was reportedly keen to bid for AGC for several reasons. As a Ghanaian company, AGC is in a better position to develop relationships and secure new assets in Africa than a South African company, which for all its directors' publicised opposition to apartheid, expanded under the former Nationalists regimes. Anglo also sought to balance its high-cost, if short-lived, projects elsewhere in Africa. It saw AGC, which as noted, has exploration projects in a dozen countries, as an ideal partner for this.

However, if the reports of the Ghanaian governmental misgivings are correct, the government, it was expected, would probably exercise its power, conferred by the golden share, to limit Anglo's holding in AGC to a maximum 20 per cent, and could declare any attempts to augment such a holding to be against the public interest. Anglo continued its strategy via Lonrho, of which it owns 26 per cent, to gain a controlling stake in AGC to provide a launchpad for major expansion in Africa. By early 1997 Lonrho held 36 million

Table 1. Ghana's Gold production and earnings 1996–1997

	Production(oz) 1996	1997	Earnings (MCAD) 1996	1997
Ashanti Goldfields Corporation	859 697	1 039 967	419.6	341.6
Teberebie Goldfields	202 902	238 804	78.3	81.2
Ghanaian Australian Goldfields	120 469	n/a	47.2	n/a
Billiton Bogosu Gold	105 434	108 388	40.1	38.5
Small miners	58 082	64 729	20.3	19.4
Goldfields Ghana	47 468	53 771	18.3	16.3
Barnex (Prestea)	34 599	33 483	13.0	11.2
Bonte Gold Mines	25 122	34 839	8.1	10.0
Obenemase Gold Mines	18 912	6 507	7.3	2.2
Prestea Sankofa Gold	17 348	19 392	6.5	6.5
Dunkwa Continental Goldfields	5 204	3 595	1.7	1.1
Amansie Resources	n/a	39 903	n/a	16.1
AGC Ayanfuri[a]	54 388	n/a	20.7	n/a
Total	**1 549 625**	**1 643 378**	**681.1**	**544.7**

Note. a. A subsidiary of AGC, not given separately in 1997.

shares in AGC which represents 33.6 per cent of the shares issued. The government which in 1996 divested a second tranch of AGC shares worth around 100 MCAD had trimmed its stake to 18.6 per cent while individual investors held the balance according to a statement from the Ghana Stock Exchange on Jauary 8, 1997.[63] As of February 1998, ownership was Lonrho 33 per cent and the government 22 per cent.[64]

AGC used to account for 90 per cent of Ghanaian production, but its dominance has been eroded by other mines, which accounted for about one-third of Ghana's estimated production of 1.5 million oz in 1996. Since the flotation, AGC has made several acquisitions in an attempt to restore its position. As noted, these have included Cluff Resources, whose Ayanfuri mine added 30 000 oz to AGC's output in 1997, and a 70 per cent stake in the Iduapriem open pit mine (which produced around 126 000 oz in 1996), acquired after AGC's merger with Australia's Golden Shamrock (GSM). Via the latter merger, AGC obtained access to the 40 Mt Iduapriem orebody which has a potential mine life of 10 years. Inferred resources at Iduapriem take the total to 100 Mt grading 1.29g/t gold. GSM also held an option to earn 60 per cent interest in the Asankrangwa and Enchi-Wawaso licenses in southwest Ghana held by Opawica Explorations Incorporated, a junior Canadian corporation.

Concerning non-Ghanaian activities, AGC signed an option deal with the Vancouver-based Carlin Resources for an interest in Niger's Tera gold concession. According to the London-based monthly International Gold Mining Newsletter, AGC has agreed to pay Carlin 100 000 CAD, spend 2 MCAD on exploration work and produce a feasibility study before the end of 1998. This gives it the right to acquire a 51 per cent interest in Carlin's 90 per cent stake. It is already drilling in Niger's Saoura concession with its partner Iamgold, a Canadian company, and the partnership planned to spend 7.6 MCAD in 1996 on a number of projects that would swell further AGC's reserves. These included drilling at Bambadji in Senegal, on which AGC had a 50 per cent option, and the Mandiana concession in eastern Guinea.[65]

While many have applauded AGC's recent large acquisitions, saying its exploration drive into more African countries is far-sighted given steeply climbing interests in sub-Saharan African mining, others have been more circumspect. Some have hinted that the expansion drive was primarily a strategy to dilute Lonrho's shareholding and concomitantly, Anglo's interest.

Apart from AGC, other major Ghanaian producers include:

- the Teberebie mine, owned by the U.S. Pioneer Group and others;
- Billiton Bogosu, owned by Billiton of the USA, the IFC and the government:
- Ghanaian Australian Goldfields; and
- Goldfields Ghana which is 70 per cent owned by Goldfields of South Africa and which bought into the Tarkwa concession in 1993.

The production figures and earnings of the major operators are listed in Table 1.[66]

As noted, a key explanation for the attractiveness to foreign investors of Ghana's gold sector has been the revision of its mining laws in the 1980's. Key elements of these reforms have included the setting up of the Minerals Commission in 1984 and the promulgation of a new Minerals and Mining Law which provided generous capital allowances and other incentives. These have included tax breaks, flexible labour policy (right to hire and fire), unregulated repatriation of profits and cheap asset transfers. The measures have attracted over 1 000 MUSD in investment including funds from the World Bank, and led to a quadrupling of gold production over the last six years.

Improved conditions have attracted more new investment, (totalling 1 600 MUSD in 1983–1994)[67], more than in any other sector, and most of it went into gold mining.[68]

Gold production rose from 285 291 oz in 1983, from four mines, a 23 year-low, to 1.7 million oz in 1995, from 10 mines and small producers, making Ghana the continent's second largest producer after South Africa. The Ghanaian Chamber of Mines' most recent objective was to boost production to 2 million oz in 1998.[69]

Officially, gold has been Ghana's leading export commodity since 1992, providing for over 45 per cent of total foreign earnings by the end of 1995, though this fell to 39 per cent in 1996.[70] The mining industry continues to dominate the country's foreign exchange earnings. In 1994, minerals earned 577 MUSD which is about 48 per cent of total export earnings. Out of this, gold accounted for 45.2 per cent representing gross earnings of 548.6 MUSD as against 305.3 MUSD and 165.4 MUSD from cocoa and timber respectively.[71]

However, this primacy of gold is in gross terms. In net terms, cocoa is still the largest export earner because mining companies may retain 25–80 per cent of their earnings in external accounts for debt servicing and other foreign costs, an important provision of the Minerals and Mining Law.[72]

Mining's contribution to gross domestic product (GDP) since independence, 1957, has hovered around 1.5 to 1.8 per cent, indicating the sector's minimal linkages with the rest of the economy. Mining is highly capital, rather than labour intensive, consequently not a large employer. As will be seen, it has under certain circumstances, a potential to do more harm than good to the local populations: "Currently, land and environmental issues are growing in importance because the main gold belt coincides with the major logging and cropping zones... In 1996, such issues prompted community protests in the major mining area of Tarkwa."[73]

Before examining certain implications of mining activities on local communities and for Ghana more generally, it is important to present a profile of Canadian companies for which information is available and which are present in Ghana's gold sector.

Canadian mining interests in Ghana's gold sector[74]

There are currently over 200 mining operations all over the country attracting very large companies from South Africa, the UK (Lonrho), the US (the Pioneer Group which owns Teberebie Goldfields), Australia (Golden Shamrock which owns Ghanaian-Australian Goldfields and operates Iduapriem mine) and minor investors from all over the world. As noted above, in addition to the Ashanti Goldfields Co Ltd, there are also the Bogosu Mines owned by Billiton and Ayanfuri Mines, owned by Cluff Resources of the UK which were purchased by AGC.

While Canadian companies are by no means among the largest, what is striking is their widespread and growing presence. In 1996, they had interests in almost 100 properties and the continuing rapid increase of these interests make Ghana the first in importance in terms of Canadian mining interests in Africa.

A survey of the 45 mining companies listed on Canadian stock exchanges as of January 1st, 1997, suggests the following characteristics and trends:

1. The Canadian companies are almost exclusively junior companies (total assets under 4 MCAD) involved in exploration, with shareholders representing on average over 80 per cent of total assets.

2. Of the 45 companies studied, 17 had interests elsewhere in Africa suggesting that Ghana, is not only the most important in terms of Canadian involvement and a point of entry to the continent but also a launching-pad for Canadian interests via the globalisation strategies of often more important operators and notably South African companies.

3. A good number of Canadian companies appear to have benefited from the dismantling of state mining interests, notably Ashanti Goldfields Corporation, but also by being present in holdings where there is also a minority government share as for example:

- Bonte Gold Mining Ltd (Akrokeri Ashanti Gold Mines of Canada and the government):
- Obenemase Gold Mines (Ghana Gold Mines Resources and the government);
- Prestea Sankofa Gold Ltd treating old tailings of the former Prestea mine. This is a joint venture between Samax, Ghana National Petroleum Corp and the government.[75]
- Gold Fields G H Ltd. Shareholders are Goldfields of South Africa, Golden Knight Resources (Canada), SSNIT, Cresent Mining Finance and the government. With regard to the latter, Golden Knight paid 47 MCAD for an additional 12.5 per cent equity capital in Gold Fields Ghana which owns the mining rights to the formerly state-owned Tarkwa concession north of Takoradi. Golden Knight which already owned a 5 per cent stake, acquired the holdings from Golden Bond Ventures. It is believed to have paid a cash sum of 37.5 MCAD to Golden Bond's parent company, Cabo Frio Investments, accompanied by the issue of 1.57 million share units, valued at a total of 9.5 MCAD. Recent exploration at Tarkwa had identified 13 million oz of gold in 5 mineralised zones. A feasibility study of 3 of the zones was to be completed by the end of December 1996.[76]

4. There exist different forms of co-operation involving different degrees of ownership between South African and Canadian mining interests in Ghana as illustrated by the following:

- Gold Fields Ghana where the main shareholders are Gold Field South Africa (70 per cent) and Canada's Golden Knight Resources (17.5 per cent).
- South Africa's Gencor announced in June 1997 that it had signed a memorandum of understanding to sell a substantial chunk of its assets in Ghana to Canada's Eldorado Gold Corporation. The deal worth 193 MCAD included a 90 per cent interest in Bogosu Mines and eight exploration properties in Ghana, together with a package of Gencor's South African assets.
- Johannesburg Consolidated Investments (JCI) of South Africa had a joint venture with Ace, a Vancouver-based company and was the major shareholder of another Canadian company, Patrician Gold Mines Ltd.

5. There also exist some links between Canadian and Australian companies. The Montreal-based Birim Goldfields and Australia's Esmeralda Exploration have acquired an old mine in the Ashanti region, according to the Paris-based newsletter *Africa Energy and Mining*. The Akrokeri mine produced 75 000 oz of gold from 104 000 tons of ore in 1905–09, during the British colonial rule. The concession's ore zone extends more than 550 metres and consists of a two metre wide mineralized quartz vein.[77] Birim was reported to be raising 6.6 MCAD through placement of warrants in Toronto to fund its share development to pur-

chase its 50 per cent stake. Esmeralda owns the other 50 per cent.[78]

6. There are other Canadian companies present in Ghana which are not listed on Canadian stock exchanges as for example:

International Gold Resources, a Toronto-based company which in 1995 estimated that production at its Bibiani project would rise above 30 000 oz in the first year of operation. The claims, based on a study by Minproc Engineers, say that production will exceed 200 000 oz in the second and third years of the project. At these rates, the company estimated that a break-even on initial investments would be acheived in twelve to fourteen months.[79]

7. Much of the activity of Canadian companies at this moment involves exploration as for example:

- West African Mining Corporation
- Golden Rule Resources
- Hixon Gold Resources

8. Canadian companies appear to have been very successful at raising venture capital for the initial stages of exploration. There are obviously several reasons for this but among them is the fact that interest rates for bonds have been low, encouraging investors to turn to alternative investments; the fact that there has developed a Canadian market for venture capital which links financial and investment interests and the fact that Canada has had a strong domestic mining sector and developed expertise in this area.

9. Another type of link which is apparent and will perhaps gain greater importance as activities pass from the exploration to investment in the production stage, are those between the Canadian government's strategies to promote private Canadian mining companies and members of Canada's political élite in mining companies presently active in Ghana and in Africa more generally. The knowledge which these individuals have of the Canadian political system and the influence which many of them still carry within this system, are obvious elements favouring the ability of the companies in which they are involved with regards the measures of assistance put forward by the government to favour mining investment abroad.

Among the examples cited, the following are illustrative of this point:

- John Turner, former Liberal Prime Minister of Canada, is chairman of the Advisory Committee to the Board of Directors of IBI Corporation which is developing gold and timber in Ghana.
- Joe Clark, former Conservative Prime Minister of Canada briefly in 1980 and candidate again for the same position in 1998, is Director of Calgary-based CANOP Worldwide Corporation, an Alberta stock exchange company involved in oil and gas exploration in Tanzania, Mozambique and Jordan. CANOP now holds a significant land position in both Tanzania with about 15 000 square km and a further 40 000 square km in Mozambique. The Calgary based survey company which conducted the study for CANOP was funded by the Canadian International Development Agency, CIDA.
- J. Clark is also special advisor to Vancouver-based and listed First Quantum Minerals, a mining company with interests in Zambia, Zimbabwe and increasingly in Zaire (the Democratic Republic of the Congo).
- Frank McKenna, Premier of the province of New Brunswick as of 1987 and candidate for the leadership of the federal Liberal Party in 1993, became Director of a Maritime drilling company with interests in Ghana.[80]

10. In anticipation of the following section on the impact of certain mining activities in Ghana and the obvious importance of a regulatory framework to monitor this area of economic activity, it is of note that there has been reticence on the part of the Ghanaian government concerning the conduct of exploration activities and the fact that certain operations are active without licences. To illustrate the former, in March 1997, the Ghana Minerals Commission (GMC) ordered an independent check on gold samples produced by Canada's Golden Rule Resources and Hixon Gold Resources, which were prospecting at Stenpad, south west of Kumasi.[81] Golden Rule Resources is a major share holder in Hixon and together they have a 50–50 joint venture.

As will be seen below, the regulatory role of the government is important in many critical areas other than the verification of ore samples.

Certain consequences of gold mining in Ghana

This section draws attention to certain negative impacts of gold mining in the believe that while by no means the only consequences of gold mining activities, these are by far much less well known. Furthermore, in the following brief presentation, it is in no way the intention to claim that it is Canadian companies which are solely responsible for the negative impacts of gold mining in Ghana. Rather, addressing the issue of the negative consequences of these activities is presented as a first step in order that the various actors involved be in a better position to assume responsibilitity for the role which they are playing in an increasingly globalised process.

As is generally well known and described by W. Appiah in relation to Ghana: " The direct effects of mining include the alienation of land by the construction of shafts, open pits, waste dumps, haul roads, conveyors, stockpiles, water supply dams, accomodation areas and associated mine infrastructure. These direct affects are highly visible and readily quantifiable in terms of land alienation all over the mining centres in Ghana.

The most significant mining related air quality pollutants include dust, sulphur dioxide and arsenic oxide. Open pit blasting, haulage and dumping generates large quantities of dust and has caused nuisance to local residents at two mines, Bogosu and Obuasi.

Most of the big transnational corporations are also heavily engaged in surface mining whose environmental impact includes visual intrusion, solid waste disposal, aerial pollution, water pollution, noise and vibration, soil and land degradation."[82]

The consequences of mining activities in Ghana over the last four years have been particularly severe for several interrelated reasons. On the one hand, as noted, land and environmental issues are growing in importance because the main gold belt coincides with the major logging and cropping zones. Mining operations have sometimes disrupted economic and social activities. Farmers whose land has been taken over have usually been given cash compensation for their crops and loss of their livelyhood, instead of similar land and means to continue farming.

On the other, in the current period of liberalisation, the mineral policy of the Ghanaian government aims, just as that of neighbouring countries, to attract investors with minimal controls over their operations. As a result, after a break of about 40 years with little (even negative) investment in the sector, the last four years alone have seen the development of six new mines in the gold sector plus a stampede to obtain exploration rights over large areas. Approximately 11.4 million hectares of forest have been granted to mining companies for prospecting and extraction.[69]

Very attractive incentives, including flexible labour policies, unregulated repatriation of profits, etc, have often placed short-term concern for rapid investment ahead of social and environmental considerations.

In Ghana, good environmental practices are specifically required of mining companies by the Minerals Commission and Environmental Protection Agency, EPA, as well as by the Minerals and Mining Law. However, problems which were latent in the past, have been amplified by the intensification of present activities, as revealed by the following examples.

At Obuasi where Ashanti Goldfied Corporation operates there are severe and moderate effects of arsenic on the surrounding vegetation.[84] There, "some vegetation has been exposed to toxic concentrations of sulphur dioxide and arsenic trioxide downwind of the stack and a number of bald areas have developed on hill-sides and crests.

For the longestablished underground operations at Obuasi, gaseous emissions, fallout from the stack, dust dispersion, tailing spillage, decanting of tailing dam liquor and various liquid effluents have over a very long period of time, produced widespread contamination in the Obuasi area and inriver drainage. High concentrations of metals and suspended solids form a pollution gradient down the Kwabrafo-Jimi drainage. The river is still moderately polluted at its confluence with the Ofin River."

Quoting a study prepared by NSSR Environmental Consultants of Australia on the symptoms observed in patients of the Ashanti Goldfields Corporation's hospital at Obuasi, on Obuasi residents and AGC workers, W. Appiah reports: "There is also evidence that the arsenic content in some drinking water supplies for both Obuasi township and AGC's accomodation areas is above acceptable levels".[85]

At Teberebie Goldfields Ltd which started mining in 1990: "activities have exposed large areas of consolidated soil to rainfall-based erosion and scour. The high suspended sediment concentrations in the downstream have rendered one village water supply unfit for drinking and other domestic purposes." Quoting an official of the Environmental Protection Agency, W. Appiah writes: "During field exploration works, mature forests and wildlife reserve may be adversely impacted on, while air and water quality within concession areas are also affected due to changing land use...Excavations left unsealed within abandoned exploration sites pose significant dangers to both humans and animals."[86]

At Tarkwa, the Environmental Protection Agency had been expected to approve a mining project but the decision was delayed by concern about environmental and social issues, notably for the people living in the area. The project required the relocation of around 20 000 people, half of whom Gold Fields Ghana (whose main shareholders it will be remembered are Gold Fields South Africa, 70 per cent; Canada's Golden Knight Resources, 17.5 per cent and the government) had already been paid to move away. Most of the rest of the people had agreed to move to a new village that the company was to build, but a small group of 100 remained on their properties in the hope of securing a more favorable settlement.[87]

As noted, environmental guidelines exist in Ghana. However, their dissuasiveness and the necessary means to enforce them is open to question. For example, despite powers to require Environmental Impact Assessments and rolling Environmental Action Plans and to serve enforcement notices where damage is occurring, the penalties for enforcement are minimal for transna-

Canadian mining companies in selected African countries and companies listed on Canadian stock exchanges as of July 1998

Burkina Faso
African Selection Mining Corp.
Ascot Resources Ltd.
Ashanti Goldfields Co. Ltd.
Boliden Ltd.
Challenger Minerals Ltd.
Channel Resources Ltd.
Echo Bay Mines Ltd.
Etruscan Resources Inc.
Geomaque Explorations Ltd.
Golden Knight Resources Inc.
High River Gold Mines Ltd.
Hyder Gold Inc.
InterStar Mining Group Inc.
Kinbauri Gold Corp.
Melkior Resources Inc.
Mink International Resources Corp.
Orezone Resources Inc.
Oxford Resources Inc.
Sahelian Goldfields Ltd.
SEMAFO (West Africa Mining Exploration Corp. Inc.)
Solomon Resources Ltd.
Tapestry Ventures Ltd.
Viceroy Resource Corp.

Democratic republic of Congo (formerly Zaire)
AfriOre Ltd.
America Mineral Fields Inc.
Banro Resources Corp.
Caledonia Mining Corp.
First Quantum Minerals Ltd.
Harambee Mining Corp.
International Panorama Resource Corp.
International Star Resources Ltd.
Magnesium Alloy Corp.
Melkior Resources Inc.
Namibian Minerals Corp.
NovaGold Resources Inc.
SAMAX Gold Inc.
South Atlantic Resources Ltd.
Starpoint Goldfields Inc.
Tenke Mining Corp.
White Swan Resources Inc.
Wye Resources Inc.

Ghana
Ace Development Ltd.
Adikann Goldfields Ltd.
African Selection Mining Corp.
Akrokeri-Ashanti Gold Mines Inc.
AMI Resources Inc.
Arc Pacific Metals Inc.
Ashanti Goldfields Co. Ltd.
Battle Mountain Gold Co.
Birim Goldfields Inc.
Carlin Resources Corp.
Dynamic Ventures Ltd.
Echo Bay Mines Ltd.
EQ Resources Ltd.
Fairstar Explorations Inc.
Gallery Resources Ltd.
Ghana Gold Mines Ltd.
Ghana Goldfields Ltd.
Golden Knight Resources Inc.
Golden Rule Resources Ltd.
Hixon Gold Resources Inc.
IMAGOLD International African Mining Gold Corp.
IBI Corp.
International Chargold Resources Ltd.
International Tournigan Corp.
Mink International Resources Corp.
Minorca Resources Inc.
Nevsun Resources Ltd.
Nora Exploration Inc.
Norcan Resources Ltd.
Opawica Explorations Inc.
Pacific Comox Resources Ltd.
Patrician Gold Mines Ltd.
Prospex Mining Inc.
Sabina Resources Ltd.
SAMAX Gold Inc.
SEMAFO (West Africa Mining Exploration Corp. Inc.)
Shiega Resources Corp.
St. Jude Resources Ltd.
Trans-Global Resources N.L.
Tri-Star Gold Corp.
Trio Gold Corp.
Vauquelin Mines Ltd.
West African Gold Corp.
Winslow Glod Corp.

South Africa
AfriOre Ltd.
Battlefield Minerals Corp.
Botswana Diamondfields Inc.
Caledonia Mining Corp.
Canadian Overseas Exploration Corp.
Clear Creek Resources Ltd.
Consolidated Granby Resources Ltd.
Crew Development Corp.
Diamond Fields International Ltd.
DiamondWorks Ltd.
ECU Gold Mining Inc. (Société minière Ecudor Inc.)
Eden Roc Mineral Corp.
Eldorado Gold Corp.
Falconbridge Ltd.
Franco-Nevada Mining Corp. Ltd.
Golden Knight Resources Inc.
Goldstake Explorations Inc.
Messina Diamond Corp.
Mineral Resources Corp.
Mountain Lake Resources Inc.
Namibian Minerals Corp.
Noble Peak Resources Ltd.
Platexco Inc.
Pure Gold Minerals Inc.
Redaurum Ltd.
Rex Diamond Mining Corp.
Royalstar Resources Ltd.
Rupert Resources Ltd.
Serengeti Diamonds Ltd.
Sonora Diamond Corp.
SouthernEra Resources Ltd.
Sutton Resources Ltd.
Trillion Resources Ltd.
Ulysses International Resources Ltd.

Tanzania
Ashanti Goldfields Co. Ltd.
East Africa Gold Corp.
Explorations minières du Nord Ltée
First Quantum Minerals Ltd.
International Barytex Resources Ltd.
International Roraima Gold Corp.
Lakota Resources Inc.
Minorca Resources Inc.
Ormonde Mining PLC
Pangea Goldfields Inc.
PrInc.ess Resources Ltd.
SAMAX Gold Inc.
Serengeti Diamonds Ltd.
Sutton Resources Ltd.
Tan Range Exploration Corp.
X-Chequer Resources Inc.

Source: MineSCAN 1998–99, Southam Mining Publications Group tional mining companies: an immediate fine of the equivalent of 2000 USD and a daily penalty of 200 USD until the offending activity ceases.[74] This situation explains why the Ghana Mine Workers Union has called for a review of existing regulations to take into account health and safety aspects.

While mining is set to remain a major foreign exchange earner in Ghana, there is increasing concern over the weakness of regulations overseeing the conditions under which activities are carried out, as well as every reason to believe that mining will under present circumstances, propably remain an enclave. To move beyond this situation, as Kwabena Mate notes, "the emphasis on investment promotion will have to shift to a more comprehensive vision that facilitates greater exploitation of Ghana's industrial minerals (manganese and bauxite), increases the proportion of locally retained earnings, and stimulates vertical and horizontal linkages in the context of environmentally sustainable development."[89]

However, whether for monitoring and enforcement of sound environmental and health practices, labour standards or promoting environmentally sustainable development, such strategies require that local actors such as communities or unions and the state, have the capacity to intervene and to do so in a context of the existence of a regulatory framework favourable to local and national interests. Under current policies of economic liberalisation in Ghana, which aim to open the economy to private interests and as has been seen in the mining sector, increasingly to foreign private interests, such a regulatory framework and the conditions for enforcing it are seriously lacking. In this sense, and as will be seen below, there is a striking paradox in this regard when contrasted to the Canadian regulatory framework and strong support provided by the state to promote private Canadian mining interests in their activities abroad.

Regulations and government assistance – the mining sector

Before looking at different forms of institutional support which are offered Canadian companies investing abroad, it is useful to look briefly at the Canadian regulatory framework which is often cited as an important factor of encouragement for companies interested in international exploration and mining ventures.

In *Canada's Global Position in Mining*, the authors list three main factors which they suggest help contribute to Canada's dominant position in mining and mine finance:

- Diversity of skills and experience
- Canadian regulations
- Knowledge of foreign mineral potential[90]

With regard to Canadian regulations, according to the same federal government source, several aspects are involved including the following three. First, the Canadian legal system has developed checks and balances which are conducive to raising risk capital. The ability of individuals or companies to obtain title to mineral rights, and to be able to benefit from the value represented by such rights, is central to the Canadian system. Second, the ability to buy and sell mineral properties and, therefore, to transfer value, ensures the liquidity essential to risk taking. Third, the concept of escrowed shares, and other aspects of securities regulations, are important to the protection of investors, while making it possible for small mining companies to get established.[791]

Furthermore, a number of tax rules facilitate Canadian investment abroad:

- Canadian rules allow the deductibility of interest incurred by borrowing, whether in Canada or offshore, for investment in foreign subsidiaries, while intercorporate dividends are exempt from Canadian income tax.
- Profits generated by subsidiaries operating in a country with which Canada has a tax treaty can be repatriated free of Canadian income tax.
- Canadian companies that invest directly in foreign mining projects and incur exploration and development expenses, can deduct, under certain conditions, up to 100 per cent of these expenses.
- Canadian rules allow the pooling of exploration and development expenses, rather than requiring property-by property or country-by-country accounting. As a result, proceeds from the sale of foreign resource properties can be sheltered against Canadian tax by the total amount of unclaimed foreign exploration and development expenses.[92]

Government assistance to the mining sector may take as well various forms of institutional support. These include the leadership which the Canadian government has taken in "Team Canada" trade meetings, by signing multi- and bi-lateral trade agreements and by the work done by CIDA, the Department of Foreign Affairs and International Trade (DFAIT) and the Export Development Corporation (EDC) among others, which illustrate the government's role in promoting and facilitating the expansion of the interests of Canadian mining companies abroad.

As is well known, the EDC helps Canadian exporters and investors in their activities abroad by supplying export credits. In helping to promote Canadian companies interested in the mining sector in Africa, EDC's contribution takes the form of credits (loans) to facilitate the export of mining equipment, the use of Canadian consultants – cartogrophers, geological surveys, etc. To cite one example, on December 22, 1997 the EDC supplied a loan of 940 000 CAD to facilitate the sale of three Canadian made trucks produced by Tamrock Loaders of Burlington, Ontario to Ashanti Goldfields Company Limited, responsible for the gold mining project at Obuasi, Ghana.

Refering to the new line of credit made available to Canadian companies selling goods or services in Ghana, June Domokos, EDC Vice-President Asia, Africa and Middle East stated: "Ghana offers Canadian exporters many opportunities to supply equipment and services in such sectors as mining, information technology, transportation, housing, energy and telecommunications, as well as other infrastructure-related projects. We believe this new financing will help Canadian exporters win new business in this emerging market." [93]

In order to describe quite concretely other forms which Canadian government assistance may take, we shall refer to two short brief examples, the first involving the role of CIDA in Zimbabwe and the second, that of the DFAIT in the promotion of mining interests in the Democratic Republic of the Congo (ex-Zaire).

Zimbabwe is an interesting case when it comes to analysing the participation of the Canadian government with respect to the expansion of global mining, and Canadian mining interests in particular. CIDA has played an important role in the development of Zimbabwe's mining industry. Elizabeth Smith of CIDA writes: "From aeromagnetic surveys and training of local mining experts to upgrading the quality and availability of information for investors, the benefits are now being experienced by junior Canadian mining companies".[94] These benefits have led to the fact that between 80 – 85 per cent of the exploration licences within Zimbabwe have been granted, and that Canadian companies have been able to secure a large number of these.[95] Discussing the role of CIDA, David Chaplin, Projects Coordinator of the Kanata-based Trillion Resources, states, "...access to information has helped accelerate this interest and the new three year 2.3 MCAD CIDA project to strengthen data management and communications systems within the Zimbabwe Ministry of Mines will give ongoing support to the sector".[96]

With regard to the increasingly active role played by the DFAIT, one may cite the recent visit of Mr. Kibassa-Maliba, Minister of Mines of the Democratic Republic of the Congo who was in Canada March 7–14, 1998 in order to meet representatives from the Canadian mining sector at the annual meeting of the Prospectors and Developers Association of Canada (PDAC). This mission was hosted jointly by the Canadian mining and banking interests including First Quantum, the Canadian Imperial Bank of Commerce, Banro Resources Corporation, SNC Lavallin, the Caisse de dépôt et de placement of Quebec, the Export Development Bank, Trillion Resources, etc. one the one hand, and by the DFAIT on the other. On March 12, Mr. David Kilgour, Secretary of State (Latin America-Africa) was to welcome the Minister before the later was received by the Geological Survey of Canada and the Department of Natural Resources. The morning of March 13 was to be devoted to an Internal Round Table at the DFAIT "allowing for a free exchange of ideas and perceptions etc with individuals interested in the Congo". Lunch was to be hosted by the DFAIT. Among the other activities planned for this mission but in the end which was cancelled, was a meeting in Montreal bringing together representatives of the business and financial communities, including banks, the Caisse de dépôt, and an observer from the Export Development Bank, with representatives of Canadian NGO's interested in participating in the delivery of the social programmes for the mining industry in former Zaire. Key figures in the organisation of this recent visit were Mr. Joe Clark, who was very instrumental in preparing the meeting with the NGO's, and the engineering firm Watts, Griffiths McOuatt, which acted as coordinators on behalf of the Federal government of the mission within Canada.

The mission illustrates what appears to be a growing and pro-active involvement of the Canadian government in the creation of conditions favourable to the promotion of Canadian mining and financial interests in Africa. This trend raises pressing issues concerning the social responsibility of the Canadian government and consequently of the Canadian people and suggests the need for an overall review of Canadian trade, aid and investment policies and their impact on developmental strategies and human rights.

Conclusion

Creating the conditions for economic and social development.

Canadian economic history and indeed present policies are dotted with numerous and very diverse examples of how the Canadian government or the provincial governments have intervened decisively in order to create the conditions to promote Canadian economic development (tariff policies; the Wheat Board; subsidised hydro-electric rates to attract aluminium smelters as in British Columbia and Quebec, etc).

However, it is precisely this type of policy introduced to build and protect a comparative advantage which is being denied developing countries under current measures which seek to promote further liberalisation, deregulation and state withdrawal.

For example, increasingly liberalised mining codes in developing countries which have as their objective to attract foreign capital investment in the short term, to take but one example, make it increasingly difficult for a country to pursue longer term developmental goals which seek to protect supplies of non-renewable resources and the environment more generally.[97]

It should be noted in this regard and as just one illustration, that CIDA contributed to the funding and translation of the World Bank-sponsored Guinean June 1995 more liberal mining code which has practically dropped any reference to environmental protection.

With regard to present trends towards further liberalisation, there is every reason to believe that the longer term objective of the Multilateral Agreement on Investment (MAI) negociated by OECD countries as of 1995, is to create a framework which will permit the extension of the new rules of openess governing trade and investment to the developing countries.

With regard to the mining sector, clearly the aim of current policies furthering liberalisation is to ensure greater access by foreign interests to natural resources. However, such policies introduced multilaterally in fact, mean that countries which had rights to introduce development policies are in the process of loosing them.

To the extent that the Canadian government supports the MAI or agreements aimed at achieving similar objectives, Canadian foreign policies are contributing to removing the possibility of other countries determining the place which they occupy in the process of internationalisation of trade and production. Consequently, to the extent that they support unqualified complete deregulation, Canadian trade and investment policies are actively contributing to the economic marginalisation of certain regions, by denying them access to and control over the development of their own resources – in ways, had it been the case of Canada, would have made the country's economic development over the last 100 years simply impossible.

The above raises a striking paradox concerning the coherence of Canadian foreign policy.

One the one hand, Canada has an agency, CIDA, whose role it is to promote international development.

On the other, to the extent that the MAI or similar agreements deny developing countries the policy instruments which permitted Canada building its own place on the international market through policies of state intervention, the Department of Foreign Affairs and International Trade's support of similar agreements risks contributing to the rapid and further marginalisation of certain regions of the world and notably that of Africa.

If the Canadian government signs multilateral agreements such as the MAI, is there not a real danger that it will condem CIDA to the role of merely supplying emergency humanitarian aid to mitigate the worst manifestations of the suffering which will inevitably accompany the continuing regression of social and economic conditions in certain regions of the word for which the term "developing" will become increasingly inappropriate?

Policy implications

These are clearly complex issues involving several levels of responsibility and numerous actors. However, this complexity should not be used as a smokescreen to hide the seriousness and the urgency of the problems of coherence which characterise present Canadian foreign policy but rather, points to the need of an overall integrated review of trade, investment and aid policies which would include among its objectives:

a. Examining the implications of the MAI or similar agreements not only in terms of its consequences for core labour standards, as well as social, political and economic rights, but also in terms of the access of developing countries to policy measures concerning issues such as the management of nonrenewable resources and environmental protection.

b. Examining present norms concerning business practices so as to establish guidelines for Canadian economic and commercial interests which are in line with the labour standards of the ILO. In order to ensure institutional coherence, there need to be put in place mechanisms which will guarantee that signature to one convention in this area is not negated by other trade agreements, or by fora such as APEC, or the sending of official trade delegations (Team Canada), etc. to areas where basic human rights abuse is flagrant. In this regard moreover, there needs to be recognition that there exist objective norms and standards which will apply in all situations and notably those characterised by political vaccum, political transition or political repression. The role of Canadian NGO's should not be that of attempting to draw up such norms, but of assuring local actors conditions permitting a degree of autonomy, such that their role in monitoring and enforcement procedures may be effective.

c. Examining the current aid programme in order to identify the conditions under which the promotion of Canadian economic and commercial interests can have a potentially negative effect on economic, social and political rights and recommending aid and trade policies which promote the respect of these rights.

We are living in an era when many signs would lead one to believe that the right to trade and to engage in business transactions are privileged as compared to the right to social and economic development and the protection of human rights.

are not inevitable and predetermined givens but rather the result of institutionalised processes and negociations. The numerous parameters which accompany each new situation are political constructions which create constraints but also open new possibilities for change.

This suggests three observations:

1. The importance of recognising that between the level of the abstract global forces of the market and the local level, there exists an intermediate level – that of the strategies of actors whether they be citizens, states, companies or multilateral agencies, and therefore, that of interests, relations of power and control and responsibilities.

2. This intermediary level opens areas of potential change, the results of which are not predetermined and consequently where alternative strategies can be put forward by different actors pursuing different interests and objectives.

3. This perspective suggests the very real possibility of new forms of cooperation among different social actors prepared to attempt to link the promotion of Canadian economic interests abroad to a process of monitoring and enforcement of measures to ensure the protection of human rights in the regions where Canadian economic interests are present. Such initiatives need to be accompanied by an on-going process of the production and circulation of information concerning Canadian trade, investment and aid policies and the activities of Canadian private economic interests abroad and promoted by the government, with a view of ensuring the political responsibility of the Canadian people and the Canadian government to its people.

In the present context of ever-increasing liberalisation and state withdrawal, there is a very real danger that unless further steps are taken to ensure greater policy coherence, and as illustrated by increasing Canadian mining activities in Africa, the promotion of Canadian economic interests abroad will most likely contribute to the further marginalisation of the countries concerned and consequently, to the increasing human suffering, social unrest and political instability of these regions.

Notes

1. The first subsection is based in part on: " Mondialisation, respect des droits économiques et sociaux et compagnies multinationales", presented to the 33rd Congrès de la Fédération Internationale des Ligues des Droits de l'Homme, Dakar, November 20–21, 1997. The proceedings of this international conference "Agir pour le respect des droits économiques et sociaux". Citation of this part of the paper should make reference to the forthcoming FIDH publication.

2. Thomas J. Biersteker, "Reducing the Role of the State in the Economy: A Conceptual Exploration of I.M.F. and World Bank Prescriptions", in *International Studies Quarterly*, Vol. 34, 1990, pp. 477–492.

3. On this subject see Bonnie Campbell, "Débats actuels sur la reconceptualisation de l'État par les organismes de financement multilatéraux et l'USAID" dans *Politique Africaine*, Paris, no. 61, March 1996, pp. 18–28; Bonnie Campbell, "Reconceptualisation de l'État au Sud. Participation démocratique ou managérialisme populiste" dans *Mondialisation des échanges et fonctions de l'État*, edited by François Crépeau, Les Établissements Bruylant, Bruxelles, 1997, pp. 163–231 and Béatrice Hibou, "Banque mondiale: les méfaits du catéchisme économique", in *Esprit*, Paris, August–September 1998, pp. 98–140.

4. This point is developed by Jean Coussy, "Les ruses de l'État minimum," in *La réinvitation du capitalisme*, edited by J.-F. Bayart, Karthala, Paris, 1994.

5. William Reno, "Markets, War and the Reconfiguration of Political Authority in Sierra Leone", in *Revue canadienne des études africaines*, Vol. 29, no. 2, 1995, p. 211.

6. Ibid., p. 215.

7. "La rébellion du Kivu risque d'accélérer l'éclatement du Zaire", in *Le Monde*, 27 November, 1996, p. 2. Our translation.

8. *L'Express*, 12, December, 1996, "La confession de Loïk Le Floch-Prigent". Quoted in *Billets d'Afrique et d'ailleurs*, no. 42, January 1997, p. 5.

9. I would like to acknowledge the valuable help of Henri Fruchet, a volunteer at the International Center for Human Rights and Democratic Development, Montreal and Bruno Sarrasin a student researcher from the Université du Québec à Montréal, in the second part of this paper.

10. Michael Barratt Brown and Pauline Tiffen, *Short Changed. Africa and World Trade*, Pluto Press, London with the Transnational Institute (TNI), 1992, p. 66.

11. Magnus Ericsson, "African Mining: A Light at the End of the Tunnel" in *Review of African Political Economy*, No. 51, July 1991, p. 98.

12. Magnus Ericsson and Andreas Tegen, "Structural Changes in the Global Mining Industry" presented to the Annual Conference of Prospectors and Developers Association of Canada, Toronto, March 12, 1997. The following sub-section draws very heavily from the analysis presented in the unpublished presentation.

13. The definition of junior companies used by Natural Resources Canada is a company which spends less than 4 MCAD a year on exploration. See: Keith J.Brewer and André Lemieux, "Canada's Global Position in Mining. Canadian Financing of the International Mining Industry". Presented to the Metals Finance 4th International Conference Finance for the Global Metals Industry, Toronto, May 7–9, 1997, p. 15.

Junior companies, lacking the financial resources of the larger mining companies, must rely on the stock market for the capital needed for their exploration programmes.

14. Magnus Ericsson and Andreas Tegen, "Structural Changes in the Global Mining Industry", *op. cit.*, 1997, p. 2.

15. *Mining Annual Review 1997*, published by Mining Journal, London.

16 "Structural Changes in the Global Mining Industry", 1997, *op. cit.*, p. 7.

17. Magnus Ericsson and Andreas Tegen,

"African Mining in the Late 1990's – A Silver Lining?". Forthcoming in a joint publication (1998) edited by Peter Gibbon. Copenhagen. (Manuscript p. 15).

18. André Lemieux, "Canada's Global Mining Presence" in *Canadian Minerals Yearbook, 1996*, Ottawa, Natural Resources Canada, 1996, p. 8.7.

19. Due to the success of Canadian companies in securing financing for exploratory work, which we will discuss in the mining finance section, many of the "large" companies are in fact junior companies which have secured capital for exploration with the hope of finding larger partners for the development stage if they find an economically feasible deposit.

20. André Lemieux, "Canada's Global Mining Presence" in *Canadian Minerals Yearbooks. 1996*, Ottawa, Natural Resources Canada, 1996. p. 8.1.

21. *Ibid.*, p. 8.1.

22. *Ibid.*, p. 8.1.

23. Lévesque, Beaubien, Geoffrion Inc., *Marché boursier canadien. Perspective 1997*. Montréal, 1996, p. 19.

24. Torsten Strom, "International Dimensions of the New Minerals and Metals Policy of the Government of Canada: Partnerships for Sustainable Development", in *Mineral Industry Review*, Ottawa, Natural Resources Canada, Summer 1997, p. 33.

25. Keith Brewer and André Lemieux, *Canada's Global Position in Mining*, Ottawa, Natural Resources Canada, p. 35.

26. Ibid., p. 37.

27. Ibid., p. 39.

28. Ibid., p.41.

29. Ibid., p. 47.

30. Ibid., p. 49.

31. Keith Brewer and André Lemieux, *Canada's Global Position in Mining*, Ottawa, Natural Resources Canada, 1997.p. 5.

32. Ibid., p. vi.

33. In 1997, Cambior was facing a class-action lawsuit filed by the Public Interest Research Associates over the accident at its Omai gold mine in Guyana, in which 3.2 million litres of cyanide spilled into the country's river system.

According to another more detailed source, the Caisse de dépôt had also, as of December 31, 1997, investments in the following eleven Canadian mining companies:

Alcan; 5678459 shares; 223.7 MCAD

Barrick Gold; 11646340 shares; 310.4 MCAD

Battle Mountain Canada; 249 015 shares; 2.1 MCAD

Boliden Limited; 1 000 000 shares; 3.7 MCAD

Cambior Inc; 6815678 shares; 57.6 MCAD

Geomaque Exploration; 500 000 shares; 1.3 MCAD

High River Gold Mines; 76 000 shares; 0,1 MCAD

Minorca Resources Inc; 1 547 900 shares; 1.4 MCAD

Noranda; 3 790 602 shares; 93.2 MCAD

Rex Diamond Mining Corporation; 655 000 shares; 0.6 MCAD

SEMAFO; 130 300 shares; 0.3 MCAD.

34. I would like to acknowledge the valuable help of Bruno Sarrasin and Émilie Revil, student researchers at the Université du Québec à Montréal, in the third part of this paper.

35. André Lemieux, "Canada's Global Mining Presence", in *Canadian Minerals Yearbook, 1996*, Ottawa, Natural Resources Canada, 1996, p. 8.7.

36. André Lemieux and Keith Bower, *Canada's Global Position in Mining*, Ottawa, Natural Resources Canda, 1997, p. V.

37. Jean Suret-Canale, *Afrique Noire. De la colonisation aux indépendances 1945–1960*, Editions sociales, Paris, 1972.pp. 238–261. See also Fayçal Yachir, *Enjeux miniers en Afrique*, Karthala, Paris, 1987.

38. André Lemieux and Keith Brewer, *Canada's Global Position in Mining*, Ottawa, Natural Resources Canada, 1997, p. 53.

39. *Ibid.*, p. 23.

40. André Lemieux, "Canada's Global Mining Presence" in *Canadian Mineral's Yearbook, 1996*, Ottawa, Natural Resources, 1996, p. 8.6.

41. Ibid., p. 22.

42. André Lemieux, "Canada and the Globalization of the Mining Industry" in *Mineral Industry Review*, Ottawa, Natural Resources Canada, 1996, p. 32.

43. MBendi Information Services, "World Gold", MBendi Information Services, 1997. (http://mbendi.co.za/indy/ming/mingaf.htm). February 12, 1998.

44. André Lemieux, "Canada and the Globalization of the Mining Industry" in *Mineral Industry Review*, Ottawa, Natural Resources Canada, 1996, p. 32.

45. André Lemieux, "Canada's Global Mining Presence" in *Canadian Minerals Yearbook, 1996*, Ottawa, Natural Resources, 1996, p. 8.6.

46. *AfriCan Access Magazine*, Victoria, B.C., 1st Quarter, 1998, p. 11.

47. André Lemieux, "Canada's Global Mining Presence" in *Canadian Minerals Yearbook, 1996*, Ottawa, Natural Resources, 1996, p. 8.7.

48. *Mining Annual Review 1997*, p. 155.

49. Kwabena Mate, "Boom in Ghana's Golden Enclave" in *Africa Recovery*, United Nations Office of Communications and Public Information, New York, 1997.

(http://www.un.org/ecosocdev/geninfo/afrec/vol11no3/Feb98/ghanagld.htm). March 10, 1998, p. 1.

50. *Ibid.*, p. 1.

51. *Ibid.*, p. 2.

52. André Lemieux, " Canada's Global Mining Presence" in *Canadian Minerals Yearbook, 1996*, Ottawa, Natutal Resources Canada, 1996, p. 8.6.

53. Canadian mining companies in selected African countries and companies listed on Canadian stock exchanges as of July 1998.(Source: MineSCAN 1998–99, Southam Mining Publications Group).

54. Walter Birmingham, I. Neustadt, E.N.Omadoe, *A Study of Contemporary Ghana. The Economy of Ghana. Volume 1*, George Allen & Unwin Ltd, London, 1966. "Mining", chapter 11 by Tony Killick, p. 250.

55. Thomas Akabzaa, "An Underground Activity", in *African Agenda*, Vol.1, No.5. 1995, p. 62.

56. The Economy of Ghana, *op. cit.*, p. 252. Table 11.1.

57. *Ibid.*, p. 251.

58. *Ibid.*, p. 259.

59. Cluff 's operations in Zimbabwe saved AGC from having to report a decline in operations in 1996. Economist Intelligence Unit. *Ghana. Country Report.* 4th Quarter 1996, p. 26.

60. The determinant role of these policies is recognised by foreign analysts: "Gold dominates the mining sector, which has thrived as a result of a series of astute revisions to Ghana's mining laws in the 1980's." Economist Intelligence Unit, *Ghana. Country Profile. 1996–97*, p. 23.

61. While in a completely different sector, it is interesting to note that the former state-owned Ghana Consolidated Diamonds (GCD)was acquired at approximately the same time by De Beers of South Africa and Lazare Kaplan International of the United States. Economist Intelligence Unit, *Ghana. Country Profile 1997–98*, p. 23 and p. 26.

62. Economist Intelligence Unit, *Ghana. Country Report* 4th Quarter, 1996, p. 25.

63. Economist Intelligence Unit, *Ghana. Country Report* 1st Quarter, 1997, p. 29. According to the Financial Times, *Energy Yearbook*, "Mining 1998" (1997): "Lonrho plc owns 37 per cent , Government of Ghana 30 per cent ."

64. Raw Materials Data, Stockholm, 1997, based on the Annual Report of AGC.

65. Economist Intelligence Unit, *Ghana. Country Report*, 3rd Quarter, 1996, p. 18.

66. Economist Intelligence Unit, *Ghana. Country Report*, 1st Quarter, 1998, p. 20. The table does not include 1997 figures for Ghanaian Australian Goldfields, GAG, which according to Ghana's Chamber of Mines produced some 120 500 oz the previous year; it is not clear whether the absence of GAG reflects a simple omission, a takeover or a membership lapse.

67. William Appiah, "Ghana's second gold rush" in *African Agenda*,, Vol. 1, No.5, 1995, p. 60.

68. Kwabena Mate, "Boom in Ghana's Golden Enclave" in *African Recovery*, Vol. 11, no. 3.

69. The Economist Intelligence Unit, *Ghana.Country Report*, 2nd Quarter 1998, p. 18.

70. Kwabena Mate, op. cit.

71. William Appiah, *op. cit.*, p. 60.

72. Kwabena Mate, op. cit.

73. Ibid.

74. It must be stressed that the following portrait can only be considered as suggestive because percentages of shares, afffiliations and the nature of operations change not only from month to month but daily. The profile presented here is done so to describe certain trends.

75. *Mining Annual Review*, 1997, p. 156.

76. Economist Intelligence Unit, *Ghana. Country Report*, 4th Quarter 1996, p. 27.

77. Economist Intelligence Unit, *Ghana. Country Report*, 3rd Quarter 1996, p. 18.

78. Economist Intelligence Unit, *Ghana. Country Report*, 1st Quarter 1997, p. 29.

79. Economist Intelligence Unit, *Ghana. Country Report*, 3rd Quarter 1995, p. 20.

80. For further details see *AfriCan Access Magazine*, Victoria B.C. 1st Quarter 1998, " The risks of not investing in Africa" p. 17 and "The Canadian Political Elite Discovers Africa", pp. 8–10.

81. Economist Intelligence Unit, *Ghana. Country Report*, 2nd Quarter 1997, p. 18.

82. William Appiah, "Ghana's second gold rush", in *African Agenda*, Accra, Vol. 1, No. 5, 1995, p. 60.

83. *Inter Pares Bulletin,* Ottawa, Vol. 20, No.3, June 1998, p. 2.

84. This description and that at Teberebie is taken from William Appiah, *op. cit,* pp. 60–61.

85. *Ibid.*, p. 60.

86. *Ibid.*, p. 61.

87. Economist Intelligence Unit, *Ghana. Country Report*, 2nd Quarter, 1997, pp. 17–18. According to another source: "In Ghana's Western region, indigenous people expressed their opposition to the expansion of mining activities by sitting on rocks that were to be blown up. Police were brought in, demonstrators were shot at and some of them killed." *Inter Pares Bulletin*, Ottawa, Vol.20, No. 3. June 1998, p. 2.

88. William Appiah, *op. cit*, p. 61.

89. Kwabena Mate, "Boom in Ghana's golden enclave" in *Africa Recovery*, Vol. 11, No. 3, United Nations, New York.

90. André Lemieux and Keith Brewer, *Canada's Global Position in Mining*, op. cit., p. 4.

91. I*bid.*, p. 5.

92. *Ibid.*, p. 7

93. EDC Today. "EDC supports Canadian exports to Ghana", Communiqué, Ottawa, December 22, 1997, (gilero@edc.edc.ca)

94. Elizabeth Smith, "Boosting Mineral Exploration in Botswana and Zimbabwe: Canada's Role". CIDA, 1997, (http://acdi-cida.gc.ca), March 1, 1998, p. 2.

95. *Ibid.*, p. 2.

96. *Ibid.*, p. 2.

97. This point is developed in B. Campbell, "Environmental Policies, Mining and Structural Adjustment in Guinea" *Journal of Mineral Policy, Business and Environment. Raw Materials Report,* Stockholm, vol.13, no.1, April 1998, pp. 34–44. ■