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The role of the public sector and transnational corporations in the mining development of Latin America *Jan Kñakal**

The world economic crisis, especially the sharp decline in the demand for minerals and metals and the collapse of their real prices (31% in the last five years), together with unprecedented economic stagnation and indebtedness, have eroded the capacity of the governments and public enterprises of the mining countries of Latin America to negotiate with the transnational corporations. These corporations are not only reducing their investments in the region but also trying to evade the effects of the crisis by cutting back the benefits acquired by the mining countries in earlier negotiations. Given the present adverse situation and the danger of an incentives war among governments to attract foreign capital, some thought should be given to the achievements and miscalculations of the public sector and the change which it has undergone in its relations with the transnational corporations in past decades,

The first part of the article assesses the structural changes reflecting the consolidation of the sovereignty of the Latin American countries over their mining resources, particularly in the matallurgical phase. This is followed by a discussion of the problems connected with the role of the State and the public enterprise in the development of the mining and metallurgical industries, with emphasis on mutual links within the framework of social and business interests, of the administrative capacity of the public sector to negotiate with transnational corporations, and of certain internal problems of the public enterprise, Lastly, an attempt is made to provide an illustration of the divergent interests of the transnational corporation and the public sector of the mining countries of the periphery in the main areas of their interaction and co-operation, together with options and modalities for solving the problem, with emphasis on the possibilities of understanding between the parties.

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Mining resources and the relocation of minerals processing¹

Analysis of the main structural changes in the world mining and metallurgical industry in the past decade leads to the conclusion that the mining countries of Latin America and other developing regions achieved a greater degree of sovereignty over their mining resources through the nationalization of local subsidiaries of transnational corporations and the establishment of public enterprises, which for some minerals now account for important shares not only of mining production but of metallurgical production as well. For example, the nine main copperproducing transnational corporations, which in I960 controlled 60% of total world production saw their production decline between 1960 and 1981 (from 2.4 to 1.7 million tons) and their world share fell to only 23% (table 1). This decline was due primarily to nationalization in Zaire (Union Minière, 1967), Zambia (Roan AMC, 1970) and Chile (Kennecott and Anaconda, 1971). In the second half of the 1970s the public enterprises of these three countries accounted for almost a third of world production (McKern, 1983). The public enterprises of developing countries also have an important role in other minerals, such as tin and bauxite (Bolivia, Jamaica and Guyana).

The experience of Latin America and other peripheral countries seems also to indicate that their increased sovereignty over mining resources is associated with a tendency for them to abandon their traditional role as producers of minerals for exclusive processing and consump-

'This article is an updated summary of the study submitted by the author to the Workshop on Technical and Economic Cooperation for the Mining and Metallurgical Sector of Latin America and che Caribbean organized by I-CLAC and the Latin American Integration Association under the auspices of the Commission of the European Communities (Santiago, Chile, ¡9 to 23 November 1984) (Kñakal, 1984). The empirical basis for this study is provided by the case studies on Chile (Herrera and Vignolo, 1981), Bolivia (Kñakal, 1981), Jamaica (Kñakal, 1982) and Mexico (Kñakal, 1984) carried out under RGACs interregional project on transnational corporations and Latin America's export commodities.

Table 1

SHARE OF THE MAIN TRANSNATIONAL CORPORATIONS IN WORLD PRODUCTION OF COPPER (1960-1981)

(Thousands of metric tons)

Corporation	1960	1970	1981
Kennecott (USA)"	571	519	378
Asarco (USA)		72	327
Phelps Dodge (USA)	234	413	287
Newmont (USA)			228
Anglo American (South			
Africa)	392	153	185
Anaconda (USA)"	476	242	135
Inco (Canada)	155	177	132
Roan Group — AMC			
(USA)"	241	338	
Union Minière (Belgium)"	331		
Total 9 transnational			
corporations	2 400	1 914	1 672
Share of world production			
(percentage)	60	34	23

Source; CTC (1983).

"Union Minière was nationalized by the Government of Zaire in 1967, Roan AMC by the Government of Zambia in 1970, and Kennecott and Anaconda by the Government of Chile in 1971.

tion in the industrialized countries. The cases of Chile, Peru, Bolivia, Jamaica and Mexico are typical in their commitment to increase the volume of minerals processing in order to enhance their aggregate value and export earnings and as a means of overcoming the oligopolistic barriers of the world markets. This trend can be seen in the relocation of the processing of solid and non-ferrous minerals from the capitalist centre to the mining countries of the periphery and the socialist countries.

Analysis of the relative positions with respect to mineral production and processing and metal processing and consumption for six important non-ferrous products (copper, tin, bauxite/aluminium, lead, zinc and nickel) shows that between 1970 and 1982 the share of the market-economy industrialized countries in metallurgical production and metals processing fell (table 2). At the same time, with the sole exception of lead, there was an increase in both branches in the share of the periphery and espe-

cially of Latin America. The case of tin is remarkable in that the share of the periphery increased from 60 to 70% of the world total (and Latin America's share from 2 to 13%).

However, except for this case, at the beginning of the 1980s the relocation process was still in its initial stages: while the peripheral countries had a share of between 20 and 45% of the world total in the mining phase, their share in the processing of the five minerals ranged from 11 to 23% (these figures are for lead and copper) and in metals processing the range was only from 5 to 14% (nickel and zinc). The ranges for Latin America were from 8 to 23% in the mining phase (nickel and copper), from 5 to 13% in the metallurgical phase (nickel and copper) and from 2 to 5% in the processing of metals (nickel on the one hand and copper, tin and zinc on the other). The transfer of metallurgical activities and the processing of non-ferrous metals from the capitalist centre also coincided with the strengthening of the positions of the socialist countries, especially in metals processing, in which they recorded larger increases than all the peripheral countries taken together.

Of the metal-consuming countries of Latin America only Brazil and Mexico stand out —relatively industrialized countries with big local markets. Both have large resources of the minerals in question, and also of phosphates in Mexico's case; they began their substitution industrialization by importing minerals (such as bauxite and tin in Brazil and phosphates in Mexico), the local exploration and exploitation of which were undertaken only at a later stage; these countries subsequently became important exporters of metals and manufactured goods.

The structural changes in world mining and metallurgy suggest that, in the light of the sustained progress in the processing of minerals and metals in the centrally planned economies and the relatively recent entry of the peripheral countries in these phases of industrialization, it is not enough to rely on market forces to achieve the relocation of these activities in the peripheral countries. To the contrary, greater importance attaches to the strategies and plans of governments and to institutional policies and instruments in the attainment of these goals. Plans and strategies do not always involve centralized planning and State enterprises, as is

clearly shown by the familiar Japanese industrialization model, in which the spectacular progress achieved is due to fruitful co-operation between the State and the prívate company.

It would be wrong to assume that this relocation will necessarily work against the interests of the industrialized countries and their transnational corporations, as can be seen from the far from isolated cases in which these corporations have thought it advantageous and profitable to relocate their processing activities in certain countries of the periphery. It is also clear that the

Table 2

LATIN AMERICA: CHANGES IN SHARES IN THE PRODUCTION AND RESERVES

OF THE WORLD MINING AND METALLURGY INDUSTRY IN THE 1970s

(Millions of tons and percentages of the world total)

		Production						
Mineral/metal/region	Reserves	Mining	Metallurgy			Metal prot:essing		
	1982	1970	1982	1970	1982	1970	1982	
COPPER — World	691.2	6.4	8.2	7.6	9.5	7.3	9.1	
Centre	43.0	42.5	29.6	61.6	50.1	74.5	63.9	
Periphery	45.0	36.0	44.8	18.6	23.2	4.0	9.3	
Latin America	30.0	15.5	22.7	7.6	12.6	2.5	5.0	
Socialist countries	12.0	20.5	25.6	19.8	26.7	21.5	27.1	
TIN — World	8.0	0.2	0.2	0.2	0.2	0.2	0.2	
Centre	7.0	6.4	9.4	24.5	14.1	71.1	61.5	
Periphery	68.0	78.3	75.2	60.5	69.9	8.0	11.0	
Latin America	15.0	16.6	16.7	2.3	12.8	2.7	5.0	
Socialist countries	25.0	15.3	15.4	15.0	16.0	20;9	27.5	
BAUXITE/								
ALUMIN1UN — World	16 740.0	59.5	78.2	10.3	14.0	10.0	14.3	
Centre	24.0	28.5	37.0	72.8	61.9	73.2	65.5	
Periphery Latin America and	70.0	53.4	43.9	5.2	13.3	5.3	9.8	
Caribbean	26.0	41.5	23.2	1.6	5.7	2.1	3.6	
Socialist countries	6.0	18.1	19.1	22.0	24.8	21.5	24.7	
LEAD — World	127.6	3.4	3.6	4.0	5.3	3.9	5.3	
Centre	61.0	50.9	49.2	62.2	61.3	66.7	59.6	
Periphery	18.0	20.1	19.7	11.7	10.9	6.9	10.2	
Latin America	10.0	12.6	12.5	7.7	6.3	4.3	4.5	
Socialist countries	21.0	29.0	31.1	26.1	27.8	26.4	30.2	
ZINC — World	172.6	5.5	6.5	5.2	6.0	5.0	6.0	
Centre	61.0	55.5	53.0	68.0	58.9	68.3	55.0	
Periphery	26.0	18.7	21.1	6.3	12.1	7.7	14.1	
Latin America	14.0	125	15.2	3.6	7.0	3.2	4.9	
Socialist countries	13.0	25.8	25.9	25,7	29.0	24.0	30.9	
NICKEL — World	183.7	0.7	0.6	0.6	0.6	0.6	0.6	
Centre	24.0	52.1	34.0	69.2	50.9	76.6	63.7	
Periphery	62.0	30.0	34.2	6.2	14.6	1.5	5.3	
Latin America and								
Caribbean	10.0	6.0	8.5	0.8	5.3	0.5	1.7	
Socialist countries	14.0	17.9	31.8	24.6	34.5	21.9	31.0	

Source: Prepared on the basis of ECLAC (1984).

acceleration and extension of this process would require the more active participation of the State, of the industrialized countries and of international organizations in order to achieve greater balance between the desire for business profits and the longer-term political objectives. The region's experience with the nationalization of copper in Chile, for example, also indicates both the viability and the pitfalls of this initiative.

H

The role of the public mining-metallurgical enterprise

Experience of the public enterprise —MINPECO, CODELCO, COMIBOL, ENAF and FERTIMEX in Peru, Chile, Bolivia and Mexico— is so heterogeneous in terms of achievements and problems that it is difficult to draw any firm conclusion. This applies above all to the question as to whether the public enterprise is intrinsically a positive or negative factor for the optimum development of the mining and metallurgical industry. Among the positive features are the great profitability achieved by CODELCO, which obtained some US\$ 6 600 million for the Chilean State budget during the period of low copper prices (1975-1983); the more profitable prices obtained by MINPECO in comparison with Southern Peru Copper Corporation; the dizzying rate of development of FERTIMEX and its high relative degree of independence in technology and engineering; and, in general terms, the increase in the drawback value of exports achieved through the processing and marketing of the minerals and the increased use of local inputs. On the negative side there are the high and uncompetitive production costs, in the MINEROPERU and ENAF foundries for example, or in FERTIMEX's industrial processing of phosphates; the general failure to explore mineral reserves, introduce new technologies and commission productive capacity, and the maintenance of the existing capacity, which aggravates these problems, in COMIBOL and ENAF in Bolivia.

1. Origin and characteristics

The active role of the State in economic development and its entrepreneurial function have a long history and a relatively broad scope in Latin America. The involvement of the State in industrial activities originated in substitution industrialization. In Chile, for example, the Corporación de Fomento de la Producción (CORFO) was established by the State in 1939 and its financing requirements led to increases in the taxation of the transnational corporations operating in the copper industry.

Despite the regional and sectoral fragmentation of public enterprises in Latin America, they are similar in their characteristics and functions, depending on the various stages of development, the patterns adopted, and the prevailing ideologies and policies of the governments. The fundamental factor which distinguishes the various positions and interpretations is the definition of the role and the advantages attributed to the free play of market forces and their automatic reactions to the active intervention of the State in the economy; the extreme examples are those of the centrally planned economies of the socialist countries (only Cuba in the region) and of the neoliberal school of Chicago (introduced in Chile in the 1970s, for example). Since mixed economies with different degrees of coexistence between the public and private sectors predominate in Latin America in both historical and geographical terms, we will now discuss this general framework, without losing sight of the heterogeneity of national situations.²

The question here is the particular nature of the public sector in the mining and metallurgical industry, for this clearly influences the development of its capacity and profits. The actions of

²Ba)raj and others (1983) distinguish in the mixed economies the market "reformed" through the execution of projects and programmes and the market 'guided' by the deliberate and systematic intervention of the State in the economy and society.

the public sector in Latin American mining are based on the concept, which enjoys broad national consensus (also called "nationalist"), of the need to exercise sovereignty over mining resources and increase the economic and social benefits to the country through the nationalization of foreign corporations. This Statist solution seems to have pragmatic origins in the lack of private capital in the big concentrations required or in the refusal of the private sector to assume the risks involved (the obvious exceptions are the Chilean nationalization of copper in accordance with the socialist ideology of the Government of Popular Unity, even though it was supported by the opposition; and where private national capital is concerned, the triple joint enterprises of Brazil). In the relatively highly industrialized countries with large local markets such as Brazil and Mexico, public enterprises were established in mining and processing to undertake new projects requiring large investments (filling the gaps) without involvement of private capital, as was the case in substitution industrialization in general, while in Chile, Peru, Bolivia and Jamaica they were established, with or without association of the transnational corporation, on the basis of nationalized foreign companies. This difference of origin can have both positive and negative effects on the subsequent development of the public enterprise.

It is also considered that the public enterprise in the mining and metallurgical industry has a strategic value for the country's development, not only through its local effects (employment, inputs, technology, infrastructure, government budget) but also and primarily because of its importance for the incorporation of the country in the international market, as a tool for the acquisition of foreign exchange and increased earnings from processing and marketing, and in negotiation, confrontation and cooperation with the transnational corporations and other foreign agents (including their counterparts in other countries and international groupings). This external projection may be of less importance in public enterprises oriented primarily towards the local market (as in the distribution of phosphate fertilizers by FER-TIMEX). Moreover, the strategic nature of the public mining enterprise seems to endure through all political and economic vicissitudes. From the political standpoint for example, it has survived the operation of the law of the pendulum, reflected in many countries of the region in the succession of governments (both elected and self-appointed) with opposite ideologies and political programmes. This is confirmed by the example of the public mining enterprises in Bolívia, Chile, Peru and Jamaica. This situation has not arisen in Mexico owing to that country's exceptional political continuity.

This survival capacity can also be seen with respect to the notorious instability of the external commodity markets which in extreme situations, such as the present world economic crisis, often leads to the collapse of private companies which have neither the financial capacity or the diversification of activities needed to stay afloat (which the transnational corporations do have). This degree of business security, connected with the broad national political consensus, influences the performance of the public enterprise.

2. Administrative capacity to negotiate with transnational corporations

The experience of negotiation with transnational corporations confirms the importance of having information, knowledge and experience of the various specific technical aspects of this kind of transaction, as well as of the global, socio-economic and political ones. The process which has taken place can generally be described as one of trial and error. At the outset the representatives of the State relied primarily on the political will of the government (on "nationalistic rhetoric", as the neoliberal critics of the process put it) and they received only limited technical support, mainly from intellectuals and social-science experts. In the 1980s the peripheral State now has specialized departments and public enterprises operating in the industry. Of course there are different kinds of experience, as can be seen from the limited capacity of the Peruvian State to control the complex agreement with the Southern Peru Corporation concerning the Cuajone project, in contrast to the ability and experience of Chile's State organizations and technical personnel acquired during the successive advances of State intervention in the industry.

in its interaction with the transnational corporations the public sector exhibits various forms of organization and administrative capacity to perform the tasks of information, negotiation, preparation of agreements and subsequent control. For example, the negotiation may be carried on at the highest level of the government or in special groups, such as the one which prepared the ground for the establishment of the Bauxite Institute in Jamaica, or, especially when the public sector has gained experience, through more hierarchical structures which correspond to the respective departments of the government and the public enterprise. The experience of Peru and Jamaica seems to suggest that the forms of organization may be less important than maintenance of the difficult balance between the various sectoral and private interests of the various units in the public sector involved in the project (mining, metallurgical, economic, foreign trade). This balance can be achieved, at least potentially, if the central economic and planning body conducts the negotiation in an informed and flexible but still authoritative manner.

The standard approach of government analyses (which is to flourish the arguments in support of the proposed solutions) should be supplemented with forecasts and projections drawn up in the light of various circumstances, including ones unfavourable to the project and the proposed decisions. For example, in the Jamaican negotiations in the mid-1970s it was difficult, if not impossible, to assess the effects of the world economic crisis, which subsequently hit the bauxite and aluminium industry. But previous experience, not only of Jamaica itself, could have pointed to the need to consider the possibility of accelerated diversification of their sources of supply by the transnational corporations. Account could also have been taken of the case of OPEC, not only as a model of peripheral solidarity but also in terms of the higher energy costs which it meant for the industry, with the familiar implications for its competitive capacity.

Lastly, it must be remembered that the institutional aspects of negotiating capacity, although important, can be cancelled out by other factors which determine the negotiating strength of the parties. As was pointed out at the beginning of this article, this is particularly likely to happen in a period of world economic crisis which strengthens the power of the transnational over the over-supplied markets of the mining countries.

3. Links between the State and the public enterprise

The public sector in the mining and metallurgical industry is usually viewed as an entity forming an integral part of the State organs and departments linked to the industry and with the public enterprises operating in it. However, the Latin American experience indicates that the roots of the problems described and of the low productivity and profitability of the public enterprise lie in the divergence (and the means of overcoming it) between the businessman's eagerness for profits and capital accumulation and the broader interests of the country's society, represented by the State, and of its institutional apparatus and the government in power which directs it. The debate on this dilemma is a very old one and is polarized around ideological approaches not only in the peripheral countries but also in the industrialized countries of the capitalist centre and in the socialist countries. To define the problem better in the framework of the mining and metallurgical industry it is useful to indicate the kinds of interests at stake and the way they have affected the Latin American experience.

The public mining enterprise is a tool of the economic and social policy of the State, and it is possible to distinguish three main functions of the State: optimum utilization of mining resources within the framework of the objectives and goals of the government's programme and plans; redistribution of income between the public mining enterprise and other sectors of the economy and society; and the distribution of income between capital and labour within the State enterprise itself.

The experience of the public enterprises of Bolivia, Jamaica and Mexico seems to indicate that the State's distributive function can be incompatible with the optimum development of the industry, with which the public enterprise, or at least its directors, is fully identified. It is clear that the sales of phosphate fertilizers to farmers by FERMITEX at prices lower than production cost, the use of the public-sector bauxite develop-

ment fund in Jamaica to pay off the government's budget deficit, or the maintenance of disguised unemployment in the inefficient COMIBOL mines in Bolivia undermine the profitability of the public enterprise and in the end lead to its undercapitalization and indebtedness both locally and abroad, obliging the State to bail it out with tax funds and guarantee its loans.

The redistributive functions of the State as regulator of spontaneous market forces in a mixed and underdeveloped economy are essential to the attainment of the economic and social goals set by the government and as a means of coping with the pressures from disfavoured social groups, particularly under a democratic régime. But how is the desired balance between State control and the economic independence of the public enterprise to be achieved? Bajraj and others (1983) suggest, in general terms, the following technical options: i) to determine and quantify the State subsidies for the State enterprise ex ante or at least to establish priorities for those which are to be helped; ii) with respect to pressure for jobs, use direct State support in the sector of new owners instead of subsidizing unemployment; and iii) set a limit on the financing which the government may furnish to a public enterprise.

In view of the peculiar nature of the public enterprise in the mining and metallurgical industry, which clearly distinguishes it not only from the traditional public enterprises of the services sector but also from those concerned with the domestic market, it would be useful to explore the possibilities of concrete implementation of the propositions set out above. One possible method, taking advantage of the external links of the State mining and metallurgical enterprise and its competitive and co-operative coexistence with the transnational corporations, would be to rethink the role of the State's existing tools of control (administrative and legal, budgetary and tax) and transform them into contractual and commercial tools. Where possible, consideration should be given to the institutional division of economic from social functions (for example, provisioning and social welfare for the miners. State distribution and marketing of fertilizers).

4. Internal problems of the State enterprise

Account will first have to be taken of the national situation, including both the degree of socio-economic and technological development and the time taken to acquire experience and overcome the transitional problems of the big corporations, which have usually been established against the grain of the philosophy and type of administration of the former international owners. Of course, the possibility of obtaining direct or indirect technical and economic support for the State mining enterprise from other social and economic sectors is not the same in Brazil, Mexico or Chile as in Bolivia and Jamaica. For example, in Mexico the public enterprises established in the petroleum and petrochemical industries were of greatest importance for the technological and engineering progress of FERMITEX.

Furthermore, the State's imposition of social functions on public enterprises and the excessive centralism of their control have direct effects not only on profitability and capital accumulation in the public enterprise (helped to greater or lesser extent by State grants) but also, and perhaps more importantly, on the entrepreneurial spirit, for there is a tendency for bureaucratization and lack of responsibility and personal initiative in the management of public enterprises. This situation is often muddled and confused by the system of subsidized costs or costs programmed for certain social functions, which leads to faulty business and administrative management. A clearer distinction between business and social functions would help to solve this kind of problem.

Furthermore, the lack of investment and the heavy debts of the public enterprises, which enjoy State support, lead to an attitude of fatalism or inertia at the top, which can be aggravated by the lack of incentives and opportunities for personal advancement and by the appointment and frequent replacement of management staff for political reasons regardless of professional merit. Greater contractual stability for managers and directors and public control over personnel changes could strengthen loyalty to the enterprise and improve its economic results.

The labour problems and conflicts affecting many public enterprises, and indeed private

ones, are often connected with failures of business management and with the long tradition of struggle for better conditions against the former foreign owners of the enterprise, which often led to the formation in the mining enclaves of a kind of trade-union élite, relatively privileged in comparison with the rest of the country's labour force. Changes of attitude towards the public enterprise require more time and could be facilitated by proper systems of training, promotion and incentives and by degrees of worker participation in the management of the enterprise.

Lastly, the planning and control of the public enterprise by the State should be reflected in a proper planning and information system within the enterprise. This should be used for the State control of the enterprise's activities and also as an effective tool of everyday management; it could also be used for producing an overview of the enterprise's development with respect not only to investment projects but also to the main areas of technological development, training of workers, and marketing and finance.

III

The transnational corporation and the government of the mining country: interests, options and criteria

1. Divergence of goals and main options of interaction

With regard to the interaction and links between the public sector and the public enterprise, it is obvious that the divergences between their interests are quite different from those between the transnational corporation and the government of the mining country. The public enterprise is part of the economy of the mining country and, in addition, it is owned by the State, whereas the direct foreign investment and its subsidiary enterprise in the country are part of a much wider transnational heritage whose centre of administration and capital (the parent company) is located in the industrial country of the corporation's origin. In the mining and metallurgical industry the desire for profits from the capital invested by the foreign shareholders and financiers means that the transnational corporation must guarantee supplies of the mineral at the lowest possible local costs and within the framework of the maximum profitability of the whole of the corporation's world operations.

In contrast, the global objectives of the government of a mining country are to make optimum use of the local mining resource for the country's development by acquiring foreign exchange and budgetary funds and by integrat-

ing the mining project, through the working of its various links (welfare, employment and local inputs, technological development and industrialization), in the attainment in general terms of greater control (national sovereignty) over the mining and metallurgical industry.

The development experience of Latin America and other regions shows that this divergence of interests between the transnational corporation and the mining State has several implications. The main political options take the form of different models of interaction and relationship between the transnational corporation and the public sector of the mining country. The traditional concession of the mineral resource leads to a pronounced imbalance in favour of the transnational corporation with respect to the distribution of the income from the project and its interaction with the local economy. This model was gradually replaced in the 1970s by the modern or developmental method of concession which is tending to eliminate, in different ways and to different degrees, the former situation of a foreign enclave in the economy of the mining country; this was the case, for example, with the Toquepala and Cuajone agreements in Peru. The nationalization, total or partial, of the subsidiary of the transnational corporation by the government of the mining country has also taken place,

or the transnational corporation itself may have decided to withdraw its investment and sever its connections with the country's mineral resource, with the subsequent establishment of the public enterprise. Joint enterprises involving the public enterprise and the transnational corporation have also been established, together with various kinds of co-operation between the two.

The region's experience seems to confirm that in their application and development these options do not constitute a lineal succession but rather a process of superimposition and combination (for example, in contrast to the Bolivian nationalization of tin in 1952, the establishment of joint enterprises involving the public enterprise CODELCO and the transnational corporations in Chile's nationalization of copper led to the subsequent total nationalization of the subsidiaries in Chile; similarly, the partial nationalization in Jamaica coincided with the establishment of joint enterprises with the transnational corporations and the conclusion of co-operation agreements).

This very variety and combination of the main political options of interaction between the transnational corporation and the mining State seem to demonstrate that the differing interests of the two parties are not necessarily irreconcilable (although they are so, at least temporarily, in the event of nationalization or the unilateral and forced withdrawal of investment), and that solutions can be found provided that both parties find them conducive to their main objectives, i.e., the exploitation and supply of the mineral and the technological and financial input which the transnational corporation offers the mining company.

The divergences of interest and the solution options affect many specific aspects of direct foreign investment and other modalities of participation by the transnational corporation in the mining and metallurgical development of the peripheral country. The list reproduced in the annex is an attempt to summarize and classify the interests, options and criteria of the transnational corporation and the government of the mining country as well as the options open to the institutions and instruments in dealing with certain important problems. This list is not intended to be exhaustive or categorical but rather to serve as a basis for the better under-

standing and discussion of the problems. These problems will now be considered, with special reference to Latin American trends in the modern modalities of concession and co-operation between the transnational corporation and the public sector.

Financing, ownership and control of the mining project[^]

In these related fields, which are of great importance for the participation of transnational corporations in the mining projects of the periphery, the adaptability and flexibility of the transnational corporation in pursuing its goal of profit can be seen with greater clarity in the alternative proposals they put forward in response to the requirements and objectives of the governments of the periphery. Firstly, the abandonment of the traditional mode of financing direct foreign investment primarily with the corporation's own resources and loans from the world financial market in favour of diversification of financial sources, with preference given to those with a direct interest in the mining project and including governments and international organizations (as in the Cuajone agreement in Peru), not only reduces the net financial participation and the external risk assumed by these corporations but also enables them to internationalize the investment and their own interests by acting as representative of a group of financiers. This can be seen, first and foremost, in the demand for guarantees of rapid total return on the real value of the investment (including, where appropriate, compensation for the property nationalized by or ceded to the government).

The interests of the peripheral government can coincide with those of the transnational corporation with respect to the guarantees needed for the total financing of the project, but the tendency is for better loan terms and lower costs (interest, commissions, repayment periods), particularly through increased participation by international organizations (such as the World Bank or the Inter-American Development Bank), and for compensation to be paid to the transnational corporation on the book value of the assets, for the return on the direct foreign

investment to be officially controlled, etc. If a joint enterprise or joint operations are established with the transnational corporation, the peripheral government has an interest in facilitating its financial participation by furnishing mining land in its ownership and postponing payment of its fees until the joint investment is producing income. Participation in the financing of the mining project by corporations interested in acquiring its future production means that agreements can be made for repayment of the loan from future sales. This method can be particularly beneficial for public enterprises, enabling them to finance the investment and at the same time ensure a future export market (this arrangement appears frequently in agreements with the State enterprises of the socialist countries, but also in the case of Japanese and other companies).

Naturally, the ownership and control of the enterprise administering the mining project is determined by the nature of its original investment financing. The economic and legal basis of the traditional concession, the operation of which was financed exclusively by the transnational corporation, was determined by its ownership and control, also exclusive, of the mining enclave, over which the peripheral State exercised only minimum control and indeed over only marginal matters. Faced with decolonization and the upsurge of economic nationalism in the peripheral countries, the transnational corporations agreed to renegotiate and modernize traditional concessions (with wider redistribution of income and national integration in the project), but they insured themselves against increased economic and political risks by internationalizing the direct foreign investment. Lastly, the frequent instances of nationalization of the subsidiaries of transnational corporations and the establishment of public enterprise led to shared ownership by the parties in the joint enterprise (with the transnational corporation maintaining its control) and to many different forms of co-operation between them (agreements on exploration services, transfer of technology, engineering and training, administration of the enterprise and marketing of its products).

In this process, which was not lineal or perfect in all cases, it is important to emphasize the question of the effective control of the joint enterprise and of the public enterprise, which contracts for the services of the transnational corporation without this corporation participating in its ownership. In the case of a joint enterprise of transnational corporation and public enterprise, the control exercised by the corporation through management and other service contracts, its right of veto in the governing bodies of the enterprise, etc., safeguard the main objective of the transnational corporation of obtaining the maximum profits from the direct foreign investment through exploitation of the mineral resource and efficient and profitable management of the enterprise. Furthermore, as demonstrated by the joint enterprises of Chile and Jamaica, the other financiers of the direct international foreign investment, especially the banks, make their lending conditional on management by a corporation of recognized international standing.

The interest of the State enterprise of the mining country participating in the production or profits of the joint enterprise coincides with that of the transnational corporation in the sense that its own administrative and technical capacity is insufficient for it to assume managerial responsibilities on an equal footing with its partners. The shortcomings in the management of the peripheral public enterprise discussed in the previous section seem to justify this option for foreign management of the joint enterprise. But the basic problem is different and similar to the problem of the transition from traditional to developmental concessions. The criterion of efficiency and profitability is not applied by assessing and controlling the professional capacities of the directors of the joint enterprise. It is a question of decisions about critical aspects of the enterprise's development, such as its expansion and investment, distribution of profits and local inputs, i.e., mainly problems connected with the divergent interests of the national integration of the mining project and the global strategy of the transnational corporation in its world operations.

Nevertheless, the experience of Chilean nationalization and even of the joint enterprises in Jamaica does not seem to confirm the view of some authors that the effective control of the joint enterprise by the transnational corporation

produces the same situation as in the modern form of concession or even in the traditional one (UNCTC, 1983b)). On the one hand, the process of learning and acquisition of experience by the national directors working in the joint enterprise is much more effective than when they occupy bureaucratic positions of control. This can be of particular importance for a fuller appreciation of the costs and benefits —business and social, present and future— of the enterprise's various projects. On the other hand, the right of veto over the basic decisions of the management of the joint enterprise ought to mean, in theory at least, that the partners seek solutions of mutual advantage and carry them out jointly (as happened, before nationalization, in Chile's joint enterprises through the joint programme for expansion of the industry). Lastly, in the event of irreconcilable divergences of interest between the local and foreign partners, the joint enterprise loses its reason for existence and should be replaced by some other kind of association (or break-up) of the partners.

Contractual relations between the public enterprise and the transnational corporation with no participation by the latter in the ownership of the mining project may also coincide with the interests of the transnational corporation, enabling it to make profitable use of its tangible and non-tangible assets of technology and know-how, marketing channels, processing capacity, etc., without committing its own capital or incurring the corresponding risks (there are also agreements which incorporate the former option, when the transnational corporation does not receive fixed remuneration but guarantees of a share in the yield from the service it has furnished, such as geological prospecting or management and marketing, in the form of a share of the earnings or profits of the public enterprise).

From the standpoint of the peripheral countries, there is no method or mode of relationship with the transnational corporation which can be considered exclusively beneficial for their national development. The success or failure of the choice and its implementation will always depend on the specific conditions in each of the peripheral countries. These include the policy and political will of the government and its ability to transform institutional or formal sovereignty over the mineral resource into effective

and profitable sovereignty. In this connection, the contractual relations of FERMITHX (or of Brazil's public enterprises) with transnational corporations have a basis of support in the country's technological and administrative capacity different than in the case of the public sector of Jamaica or Bolivia. Furthermore, the acknowledged technological capacity and efficiency of CODELCO in Chile could not by themselves prevent a reversal to a fresh transnationalization of mining if the country's economic policy promoted the total privatization of productive industries.

Lastly, even in the relatively less developed countries, the institutional control of the public sector over the mining and metallurgical industry offers greater independence in foreign relations than the unilateral subjugation entailed by the traditional or modern forms of concession. This is confirmed by the experience of Peru, Jamaica and Bolivia in their trade relations with the non-traditional markets of the socialist countries and other Latin American countries and their technological links with the independent companies of the transnational corporations.

3. Taxation and redistribution of the earnings and profits of transnational corporations*

The transnational corporation's desire for profit means that it tries to minimize taxation by the peripheral State, especially in view of the economic and political riskiness of the direct foreign investment and the need for the global costs and prices of its final products to be competitive with those of other transnational corporations. This desire prompts demands for low rates of taxation, stipulated exemptions and incentives, guarantees as to the long-term stability of the tax regime, and maximum deductions from the taxable amount in the form of rapid depreciation of the investment in the initial period of its recovery on the ground of exhaustion of the mineral reserves and their "marginal" nature. The marketing of the mineral in the transnational corporation's own system enables it to avoid local taxation in the peripheral country by manipulating transfer prices and thus modifying profit rates (as happened in the Toquepala and Cuajone concessions in Peru). Lastly, the demand for equal or national treatment of the direct foreign investment implies the right to opt, at the discretion of the transnational corporation, for the tax system of the host country applied to the public enterprise and to small and medium-sized mining companies and thus to avoid double taxation (local and in the country of origin).

The general objective of the peripheral mining country is to maximize the drawback value of the exports of the transnational corporation by means of taxation, particularly in countries in which this represents a large part of the government's budgetary income. This general objective combines with other specific objectives to produce ad hoc agreements with the transnational corporation with respect to certain incentives and tax advantages. Thus, the goal of attracting direct foreign investment means recognition of the need to concede tax advantages for the initial risky period of recovery of the capital invested; in addition, the governments of the mining countries usually recognize the need to share, by means of tax concessions, the higher costs incurred by the transnational corporation as a result of the increased national integration of the mining project and, in particular, from its expansion through reinvestment and the increased processing of the mineral. The governments share the concern of the transnational corporations to avoid double taxation, as for example in the agreement between the Jamaican Government and United States transnational corporations concerning the form of payment of the production tax.

Abusive manipulation of transfer prices and the enormous profits of the transnational corporations which are repatriated with nothing left in the host country have provoked counter measures. These measures have taken the form of new methods of taxing the earnings and profits of the transnational corporation, such as the production tax in Jamaica linked to the price of the final aluminium product as quoted in the world markets, or the graduated tax on profits over and above the established level introduced in Chile after the establishment of the joint companies and subsequently in Indonesia and Papua New Guinea. With the establishment of joint enterprises the government obtains divi-

dend income, always provided that the joint investment is profitable.

As in the case of the connections between transnational corporations and the public sector of the mining country, it is difficult if not impossible to indicate which of the many forms of taxation and incentive is most effective in increasing the government's budgetary income as well as satisfying its other interests and the industry's development targets. In the majority of cases (not only in Latin America) the new kinds of taxation in the 1970s have produced a considerable increase in government income in comparison with the limited profits obtained under the traditional concession system. This has prompted some critics of the public enterprise (whose benefits are not limited to the book and current yield) to contrast the Statist solution with the more advantageous alternative of the redistribution of the earnings of the transnational corporation through taxation (Walde, 1984). In addition, changes in production costs, especially of energy, and the lack of joint operations with other mineral countries can, especially in a period of crisis, impede the transfer of the cost of the tax to the metal consumers and lead to the gradual separation of transnational corporations from the less competitive mining countries. This happened in the case of the bauxite production tax injamaica, and in its renegotiation with the transnational corporations the government tried at least to offset its fiscal effect by offering large incentives for production increases.

4. Local factors; employment, inputs, infrastructure and environment"

Under the modern concession system the transnational corporations usually recognize and accept the requirements of increased national integration of the mining project through increases in local employment, wages and social benefits, training and promotion of national management staff, use of local inputs and services, establishment of the necessary infrastructure for the operation of the mining project (including the social infrastructure), and protection of the environment in accordance with national or international rules —with the

⁵See points 5, 6 ant! 10 in the annexed list.

expenditure incurred added to the investment and current costs. Problems and differences can arise, especially in connection with the control of the enterprise and the competitiveness of the local inputs and services.

It is natural that the transnational corporation should undertake the training and further training of national technical and administrative staff, not only to increase their professional capacity but also from a paternalist standpoint, i.e., to ensure their unconditional loyalty to the company's interests. This problem of dual loyalty or transnationalization of local staff can arise with greater force in joint enterprises, in which the public sector may be represented by political appointees, advised by technicians, who also seek to occupy senior professional posts in the joint enterprise. Without undervaluing moral and patriotic motives, it must be recognized that the transnational corporation can offer weighty incentives to win the loyalty of its local employees (relatively high wages, special payments, possibility of transfer to work abroad). In market economies the public enterprise probably has no alternative than to offer its top-level specialists material conditions comparable with those of the world labour market and, in particular, a reliable prospect of a professional career.

With respect to the price and quality of local inputs, in conditions of international competition (expressed for example in the Cuajone concession in Peru by a maximum margin of 30% above the CIF price) consideration must be given to the import function of the transnational corporations, which can be offset by plans and agreements for local supply, with the possible technical assistance of the transnational corporation to local companies. Agreements of this kind are of even greater importance in joint enterprises.

5. Downstream operations of the mining project: marketing, processing and transfer of technology

Under both traditional and modern concessions the transnational corporation retains full control (free disposition) over the marketing of the mining project's output. This enables it to supply its own processing plants (located in its country of origin or in other industrialized countries) or to sell the output on more profitable terms to other customers. The first goal of supplying its own plants enables the transnational corporation to manipulate transfer prices to its own advantage, especially in the marketing of minerals (including the processing margin) for which there are no quotations in the world markets. The undervaluing of the prices of the minerals as costed by the subsidiary (and the overvaluing of the import prices of the machinery, equipment, inputs and services) enables the corporation to reduce the sum subject to local taxation.

Lastly, one of the new forms of co-operation with the joint enterprise or independent State enterprise which the transnational corporation has an interest in furnishing, together with administrative services as such, is marketing services, where it can make use of its extensive experience, its established contacts with networks of intermediaries and associated companies, and its position on the exchange. If the public enterprise has still not succeeded in competing in world markets by establishing a similar marketing capacity it will remain dependent to a greater or lesser extent on the transnational corporation.

For this reason, the public sector of the mining country not only has a great interest in controlling the transfer prices in the transactions within the company and the prices and other buying and selling arrangements with the transnational corporation's customers —control which has its limits and problems as has been demonstrated by MINPECO in Peru- but also and primarily in establishing its own marketing capacity. The experience of CODELCO, MINPECO, ENAF and the public sector in Jamaica indicates, especially with respect to direct sales to consumer companies (both in the new markets of the Latin American and socialist countries and in the traditional markets) but also to traditional marketing, that this road is hard and long but of decisive importance. The initiatives promoted by UNCTAD in particular to establish joint marketing enterprises among the mining companies of the periphery could open up new projects in this area (UNCTAD, 1979 and 1983).

In minerals processing the interest of the transnational corporation was traditionally to locate the plants in its country of origin or in other metal market countries in order to minimize costs (including those connected with tariff and other protectionist barriers), to ensure flexible and profitable marketing of both concentrated and processed minerals and, lastly, to avoid the political risks in the developing countries. These same motivations are prompting the transnational corporations to relocate the minerals processing in the peripheral countries, as can be seen from their clear preference for the relatively industrialized countries with large metals markets and for those which offer sizeable comparative advantages with respect to processing costs (energy above all, but also qualified labour and tax advantages). The Latin American experience also teaches that in joint enterprises the transnational corporation has an interest in retaining control over the transferred technology, particularly in this more complex era (for example, the conditions imposed for the possible expansion of aluminium production capacity

in Jamaica). On the other hand, the relative diversification of the technology market in this sector, in which many independent companies operate, obliges the transnational corporation to compete in this area as well and to offer to sell technology and technological services to the public enterprises.

It has also been demonstrated that, despite the progress achieved by the public enterprise in relocating minerals processing to the mining countries and the resulting progress in industrialization, increases in the drawback value of the exports and increased marketing capacity, the problems of costs and profitability persist in several cases (for example, the Ilo State refinery in Peru, ENAF in Bolivia). This validates, particularly in the present economic crisis, the policy of also taking advantage of the services offered by the transnational corporation to the public enterprise with respect to the leasing of its processing capacity.

Annex

LIST OF MAIN INTERESTS, CRITERIA AND OPTIONS FOR INTERACTION BETWEEN TRANSNATIONAL CORPORATIONS AND THE GOVERNMENTS OF MINING COUNTRIES BASED ON THE LATIN AMERICAN EXPERIENCE"

Topic

- 1. Global objectives in the mining country
- 2. Financing and return on the direct foreign investment (or joint project)
- 3. Ownership and control of the enterprise

A. Taxation (redistribution) of earnings and profits

A. Transnational corporations

Guaranteed supply of the mineral for exploitation with minimum costs and maximum profits on the capital invested by its share-holders and the project's financiers, always considered as a link in vertically and horizontally integrated world operations.

- a) To reduce the input of own capital by requiring banks and financiers commercially connected with the project, governments and international organizations to bear jointly any possible economic and political risks;
- b) Guarantees of rapid total return on the real value of the investment (including cases of nationalization)
- a) Under the traditional concession they belong exclusively to the transnational corporation;
- b) By reacting flexibly to nationalist demands under existing legislation, to agree to joint ownership with the public enterprise or the local private sector, but safeguarding the interests of its shareholders and the project's financiers through effective and profitable control and with acknowledged loyalty;
- c) To replace direct ownership and control of the project by profitable contractural arrangements with the public enterprise, furnishing it the required technology, know-how and services.

To minimize taxation costs in the light of the economic and political risk assumed by the transnational corporation through:

- a) Low rates, exemptions and guaranteed long-term incentives;
- b) Rapid depreciation and other advantages in the initial difficult period of exploitation;
- c) Equal treatment (with the public enterprise and the local private mining company), also avoiding double taxation;
- d) Control of transfer prices in transactions within the corporation.

[&]quot;Taking also into account the presentation by the Director of Rio Tinto Zinc Corp. (Thompson, 1984). Including the value of geological prospecting and preparation of the mine.

- 5. Local employment and training
- 6. Local inputs and services
- 7. Marketing of the enterprise's output
- 8. Minerals processing and industrial and technological relocation

- 9. Expansion of production and exports (from existing capacity and through modernization and new investment)
- 10. Infrastructure and environment
- 11. State control of the transnational corporation
- 12. Renegotiation and settlement of disputes

A. Transnational corporations

- a) Essentially paternalist attitude towards underdevelopment expressed through training, promotion and social benefits with a view to ensuring loyalty to the transnational corporation and its control (3.b, above);
- b) Training services for the public enterprise. Preferential treatment, provided that quality and prices are internationally competitive (and not subject to adjustment).
- a) Free availability of the goods produced for more profitable disposal (see also 4.d);
- b) Compensation (e.g., through the tax system) for regulation of sales by the government of the mining company;
- c) Marketing services for the public or joint enterprise.
- a) Preference for location in metal market countries to minimize costs (including protectionist barriers), ensure flexible and profitable marketing and avoid political risk (nationalization);
- b) With similar objectives and maintaining technological exclusivity, location in peripheral countries, especially: i) relatively industrialized ones;
- ii) those with comparative cost advantages (energy, tax, etc.);
- c) To sell technology and services (plant, equipment, etc.).

To consider the profitability of current and forecast prices in the world market to regulate the supply through proper use of installed capacity and programming of new investments (possibly with the formation of cartels with other corporations).

Under the modern concession system, considered to be investment costs.

- a) To minimize and obtain national treatment (equal with the public enterprise and private mining company)
- b) Rapid, flexible and concentrated administrative procedures;
- c) Possibility of unlawful acts (double accounting, bribing of civil servants, etc.).
- a) Long-term stability and irrevocable nature of the guarantees granted;
- b) Jurisdiction of international organizations, in the interest of shareholders of the transnational corporation.

1. Global objectives in the mining country

- 2. Financing and return on the direct foreign investment (or joint project)
- 3. Ownership and control of the enterprise
- 4. Taxation (redistribution) of earnings and profits

- 5. Local employment and training
- 6. Local inputs and services
- 7. Marketing of the enterprise's output

B. Governments of peripheral countries

Optimum utilization of the mineral resource to maximize:

- a) GDP and foreign-exchange and budgetary income:
- b) National integration of the mining project in terms of: i) welfare, local employment and inputs; ii) technological development and industrialization; iii) control (national sovereignty) over mineral and metallurgical development.
- a) To support the project with the necessary guarantees and participating, where appropriate, in its financing:
- b) To improve the cost and terms of loans, including greater participation by international organizations;
- c) In the event of nationalization, to restore the book value of the transnational corporation.
- a) To control the terms of the concession and to renegotiate it;
- b) To find and test ways and means for exercising effective and advantageous sovereignty in accordance with the country's socioeconomic conditions:
- c) Particularly point B.5, above.

To maximize State income by distinguishing:

- a) Between the periods of attraction, entry and amortization of the direct foreign investment and the period subsequent to its maturity and in this period;
- b) Between the unilateral repatriation of excess and extraordinary profits (graduated rates) and expansion and reinvestment (regressive rates and other incentives);
- c) In favour of greater expansion and integration of the project (see b, above);
- d) Between complicated instruments and easy administration.

To increase local qualifications and experience in order to reduce external dependence, limit it to the new technology and know-how required, and achieve own capacity to export services.

Upstream incorporation as part of the national integration of the project.

- a) Control of transfer prices (by means of reference prices);
- b) Marketing participation or monopoly to increase the drawback value and diversify markets (in the direction of non-traditional ones).

8. Minerals processing and industrial and technological relocation

- 9. Expansion of production and exports (from existing capacity and through modernization and new investment)
- 10. Infrastructure and environment
- 11. State control of the transnational corporation
- 12. Renegotiation and settlement of disputes

B. Governments of peripheral countries

- a) National integration of the mining project through relocation of processing in the peripheral country to increase the aggregate value (industrialization) and drawback value (foreign exchange) and diversify markets;
- b) With similar objectives and in accordance with the local and world market situations (in the medium term), to select modalities of cooperation with the transnational corporation and other enterprises (including public and State enterprises in the industrialized countries).
- a) In the light of the global objectives (B.1) to maximize production and exports (foreign-exchange earnings especially in times of crisis);
- b) Given cartel-style economic and political conditions (OPEC for example), to regulate supply in conjunction with governments and enterprises of other mineral producing countries.

To promote the maximum national integration of the project (B.l.b).

- a) To exercise effective control by enforcing legal regulations and agreements with the transnational corporation;
- b) To combine the global approach and centralized control with specialized expertise and responsibility.
- a) Guaranteed and sovereign right to renegotiate;
- b) National jurisdiction (Calvo doctrine) and/or representatives of the two parties with independent chairman.

Topic

- 1. Global objectives in the mining country
- 2. financing and return on the direct foreign investment {or joint project})

C. Options

- *a)* Traditional concession of the mineral resource to the transnational corporation;
- b) Developmental concession (integrative);
- c) Nationalization of the transnational corporation by the government or its own separation from the project;
- d) Joint enterprise or other form of co-operation.
- a) Financial agreements and plans;
- b) Agreements on repayment of the investment and loans from the output of the investment;
- c) Lending programmes of the World Bank, IDB, etc.

3. Ownership and control of the enterprise

- 4. Taxation (redistribution) of earnings and profits
- 5. Local employment and training
- 6. Local inputs and services
- 7. Marketing of the enterprise's output
- 8. Minerals processing amd industrial and technological relocation

- 9. Expansion of production and exports (from existing capacity and through modernization and new investment)
- 10. Infrastructure and environment

C. Options

See points l.a-d above and, with respect toe and d, particularly agreements and contracts for: i) joint enterprises with shared ownership; ii) services (control) of administration, exploration, technology and engineering, marketing, transport, etc.; ÜÍ) purchase sales transactions in the output of the project, machinery, equipment and inputs, plant with key in hand, etc.; iv) combinations of i - iii).

- a) Royalties on production volume or value;
- b) Royalties or taxes linked to selling prices;
- c) Tax linked to profit rate;
- d) Other taxes on earnings/profits;
- e) Tariffs, duties and other charges;
- f) Dividends of joint enterprises;
- g) Special schedules of incentives, discounts, etc.
- a) Agreements and plans on training and promotion between the government and the transnational corporation;
- b) Contracts concerning administration, consultancy, training, etc., between the public enterprise and the transnational corporation.

Agreements and plans for local supplies.

- a) Agreements (guarantees) between the transnational corporation and the government (public enterprise);
- b) Direct marketing agreements (short- and long-term) with governments and enterprises (including loan-repayment agreements).
- a) Incentives and administrative measures to encourage the transnational corporation to achieve greater industrialization;
- b) Agreements between the public enterprise and the transnational corporation or other corporations (independent of it) in accordance with A.8.C;
- c) Including leasing of the processing capacity (toll) in the metal's market country.
- a) Tax incentives (B.4.c) and agreements with the transnational corporation;
- b) Agreements under UNCTAD's Integrated Programme (as in the case of tin);
- c) Agreements in producers' associations. Agreements with the transnational corporation, with possible local participation.

- 11. State control of the transnational corporation
- 12. Renegotiation and settlement of disputes

C. Options

- a) Legislation, administrative rules, agreements with the transnational corporation;
- b) Organization of the control apparatus;
- c) Directors of the public enterprise.
- a) Legislation and agreements with the transnational corporation;
- b) Expert advice of organizations in the producing countries and independent experts.

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