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The Second Regional Conference on the Development
and Utilization of Mineral Resources in Africa

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The possibilities of establishing African Regional or
Subregional Institutions for the Mobilization of
Finance for Investment in Mineral Resources in Africa

I. INTRODUCTION

1. When the participants of the First Regional Conference on the development and utilization of mineral resources in Africa held in February 1981 in Arusha, Tanzania, (hereinafter First Regional Conference) formulated their recommendation that gave rise to the present report, little did we know of the change in the evaluation of financing and investment requirements for minerals. At the time it was still the widely held belief, prevalent during most of the second half of the seventies, that by and large an injection of funds would be all that is needed to bring minerals investment in Africa to a level commensurate with its resource endowment. In fact, the recommendations formulated in 1981 already appear permeated by a degree of pragmatism as they do not call simply for more funding but mention the conditions under which funds should be made available.
2. The present situation, and this is done for base metals but also for a number of other minerals and metals, leaves little room for the belief that there could be one panacea to revive the minerals sector. Instead of "investment and financing gaps" and "supply shortage" new keywords such as overfinancing, "over-exploration" and consequently overproduction made their debut in the mining media. Depressed prices accentuate this situation. African and other developing producer countries hard pressed for foreign exchange had to increase their output to make up for low prices. The most important consumer country is considering to introduce quotas for imports of copper, where the touch is most severely felt. Under these circumstances, new investment or financing for mining projects on adequate conditions has all but faded out of sight.
3. The report, restricts itself to clarify some basic concepts and to present in a topical manner some opportunities for actions and modalities for the operations of an institution. They are hoped to pave the way for a mode of financing which corresponds better to both, to the aspirations of African nations to convert mineral deposits into agents of development and to the current situation on consumer markets on which mineral producers depend. It is against this backdrop that the present reports set out to critically reexamine and evaluate the need for more investment and financing which both should be brought about by setting up an institution.

II. MINING INVESTMENT IN AFRICA

1. The Policy Background

4. The recommendation of the First Regional Conference has to be seen in the context of the struggle of African minerals producers to fully and gainfully exercise their rights over their mineral wealth. The beginning of that struggle goes back to 1962 and the seminal declaration of permanent Sovereignty over Natural Resources.^{1/}
5. The topic was taken up again in the declaration on the establishment of the New International Economic Order whose Programme of Action^{2/} again underscored the demand for a policy in natural resources which would attribute to producer countries a role they were so far prevented from assuming. Finally, the African nations forcefully repeated their demand in the Lagos Plan of Action in 1980 which

^{1/} G.A. Res. 1803, 17 U.N. GAOR, Supp. 5217.

^{2/} G.A. Res. 3202, 6 Spec. Sess. UN GAOR, Supp. (No. 1) 5, UN Doc. 9559 (1974).

laid the emphasis on development of indigenous factor inputs and, in particular, on the qualification of manpower and the improvement of institutions. The development of indigenous resources to analyse the mining situation and to strengthen the capabilities for supervision and control had to be regarded as a first priority.^{1/}

6. In sum, while the interests of African mineral producing nations have been well examined and forcefully stated in many fora, and over many years, it appears that the little headway that has been made in pursuing these interests and translating them into action has fallen far short of expectation. The Lagos Plan of Action did not stop at deploring the shortfall of finance and investment. It addressed above all those conditions of development that can be substantially influenced by African states. While the availability for funds for realizing large-scale mining projects remains outside the immediate reach of most African states, improving the performance of institutions and training of manpower are aims, which can be effectively tackled.

2. The Economic Background

7. The development of mining in Africa, its problems and trends have been discussed numerous times. The report submitted by the ECA to the First Regional Conference has given an accurate and detailed picture. ^{2/}

8. In its chapters on "Trends in mine financing and mine development" and "Difficulties relating to mine financing" the widely familiar problems of financing minerals development from the risk characteristics of mining operations to the difference in terms between external and equity capital - are well presented and discussed. The conditions prevailing in mine financing have hardly changed since, so that the present report needs merely to complement the picture then painted. Indeed, some of the trends described in former reports have continued in such a way that conclusions drawn in 1981 appear even to be more justified by developments in later years. This is the case with the assumptions regarding flow of mining investment to Africa. Investment in African mining projects by US companies which in the decade until 1978 had always been above the 1% range of total world wide investment shrank to half this size since. Exploration expenditures by European firms shows a similar if not as marked a trend for investment in Africa. ^{3/}

9. On the other hand it is equally pertinent to look at the development of prices for some African minerals over the recent period. While the First Regional Conference might have been imbued with some optimism as prices just recovered from their low levels, the Second Conference may not be taken by the spirit.

Price Developments of some selected metals

	<u>1978</u>	<u>1980</u>	<u>1982</u>
Aluminium	1,325	1,884	1,442
Copper	1,364	2,173	1,480
Tin	12,879	16,785	12,823

All prices in US\$ per metric ton

Source: African Development Bank, Annual Report 1983, 78.

^{1/} See for a resume of Lagos Plan of Action consequences for the mining sector, ECA Doc. E/CN.14/MIN. 80/6.

^{2/} FN ECA Doc. E/CN.14/MIN.08/5. The present status of mineral development in Africa.

^{3/} FN K. Kalonji, Laire report on file with the ECA Secretariat.

10. The developments point to the fact that the room for manoeuvre for African producer of minerals is very restricted at present. Finance required to realize new mining investment or to sustain and improve existing operations might have to be found in spite of a rather dim outlook for minerals investment.

III. THE NEED FOR A MINE FINANCING INSTITUTION

11. Although Africa was rich in untapped orebodies with a relatively high metal content, investment capital tended to flow into areas with lower grade deposits and, by the same token, not the same potential for lower exploration costs and lower unit production cost. ^{1/} In so far as this topsided flow represented a mis-allocation of resources, it would have been in the interest of producing and consuming countries alike, to take remedial action by making additional funds available to African minerals development. This widely held belief may have been and certainly in no small measure responsible for the recommendation of the First Regional Conference to examine the feasibility of creating financing institution in support of minerals development. A report on mining finance has to examine the justification for such a need in particular since actors might have modified strategies, estimations may have been revised or circumstances have changed. So before examining the feasibility of any institutions supposed to generate funds for mining investment the three basic questions have to be answered.

- i) Is additional investment under current circumstances feasible and desirable?
- ii) Could this investment be brought about or at least substantially promoted by making available additional funds?
- iii) Could this task best be served by the establishment of a new institution?

12. During most of the second half of the seventies and into the eighties concern was voiced that there was a critical shortage of investment by the mining companies and that this would eventually negatively affect price movements and the security of supply in industrialized countries. ^{2/}

13. It appears that at times the calculations did not take into account the change in some of the industries, where it is not any longer the transnationals which command the largest share in production and investment. In copper, it is estimated that more than 51% of production of market economy countries is now controlled by state enterprises. ^{3/} Their investment into production and development frequently escaped calculations and depressed investment statistics. In addition, the size of mines particularly in base metals developed and brought on stream during the 60s and 70s and a demand growth which showed signs to level off, made it very improbable that capital expenditure for investment would remain on levels attained during the first half of the seventies. These reservations to the assumption of an investment gap apply today with even greater force. Expectations for realizing large scale

^{1/} M.H. & G.J.S. Covett, geological supply and economic demand: the unresolved equation, Resources Policy 4 (1987) 106.

Eric Croten/X.C.J. Van Rendsburg, Basis to Investment in Third World Mineral Institutions, Resources Policy 9 (1983) 33

CDC, North-South: A programme for survival, Lon 1980, p.292 where the Brandt Commission advocates a special effort to increase the resource flow to mineral exploration and production in developing countries.

^{2/} See only N.A. Butt/T. Atkinson, Shortfalls in minerals investments, Resources Policy 8 (1982) 261 with further sources.

^{3/} "UN Copper: Response to Change" Mining Journal August 17, 1984, 105.

investment in Africa appear rather dim indeed. In iron ore the Mt. Nimba - Simandou deposits, the second biggest in the world, situated in Guinea still await a positive investment decision. Such decision has to be taken at a time when the Carajas project in Brasil has finalized its financing package, Carajas a minerals' province, which has the biggest known iron-ore reserves world-wide. Furthermore, another capital intensive iron ore project in Africa, the Guelbs project in Mauritania, recently has come on stream with somewhat smaller production and reserves but still enough to satisfy the needs of its long-term customers. Both Carajas and Guelbs have received funds from multilateral financing institutions and mineral supply oriented public financings. In copper the large-scale African project while is ready to be developed, the project of the Societe Miniere de Tenke Fungurume in Zaire would have to compete with the expansion of production of CODELCO, Chile, the lowest cost producer in market economy countries. Likewise investment in a new project like Tenke Fungurume would have to be evaluated in the light of the possibility of reactivating production capacity which has been temporarily suspended in the light of the ZCCM project which aims at reducing production while improving productivity, co financed by the World Bank, EB and ADE. In manganese the picture may be even more bleak. How can a greenfield development project like that of Tarbao, Burkina Faso, be justified at a time when Carajas has received the go-ahead which has large manganese deposits, and when another African producer, Gabon has cut back production? The outlook for profitable investment in tin mining is influenced by a low in world-wide tin mining evidenced by large export reductions of the ITC members ^{1/} and nickel projects, especially those mining lateritic deposits such as Musongati in Burundi, suffer from the impact of high energy prices on operating cost. This cursory glance at African metal mining prospects and its competitors brings out rather clearly that it will be difficult to secure finance on appropriate terms for these projects, unless the situation changes materially.

14. As far as availability of funds is concerned minerals supply - oriented finance from consumers may hardly bring any relief. A series of articles in the sixties and seventies suggested a shortfall of investment that would result in a sudden price hike, a shortage of minerals supply in industrialised countries and finally even in resource wars.

15. This view which was not universally shared at the time ^{2/}, in the meantime has lost acceptance. It is no longer the scarcity of mineral resources, the fear to approach depletion and threatening resource wars that characterise the situation but rather excess production, abundance of explored deposits, depressed prices and money losing mining operations everywhere.

16. The provision of finance to mining investment has particularly come under attack since it supposedly had the effect of blurring and weakening the financial criteria for investment and, moreover, had led to a lesser degree of market organisation with its debilitating effects on the price structure for mineral metals. (See 'World copper markets 1973-1982 and international stabilization policies' Resources Policy 10 (1984) p. 19 (24).

^{1/} "Tin mining workforce out by a third, Mining Journal, June 15, 1984 (400) 399.

^{2/} See for a notable exception P.C.F. Crowson, Investment and future mineral production, Resources Policy 8 (1982) 3.

17. In sum, from whatever angle one looks at it, from that of the producer at consumer, on a general level the present minerals situation appears rather to discourage investment in the minerals sector.

18. The second assumption, namely that a possible gap in investment flows can be filled by channelling additional funds to the minerals sector, also cannot withstand closer scrutiny. In fact, banks and financial institutions have developed over time a range of funding mechanisms 1/ the potential of which does not appear to be exhausted. Commonly referred to as project financing techniques.

19. The beginnings of project finance in Africa, illustrated by such projects as Boke, Guinea or Selebi Phikwe, Botswana, its special features and raison d'etre have been well presented in earlier documents. 2/

20. Suffice it to say at this point that the thriving forces behind the development of project finance still are active. Project finance in the minerals sector corresponds to the interests of producers to receive finance regardless of hitherto accepted limits as long as the documented expectations of project output secures repayment and debt service. It corresponds to the interest of bankers to expand their lending business to operations that under traditional risks could not be regarded as creditworthy. 3/

21. Project finance techniques in recent years have even gained in importance and flexibility as general lending to developing countries' public institutions has tended to dry up. While bank lending constituted 26,9% of total flows in 1981 (after 22,9% in 1980) it shrank to 22,5% in 1982. 4/

22. One reason is that some developing countries have reached their borrowing limits. The other reason, outside the reach of developing countries is the development of bank lending portfolios. The ratio of outstanding loans with developing countries to total international assets and to the capital of lending institutions has reached limits, which may induce intervention of bank regulatory bodies. 5/

23. While prudential and/or regulatory lending limits may thus restrict the access of developing countries and its parastatal institutions to foreign finance, the potential viable mining projects to attract funds on a project finance basis appears far from being exhausted. Three features of project finance play a decisive role here. In the first place, project finance techniques can ensure that project debt will not be treated in the same way as general debt, but as a separate preferred class of creditors if a country has to or elects to reschedule its foreign indebtedness. Secondly, project financing agreements are designed to grant leading

1/ See generally for project finance in the minerals sector, David Surargar International Project Finance in: Legal and Institutional Arrangements in Minerals Development, London 1982 P. and Albrecht Stockmayer, Project Finance and Security, Leiden 1985.

2/ Source: DECL-DAC, Annual review 1983.

3/ See e.g. Christopher Johnson, International bank lending after the slow-down, The Banker, January 1984, 23.

4/ Ibid

5/ Ibid

project financiers the opportunity to actively manage risks arising from project lending. They may do so by structuring their loans accordingly or by reserving certain monitoring and controlling sights. Finally, the project perspective of lending operations can allow banks to achieve a better balanced and more homogenous loan portfolio, which again increases their capacity to shoulder certain project risks that lenders normally cannot accept.

24. Since there is only a small number of viable investment opportunities and since financing for mining projects still appears available, the question of whether a new financing institution is needed can be considered moot. In conclusion then, there is no prima facie case for an institution that would have as its primary objective to channel funds in a general way to the mining sector. The prevailing situation in the minerals and financial markets calls for a much more discriminating approach. The report in its following chapters shall therefore firstly analyse the existing inadequacies of investment and finance flows to the minerals sector in Africa. To the extent that such an analysis permits the elaboration of a profile of specific needs, and based on the different requirements for discrete phases of the mining cycle funding and investment opportunities shall be presented and contrasted with existing programmes and past abortive financing proposals. The outcome should be suggestions for the operation of an institution that could render a range of specific finance related services to African minerals producers that can meet their demonstrated needs.

IV. DILEMMATA OF THE MINING INVESTMENT PROCESS IN AFRICA

25. Since investment and finance flows to the minerals sector in Africa have not fulfilled expectations (at least of the producers) one consequence would be to analyse inadequacies of the investment process. One would be likely to come up with a list of such inadequacies which, depending on the viewpoint, would emphasize overtaxation or instability of investor-government relation or conversely, a bias of investors and lenders and distortions in the capital flows to developing countries.

26. The present report prefers to go one step further in the analysis and have a look at the causes that underly government or investor reaction which have been interpreted in the above mentioned ways. These causes are summarized in five dilemna ^{1/} which will have to be taken into consideration when creating programmes or institutions to improve the flow of finance or investment.

27. Five dilemna come to mind which influence finance or investment flows to African developing countries.

- i) Comparatively favourable geological conditions of deposits - and comparatively small investment flows,
- ii) unlimited investment requirements - and more attractive uses for capital elsewhere,
- iii) a quest for influence and control over investment - and the lack of resources which can assure control.

^{1/} The approach suggested by D.A.R. Phim op. cit., PN 159 has been considerably expanded for this study.

- (iv) Chance for sustained flows - and their guiding (consumer) interests, which may not totally correspond to producer interests;
- (v) Availability of funds or investment - and the risks associated with these flows that may reduce or denigrate its economic and social benefits if circumstances change only slightly.

28. The first of these dilemma, or the unfulfilled equation, has been widely discussed. 1/

29. It loses, however, its quality as a dilemma once it is recognized that the favourable geology of a deposit will only then have a decisive influence on a funding or investment decision when all other elements for such a decision have been positively solved, or in other terms if the orebody is readily accessible. Seen in this perspective metal content is only one out of several aspects that determine the accessibility of a mining prospect. 2/ A favourable geology of a mining prospect can be negatively affected or overridden by host of other aspects determining in their combination whether a deposit is accessible; e.g.

- physical infrastructure, e.g. energy, water, means of transport and communication;
- availability of skilled manpower and of services;
- distance and quality of access to consumer markets;
- institutional infrastructure, legislation and administration etc.

30. The existence and the quality of infrastructure elements can play an exceedingly important role. The second dilemma sheds some light on the competitive environment in which African projects have to attract private or public funding. The constraints for private funds are better terms and yields in other geographical areas or other sectors of industry, and for public funds higher social benefits in other public investment projects. During the latter half of the seventies, when markets were awash with liquidity, chances of attracting capital were relatively good and were widely used by developing country general propose borrowers. Stronger demand and by IC borrowers lending limits have reversed this trend, so that the availability of funds has decreased and costs have soared.

31. The third dilemma has been most acutely felt when after independence African governments were vested with the formal control powers over investment and its flows without being able to effectively exercise their powers. Since control and its exercise is inextricably linked to the dominance over production factors, the first attempt to exercise full control by means of nationalizing mining operations was doomed to failure and led to a high cost burden for the countries as they tried to acquire these factors.

1/ See above II. and FN

2/ So P.C.F. Crowson, op. cit., FN, P. 5.

32. The fourth dilemma is of even a more recent origin. When TNC investment in developing countries had diminished and new efforts to sustain investment were encouraged to secure long-term minerals supplies for industries in industrialised countries, it was thought that these efforts were immediately complementary to those of developing countries to secure an appropriate flow of investment and finance. The alleged resource complementarity presumably could have led to a complete community of interest for both parties, consumers and producers. A closer look however reveals that this community of interest appears rather precarious and has to be determined on a case by case basis and for every cycle of the investment process. ^{1/}

33. In the downstream operations of the mining cycle consumer countries like to preserve their fabricators interests. New investment while may further the interests of consumer nations and may at first glance appear desirable to the producer nations that benefit from it, can generate other effects that jeopardise or erode those same benefits.

34. Again, and similarly to the preceeding dilemma mining investments' benefits may turn out to be very limited and in addition highly subject to a number of risks which may wipe out these benefits. A mining investment, due to its well known long time horizon is particularly exposed to unforceable changes in the minerals and capital markets which can have a profound and lasting effect on e.g. prices for the minerals produced or costs of the equipment and other production input needed.

35. Obviously these dilemma are more or less endemic to all mining investment or finance decision on the African minerals sector. However, these decisions have to reckon with these problems and a financing decision examined with a view to take these problems into account will hopefully prove to be better founded and fitting the interests of the project countries.

36. Likewise the adequacy and efficiency of any mechanism or institution to increase the availability of investment funds for the minerals sector should be examined in terms of its contribution to a solution of these dilemma. Hence, an institution, should it have the anticipated beneficial effect, will not only have to make funds available but also see to it, that these funds correspond best to uses.

V. OPPORTUNITIES FOR FUNDING SUPPORT

37. As the dilemmas should have illustrated there is no one single approach for the establishment of an institution or the creation of a mechanism that could overcome the problems besieging African mining investment. In the absence of such ideal approach the following chapter will discuss opportunities for financing, i.e. spheres for activities of an institution to alleviate a financing impasse or to support particularly worthy mining operations. In discussing these one has to keep in mind two questions.

^{1/} Michael Faber/Roland Brown: Changing the rules of the games: political risk, instability and fairplay in mineral concession contracts, Third World Quarterly 2 (1980) 100, 104.

- Is the activity targeted for financing support especially prove to stimulate other related stages of mining investment, and may it thus finally contribute to the viability of the whole project?
- Will the financial support decisively improve the viability of the operations supported and thereby increase "accessibility" of the project?

38. During the past years prospecting and exploration were preferred tasks for financing or technical assistance measures reducing overall investment risk. Investors in mining deposits, that have enjoyed thorough exploration have a vastly improved knowledge which will help them to better estimate the chances of successfully mounting further operations. In turn their justified profit expectations should be lowered to the degree risk has been diminished. While these advantages hold true in general, many cases have demonstrated that in fact, exploration ventures financed and managed separately from the other parts of mining investment have not significantly reduced risks and return expectations commensurate to the funds spent. Especially multilateral donors and among them UNDP and UNRF encountered the problem that information generated by exploration projects assisted by these organisation could not immediately be used in continuing mine development and production operations.

39. Chances are that exploration projects produce information that has to be re-evaluated and rearranged at an elevated cost by the eventual investor which may bring the orebody into production.

40. Other factors limiting the positive effect of exploration finance is the fact that knowledge of orebodies will often be considered as in the public domain and may not be made immediately available to any type of investors. It may be questionable whether co-operative financing institutions should commit funds to an activity, that ought to be financed from natural budgetary resources. Finally, there are already a number of specialized financial institutions active in this area, notably the United Nations Revolving Fund for Natural Resources Exploration. The Fund may not have totally lived up to the high expectations expressed at the time of its establishment. Still, it would be difficult for any newly created institution to match the experience it has been permitted to acquire during the years of its existence. The same certainly is true for those national geological services and organisations which organize exploration campaigns financed under bilateral assistance agreements. These campaigns may be considered as yielding information particularly useful to investors from the respective donor countries. Still this disadvantage may have to be accepted in view of the costs and risks which otherwise might make detailed exploration totally unaffordable.

41. Another element of the mining cycle which has recently gained some prominence as a target for multinational finance is the elaboration of feasibility studies for mining operations to remove insecurities from an investment decision. Again, the same caveats apply concerning the transfer of information that apply to exploration information. Feasibility studies have been financed for African projects by the EIB, the World Bank, the African Development Bank and again UNDP and UNRF. The latter organisations have entered this field mainly to enhance the chances to bring an explored orebody into production by offering not only geological information but also a study on potential future operations but may not be able to follow up on their financing. For instance EIB has the declared intention of financing feasibility studies of projects in the financing of the later stages it expects to

participate. Such potential support may overcome some of the problems of information transfer that affect negatively the value of a separately financed and prepared feasibility study.

42. The financing of processing facilities for locally produced minerals has always ranked high on the priority list of mineral producing developing countries. It is believed that by adding processing facilities to mine installations a number of advantages can be achieved which increases the overall value of mining for the national economy. Finally, and this would be of particular significance for the purposes of establishing a financing scheme, processing is believed to improve the access to capital markets for mining projects in general, since it is easier to obtain funds for the purchase and installation of processing equipment than for other parts of the mining project such as exploration. 1/

43. On the other hand there are a number of reasons which may serve as disincentives to financing processing facilities and which, in particular, may limit any positive effects the investment in processing may have on the viability of a mining project in general. The first group of disincentives relate to the obstacles for setting up economically viable processing operations in developing countries. As regard the mobilization effect for mining investment in general, the advantages attributed to processing may not apply in the generality stated above. Access to fund of processing investment, which in part is due to the high foreign source capital equipment content that can be financed by supplier credits, may be counter balanced by the loss of the bargaining advantage mineral crude producers enjoy with security of supply oriented investors or countries. Mining projects that include processing facilities, may not be eligible for funding programmes set up and managed by institutions such as EXIM bank/OPIC, KfW, or OMRD, that are destined to secure supplies for the country's processing and manufacturing industries. 2/

44. An analysis of several investment, where processing facilities were part of the mining investment has produced no evidence that these projects enjoyed easier access to funds or that financing terms were significantly different from terms negotiated for other projects. 3/

45. Further downstream marketing efforts could be another target of financial support. Better knowledge of the marketing processes and of consumer behaviour and an active involvement in marketing and selling activities can considerably increase the level of information required to exercise an informed control over all phases of the mining investment process. For instance, when the state took over control of diamond mining in Angola a two-percent participation was retained by a subsidiary of Anglo American which insures the marketing of diamonds through its Central Selling Organisation. At the new Aredor project in Guinea, a 1% share is held by a diamond dealing house. In other minerals, marketing efforts had rather limited success. Recently, the state metal marketing organisation of Zaire has been dissolved after years of activities that hardly improved marketing opportunities for Zairean minerals. Its neighbouring state, on the other hand,

1/ See generally UN, Mineral Processing in Developing Countries, London 1984, p.6.

2/ See Stephen Zorn, recent trends in the mining agreements, in Sideri/Hohns (eds.) Mining for Development in the Third World, New York 1980, p. 210.

3/ See Albrecht Stockmayer, Project Finance and Security Deventer 1985 ch. II.
2.

which has concentrated marketing in the metals marketing company has recently done a step in the direction of close involvement in terminal markets, when it set up a joint subsidiary with ZCCM, Memaco Trading Ltd. in London. While this may still be a far cry from achieving the kind of dominance over end-markets which the aluminium producers command and to which part of their success has been attributed, it should be considered a step in the right direction.

46. This notwithstanding, it may be open to question whether increased marketing efforts can be considered an adequate target for financing. As marketing may have difficulties to attract supply oriented financing. Hence marketing may be more an object for foreign technical assistance than for financial support.

47. Outside the mining investment cycle, multinational mining projects may be a target for funds of a newly established mining finance institution. Recently some projects have taken shape, both in mining and in processing. For example, in the 50 per cent government held company which eventually will assure the mining of the Mount Nimba iron ore, the Nigerian government through the Associated Ores Mining Co., Okerre Lagos holds a 19.5 per cent participation. Liberia through its National Investment Commission and Libya through its Foreign Investment Company equally hold an equity stake. The reason for the Nigerian Government to seek a participation was to secure iron ore supplies for its building steel industry. Security of supply with fertilizers prompted the governments of the Ivory Coast, Nigeria and Cameroon to take out each a 9.4 per cent equity stake in the industries chimiques du Senegal (ICS), in which the Senegalese state holds a 23 per cent share. The company which combines both features, multinational and processing, is particularly interesting, in our context, since only the combined share holdings of the participating African states assure a majority. Multinational project, the Guelbs iron ore project in Mauritania, demonstrate that a great number of financing institutions, particularly multilateral development finance institutions participate in the financing of these projects. In the case of ICS they are the ADB the French CCCE, EDF and EIB, IFC and IBRD and several Arab financing institutions among them the ISDB, OPEC Fund BADEA etc. In the case of the Guelbs project the number was even bigger, including the KFAED, the AFESD, the Saudi and Abu Dhabi Fund, in addition to the above-named institution leading to a 80:20 debt equity ratio. In the face of funding facilities that these projects enjoyed one can hardly speak of a financing gap. Financing these projects would rather have to be based on the reasoning underlying the Lagos Plan of Action and its quest for regionally centered and promoted development. Furthermore institution that would offer funds particularly to multinational projects may evoke more interest and eventually bring more of this type of projects, based on complementary interests and developments of African countries, to the fore.

48. As the last type of projects targeted for financial assistance by an African mine finance institution, rehabilitation and reactivation projects should be mentioned. They appear as a very timely option since rehabilitation, due to lack of modernization and replacement investment, and reactivation of abandoned and/or suspended operations may both be projects for which a demand exists and which may yield a return with relatively little capital input and after comparatively short lead time. As in the case of multinational projects, rehabilitation and reactivation projects are self-contained. They have no effect on the flow of mining investment in general and would have to justify a funding decision on their intrinsic merits. Financing examples for these projects are a ECU 6 m loan by the EIB to rehabilitate the Ghana National Manganese Corp. or, on a much larger scale a joint financing operation by the ADB the World Bank and EIB for a \$300 m rehabilitation project of Zambian copper mining. Particularly the latter project

may be exemplary in the sense that the project's intended effects are not expanding or even maintaining current levels of minerals production but an increase in productivity which should improve the mineral producer's competitive position vis-a-vis producers from other regions, a position which has tended to deteriorate over the past decade. Regaining a certain competitive edge may force some minerals producer from the stranglehold of depressed prices and the need to increase production to meet foreign currency obligations. It is namely in this way that rehabilitation and reactivation projects can exert beneficial effects for the minerals sector as a whole.

VI. CONSTRAINTS

49. The basic financing constraints plaguing African mining has already been expressed in general terms by dilemma No.2: while many comparatively worthy projects in Africa await finance donors, financiers or investors may have other priorities. Especially for international development financiers these priorities are illustrated by their recent lending practice and determined for the near future by their lending programmes. If these programmes will cover all requirements of mining finance, there is no need to set up an institution. Furthermore, if experience of these organisations has it, that past proposals for additional financing mechanisms have not met with the necessary approval from funding sources, the institution to be established should avoid to provoke the same resistance.

50. Of the performance of Multilateral Mining Assistance Programmes, one of the international institutions with the longest track record in assistance to the mining sector is UNDP. By the end of 1982 UNDP supported 150 projects for which \$130 m were expended at total project cost of \$200m. UNDP originally mainly financed large scale grassroots exploration mapping and surveying, projects which contributed considerably to a better knowledge of the recipient country's mineral resources, and at times led to commercial discoveries and follow-up investment by private companies. A special feature of UNDP are projects that strengthen the institutional infrastructure for mining administration, mainly destined to geological surveys and the ministries of mines. The projects' aim is basically to enable public authorities to properly discharge their obligations towards the mining sector. Due to recent budget cuts projects now concentrate on smaller areas and detailed work, focussed on the downstream phases of the mining cycle. For these projects 3% of UNDP's budget of \$18 m is spent of while roughly one half goes to African projects.

51. The United Nations Revolving Fund for Natural Resource Exploration, operational since 1975 - finances exclusively exploration projects. By end 1982 it has spent \$8.9 m on its eight completed projects, with \$18.4 m committed on ongoing projects or pre-project work. The special features of UNRF projects is dictated by its revolving nature. Contrary to other mining assistance institutions the Fund after a certain start-up time is expected to become independent from donor institutions and finance its projects out of replenishment contributions, a kind of royalty levied on the production value of mines explored with the assistance of UNRF.

52. International or regional financial institutions were the most prominent source of funds for minerals development. In general their scope of activity excluded exploration, an area considered too risky for financial assistance and better left to the states assisted by the above organisations or by bilateral efforts if not undertaken by private investors. As has been illustrated in the previous chapter their efforts were chiefly directed to more "bankable" projects, from the financing of feasibility studies as a preparation to anticipated lending operation through mine rehabilitation to processing facilities.

53. The World Bank's lending to the mineral sector has slackened during the past years.

	1980	1981	1982
Total	220	29	75
of which Africa	80	9.7	33.5

Loans and credits in \$ million.

Source: Jacques Charbonneaux, *Mines et Développement, Industrie et Travaux d'Outre-mer*, Novembre 1983, p. 637.

The reasons for the slowdown in large measure would have to be attributed to the general depressed state of the mining economy. In addition low growth in developing African countries and the requirements for project execution while may not always be assured, may have added to this development. On the other hand, since it modified its lending strategy in 1977 the Bank has broadened its potential scope of activity. While straight exploration still remains outside the scope, other activities preceeding the actual mine development and production have become eligible for being included in projects, among them feasibility studies and other preparatory work for the mine or for physical infrastructure development. ^{1/}

54. At any rate as can be demonstrated by the two of the three major mine financing operations in Africa, Boké in Guinea and Selebi/Phikwe (Shashe), in Botswana the World Bank sees to foreign sponsors to directly or indirectly guarantee its loan.

55. The African Development Bank's programme does not provide for lending to minerals projects as such. Loans that reached the sector are being granted mainly under the heading of industry. The Bank regards the minerals sector as a subgroup of its loans to industry. Still, industry's share of total lending and by the same token, minerals industry's share has been comparatively modest and has lately even decreased. In the fiscal year of 1983 it reached a mere 5.7% of total lending down from 1982 and 1981 figures. Since mining is only a small part of the industry loan portfolio, funding extended by the ADB has remained within close limits. A comparison with figures from the Interamerican Development Bank may shed some light on ADB's performance: ADB has increased its lending to industry and mining from an average of 15.1% during the 1961-1982 period to 24.0% in the 1983 fiscal year. While thus the contribution of ADB to the African mining sector appears rather meagre there are a number of reasons that would justify the prudent course of the ADB. Its attitude is also evidenced by operating in the mining sector chiefly as a co-lender. In some of the major African projects, such as Guelb ICS or the rehabilitation of Zambian copper mining ADB participates as a co-lender together with major international lenders. This strategy will in the medium term add to the financial and technical skills for minerals project funding and thereby enable the ADB to assume a more active role.

56. Among the non regional non-international institutions the European Investment Bank has played the most important role in minerals financing. It has disbursed

^{1/} See World Bank, *Minerals and Energy in the Developing Countries*, Washington 1977

or has allocated a total of ECU 127.4 m for 9 completed and 7 current projects in the minerals sector, which is the equivalent of 14.1% of funds provided from own resources and from so called risk capital resources allocated from EEC member countries budgets and lent out by the EIF. These funds have been made available under the Lomé I and II Conventions. They have been used for all stages of the mining cycle from exploration and engineering and feasibility studies to mine rehabilitation, often in the form of co-financings with bilateral European and international financing institutions.

57. In line with the reluctance of foreign companies to invest in the minerals sector in Africa the lending operations of the mentioned organisations have slowed down. This does not mean that the institutions will not lend to public mining enterprises in host countries. Loans to Ghanaese and Zambian metal industry rehabilitation are cases in point. Still, these institutions may not be able to expand their operations to meet all expectations of the African mining and to the extent that its interests differ from those represented by foreign investors institutions having the security of supply of industrialized countries as their principal business objective.

VIII. OBJECTIVES AND FUNCTIONS OF AN AFRICAN MINERAL FINANCING INSTITUTION (MFI)

Basic alternative

58. When devising the basic general functions and objectives of a new financing institution one is faced with a fundamental alternative. The new MFI African regional Institution could be oriented towards:

- channelling additional funds to national authorities or entities, whether para or semipublic, to mount alone or jointly with private partners mining operations,
- improving the accessibility of African mines by a two-pronged action, namely co-lending to or co-investing in some large scale mining projects.

59. The present proposal against the background of the actual opportunities and constraint has adopted the second option. The Institution developed in the present paper would thus have the following basic features:

- a) it would be an advisory body to assist host countries with potential projects create conditions conducive to an investment and finance flow to the project and conforming to national and regional mining interests,
- b) it would participate as a co-lender or co-financier in funding operations for the project,
- c) based on its preparatory work and with the authority of a co-lender or co-investor the institution would assist the host country to administer the project along the lines elaborated.

60. In fact, the Institution would combine technical and administrative advice with funding assistance, funding scoring mainly as a means to increase the efficiency of advice and its implementation.

61. The following chapters will first outline the reasons behind this basic choice, will then put the operations of the Institution in its national and regional minerals policy context and will finally explain some of the modalities of its operations.

2. Advantages of an investment promotion approach

62. An institution that is designed to improve the accessibility of African minerals projects to foreign investors and financiers can be justified on those grounds:

a) under prevailing circumstances to obtain general finance, i.e. without strings attached to its final use, is almost prohibitively expensive and certainly much costlier than direct investment funds.

b) it is submitted here, that African mineral countries need more urgently an increase in their capacities to prepare, implement and execute mining management and control policies than they need funds.

c) improving capacities to jointly elaborate and administer the terms and conditions of mining investment will have a more beneficial effect on the future of potential mining projects than the increased availability of funds put at the disposal of project countries.

a) Cost advantages of direct investment funds

63. Overindebtedness of African countries and overextension on the side of commercial banks have tended to slow down the flow of general finance that during the time of abundant liquidity was in reach of some African mining countries. So general finance, if available at all, will be more costly which in turn puts a heavy financial burden on the mining projects in the first place.

64. As to international financial institutions and its main donors, they are unlikely to change their minds and make more funds available on liberal terms to project host countries.

65. To rely on regional funds which would not or only to a small extent be complemented by extraregional funds appears all but unfeasible given the huge capital requirements for new mine development.

66. Furthermore, investment capital always has been cheaper than loan capital. Repeatedly, foreign exchange cost of servicing multinational investment during the period 1978-1980 was 4% compared to 13% that had annually to be paid for bank loans. ^{1/} While the 4% represents rather a fixed rate to be charged against foreign exchange income, the financial cost of commercial and some international loans will vary according to interest rate movements in international capital markets.

67. Finally, risks and costs of mining operations are such that they should not be totally assumed by the public. Investing public funds into mining usually is justified on the grounds that it is the only way to ensure full control over the development and utilisation of the national mineral wealth. Experience in Africa, however, has shown that even under conditions of full national ownership of mines the degree of control over operations was not satisfactory. In the light of these experiences and to the extent, public funds can be put to use in a way more beneficial to the national economy public funds and should be used to finance mining projects only as a complement to funds made available by private sources.

^{1/} "Beggaring the poor" The Economist, February 18, 1984.

b) Increase of accessibility

68. The investment orientation of the proposed institution is further justified as it corresponds to a need to improve the accessibility of mining projects to investment and financial flows, that means, inter alia, to establish and consistently control the environment for mineral investment.

69. Accessibility in the sense used here denotes the presence of elements of physical and institutional infrastructure necessary and sufficient for both the investor and the state to establish, to manage and to control large mining projects.

70. Infrastructure comprises the legal and contractual arrangements which state and investor will have to agree to; the policy making and executing institutions that devise and implement the general economic and in particular the mining policy of a sector, whose part, and at times whose most prominent part the mining investment will be. Accessibility likewise will be determined by the capacity of this infrastructure to adjust to requirements of the mining project and likewise to requirements of the national economy. Since mining projects have long recoupment periods, a major role will be played by the parties' expectations that the institutions and organisational structures forming the infrastructure will act in a consistent manner over the long run ensuring stability of contractual or legal regimes.

71. Defined in this way, accessibility for mining projects is the result of the adequate infrastructure that permits the government to exercise rational management and informed control over activities in the minerals sector. The infrastructure at the disposal of the government whose application lead to responsible management and control which in turns assures consistency and stability of an environment that makes minerals accessible to investment.

72. Industry sources have frequently asserted that a low level of stability of investor government relations is to blame for the decrease in foreign investment in the minerals sector. ^{1/} While the notion of stability already has prompted relevant criticism. ^{3/}, it is the context of the link between accessibility and control that best can demonstrate the defectiveness of the notion of instability. First of all, those who formulate the criticism often imply that a government that acted unstable, did so purposely and could have acted differently. In many cases this implication will not hold, as governments that lack the necessary infrastructure may not be in a position to act consistently and stable in the first place.

^{1/} See e.g. R. Mikesell, Mining Investment in Third World Countries, 1982
^{2/} See M. Faber R. Brown, op. cit.: p. 112.

73. The institutional infrastructure is thus the indispensable prerequisite for managing and controlling the mining sector in keeping with national interests. The requirements for proper management and administration of mining operations are high. A well established and competent administration is the best guarantor that these conditions are upheld during the life of a minerals investment. 1/

74. African mining countries in the past have grappled with mining investment control problems, and had rather limited success. While the right to exercise effective control over natural resources had been proclaimed in many instances, while every so often governments promised to capture the commanding heights of their respective economies, the results invariably fell short of expectations.

75. Ever since their independence African countries strove to gain control by employing different contract patterns that promised formal positions of ownership and control. All countries without exception tried to increase the scope of management and control over mining activities as they bought equity shares, participated on a carried interest basis in joint ventures, employed foreign firms solely on a contract basis etc. The ongoing search alone is witness to the fact that control has not been achieved by these methods 2/. Governments were not successful in harnessing mining investment most often undertaken by transnational corporations. For instance, governments nationalized mining operations, only to find later that the capacities required for managing these operations were not yet in place. Two areas where this lack is widely felt is the development of national management capacities through training and manpower development programmes and the taxation of mining operations. In either area, responsible authorities at times had to admit that in the absence of firm guidance and without the necessary implementation capacities they are forced to resort to trial and error methods, that are disruptive and costly.

76. It is in these areas where the institution could make a most valuable contribution to minerals development, as it would:

- advise the project host countries on conditions conducive to an increased flow of mining finance and investment; and
- assist these countries, once the investment has been decided on administer the sector and use its rights under the investment agreement in line with its long term national interest and the interests of the regime as a whole.

1/ See objectives and role of minerals in the economic and social development of Nigeria, ECA/NRD/MIN.80/INF.19 and Aide-memoire on the mineral wealth of Rwanda and its management, ECA/NRD/MIN.80/INF.7.

2/ See S. Asante/A. Stockmayer, Evolution of mining development contracts: the issue of effective control, in: Legal and institutional arrangements in minerals development, London 1982, 53.

77. It would seem that to grant assistance in this way is a very timely exercise. Advise at an early stage may help to avoid some of the problems which have plagued African mining projects in the past. The result would be improved accessibility for investment on conditions conforming to the interests of both investors and the project countries.

c) Participation in credit administration

78. Investment and finance oriented activities of the new institution provide an opportunity to bring to bear regional interests of African mineral producers on the formulation and administration of credit conditions. The institution's activity may thus ensure the project relevant credit conditions and their enforcement during the project life will not be in contradiction with the interests of the members of the institution.

79. Credit conditions and their administration have recently gained in importance. Conditions attached to credits usually to their disbursement are highly visible in the case of e.g. structural adjustment loans, i.e. loans that are more directed at supporting general economic programmes than at implementing projects. These loans carry a number of conditions in the favour of economic indicators which signal the compliance of conditions and in turn trigger disbursements. 1/

80. In mining finance conditionality has found its way into project loans as they were intended to further aims outside the projects, e.g. in the case of European Community loans the security of supply for European consumers. Conditionality of financing in general and fulfilling some conditions can pose considerable problems to developing country governments. The contents of conditions to some countries may imply burdens difficult to accept; their formulation and administration so far has not been transparent, and prevent the borrower from drawing up and implementing strategies to modify or influence them during the credit negotiation stage or adjust them to changes during the project implementation stage. 3/ Another, different type of conditionality is applied by international financial institutions or in some cases by commercial banks in project financing ventures. Here the objective of credit conditions is less to create favourable conditions for investments or improve the performance of the minerals sector in order to better contribute to minerals production and export. The purpose of lending creditors is to ensure that a project is developed and operated according to projections and that finally it generates the funds required to repay loans and pay debt service. The increase in conditionality of project loans also

1/ See for an overview of the IERD programme.

2/ See for introduction into the European mining finance and investment programme C. Cheysson, *La Cooperation Miniere dans Lome II*, Evue du marche Commun 1980, p.60; P.C.F. Crowson. The national mineral policies of Germany, France and Japan, *Mining Magazine* June 1980, p. 537.

3/ See for a recent critique Gerard Fucha, *La convention de Lome: reconduction ou innovation?*, *Le monde Diplomatique*, aout 1984, pp 1, 15.

corresponds directly to the advances of the project finance management techniques which permit the control of project risks. The conditionality of bank loans as a means of risk control at times is complemented and strengthened by the position some leading project lenders have within the borrower national economy. They may be project lenders and at the same time providing budget finance to the government and be involved in retail banking through affiliates. This position enables them to a much higher degree to foresee, influence and manage certain project risks more successful than investors that are represented in the country by a single investment. However the conditions therefore need not be openly spelt out in the credit agreement; they will be felt by the moral suasion or economic pressure such lead lender can bring to bear on the host country of a project. In any case, the effects of project lenders' conditions will be similar to the conditions described above: since they are not readily recognizable they will increase the insecurities and difficulties of decision making for the host country's administration charged with the implementation of the country's policy towards a mining project.

80. In both cases, loan conditions of international or bilateral institutions and conditions for the project administration imposed by lead project leaders, a community of interest can exist between them and the host country of the project. However, even if a community of interest exists, the host country's administration should be able to participate in the process of setting and controlling the conditions. In case it lacks the necessary experience a specialized institution based on its mandate from producer countries and supported by its experience in technical and financial matters could represent the host country's administration and provide it with relevant information. These functions of the new institution may become indispensable when a conflict exists between conditions and policies of the host country. The institution will see to it that the interests of the host country are well presented and represented to the extent these interests are compatible with the common interests of the rest of its member countries. As a co-venturer or co-lender it can do so using the communication channels of the project and taking into consideration the technical and financial requirements for the success of the project. As a regional institution it can rely on its well established policies of resource development.

81. Concluding this chapter it should be retained that the new Institution that would take an active role in improving the conditions for increased and adequate mining finance and investment would yield the following benefits to its member countries:

- reduce risks and costs to the host state that may otherwise be associated with mining finance and investment;
- increase its member countries' capacities to prepare and implement institutional and other infrastructure required to properly administer and control mining investment;

- ensure that member countries are better informed and their views adequately represented in bodies deciding on and applying conditions to financial and investment flows.

82. As a reflex, the activities of the institution would lead to a more stable and predictable environment for both investors and financiers and, by the same token, to an increase in flows to the mining sector.

VIII. THE NATIONAL AND REGIONAL POLICY CONTEXT OF THE INSTITUTION

1. National Mining Policy and the Institution

83. The activity of the Institution will alleviate the policy making and administrative burden of its member countries. The institution's focus on large-scale mining projects will reduce the necessity for the member countries' governments to establish full fledged programmes and services in this respect. Instead it will allow these countries to center their attention on small-scale, non-industrial mining, a main element in mining development programmes for a number of reasons, foremost among them its social and financial impact since small-scale mining is less costly in terms of foreign exchange requirements.

84. The institution is designed to assist the governments and administrations with advise, represent them in investor and financial bodies and create solutions and patterns on a regional level that the member countries can adopt. It brings to bear regionally adopted patterns on national customs, while it facilitates the task of coping with large-scale projects, the administration of which may pose burdens beyond a single country's capacities.

2. The regional policy context

85. The operations of the new institution which is based on the assumption of a regional community of interest, can in no small measure contribute to a strengthening of intra-African co-operation in large-scale mining. Such co-operation appears to be called for:

- since the development and exploitation of the African mineral wealth so far has not lived up to its potential to serve as an engine to African economic development. On the contrary, African minerals producers struggling each one for itself, have not succeeded in re-orienting mineral production operations, while often still follow closely the patterns of pre-independence that did not or not exclusively follow arm's-length standards;

- since the emerging resource co-operation, that finds its expression in some multinational projects ^{1/} needs every support and complementary action in the field of foreign investment and finance flows to the African minerals sector.

86. The institution may also encourage its members to do away with and overcome the traditional obstacles to intra-African co-operation. Its success could forge a unity of interests while in turn could stimulate mining development in Africa.

IX. MODALITIES OF THE INSTITUTION'S OPERATIONS

1. Principal activities

87. The institution will exercise three main activities corresponding to those main phases of its development:

- advisory assistance to member countries in preparing, formulating and implementing a strategy how to best deal with large-scale mining projects. The focus of the activity would be assistance to set up an administrative infrastructure capable of dealing in a rational and coherent manner with these projects;
- participation as a joint venturer, co-lender or guarantor in the financing of large-scale mining projects. The focus here would be to represent the regional interest in the administration and control of the credit as investment and, by the same token, of the progress of the project;
- mobilization of funds as a catalyst while would be made available to projects that fill a gap in the mining investment process or while are of particular interest to the regional member countries.

2. General principles of activities

(a) Co-operation with African financial institutions

88. These activities presuppose a certain financial and administrative basis. In view of the scarcity of funds available the Institution should be attached to or hosted by an established financial African institution, be a temporary

^{1/} See above VI.

measure which could reduce the start-up delay. The existing institution and the facilities and experiences it could make available would influence - at least during an initial period - the details of the patterns and the extent of activities developed. It would provide the new institution with an opportunity to benefit from the knowledge and experience in terms of banking techniques in particular in the fields of project-credit evaluation and administration. The choice of the hosting institution would thus depend on the kind of inputs it could provide to initial activities of the new institution.

3. Modalities of financing operations

(a) Size of projects

89. The main thrust of activities would be directed to large-scale mining projects defined as projects that transcend the capacity of a single member country. Moreover, projects would be considered eligible that have a very pronounced economic and social effect on one or more member country or a part of the region. It would depend on the criteria of an agreed lending policy what projects would have preference. A list of project types has been given in Chapter IV.

(b) Financial basis

90. The basis of operations would constitute the capital of the institution subscribed exclusively by member countries. It would consist of paid in and callable shares backed by notes evidencing the amount owed. The amount of capital subscribed at the initial stages of operations would be rather low. It is not meant to back-up capital contracted on financial markets or to be lent to any larger extent to projects but much rather to be a sign of seriousness of the institution and to constitute a fund that would lent additional weight to the institution's undertakings. The question of the social capital will have to be re-considered when the institution has acquired enough standing to mobilize additional capital.

(c) Scope of financing activities

91. The scope of its financing activities would likewise be determined by the dominance of its technical advisory function. The institution should engage in all those financing activities where its comparative advantage, i.e. its knowledge and position, will yield the greatest benefit. Among the activities should rank highly the participation in joint lending operations, i.e. financial operations by which several lenders participate in the financing of one and the same item, e.g. the cost relating to the development of the mine, the cost of establishing a smelter or other processing unit etc. Since the institution presumably has been involved in preparing the project, it can provide the requisite information to co-lenders and assist in protecting the interests of its member countries.

92. In addition the activities it may perform as a leading co-lender will in fact result in a guarantee effort for the other participants. The guarantee-effect that is one of the basis of other joint-lending programmes, notably the one of the World Bank, is not brought about by assuming a financial responsibility for other participants' loans but by the transparency of joint lending operations. Other co-lenders assume that the project will not default on a loan granted by a regional institution, a loan while furthermore is backed up by its knowledge and experience in the region. This effect may be strengthened if the institution accepts a cross-default clause in its loan agreement.

93. Besides the informal guarantee the institution may extend formal guarantee undertakings to a lender, especially in those cases where statutory requirements or reasons of business policy make such guarantee indispensable.

94. Another modality of the institution's activity would be to invest some of its capital stock in large-scale mining projects. An investment in a project may prove adequate in the case that effectiveness of the institution's action could be increased by representation on the managing body of a project. Given the scarcity of funds and the higher risk of an equity investment, co-venturing would constitute an exception in the institution's activities.

(d) Security considerations

95. The credibility of the institution - as in later phases of its activities, its creditworthiness in financial or capital markets - will depend on a number of factors that determine the security the institution can provide for its financial operations.

96. First, its operations would be secured by the capital stock subscribed by member countries. The institution would be responsible for its activities with and up to the subscribed capital. Since the capital will be rather low, as has been pointed out above, its security value will be low. It has to be complemented by guarantees the institution receives from host project member States to cover the repayment of a loan granted by the institution. In case the institution itself has guaranteed the repayment of a loan granted by a third lender, the institution's guarantee would be secured by a back-to-back guarantee of the host country.

97. The 'primary' security for any obligations the institution will incur should consist of its technical and financial expertise of handling large-scale mining projects in member countries. In order to obtain this type of security, only those projects will receive financial backing that have been prepared and evaluated by the institution and whose host governments had been assisted in setting up or reforming their administration to face up to the task of administering the project.

This prerequisite will offer an insurance against so-called "political risks", i.e. disruptive behaviour of project sponsors that can jeopardize the project's success.

98. Finally, the information and its position as a "broker" between interests of the host government and other sponsors will enable the institution to actively reduce project risks. The position of co-venturer or co-lender confers a right to institution to monitor and control the administration of the project.

(a) Cost considerations

99. Cost incurred in running the institution and funding necessary to cover these expenses should be guided by three basic considerations: the operating costs should be as low as possible and covered wherever possible by external funds, since they reduce the availability of regional capital for financing of or investing in minerals projects; an important role in the efforts to keep operating costs to a minimum will play the decision to attach the institution to an existing financial organization.

100. The initial funding which would have to be financed by member countries would consist of a contribution to the hosting organization towards meeting the cost of the use of its facilities and a component to finance the basic cost of hiring a minimum of personnel. Activities for projects and member countries would have to be carried by the member country demanding the services. To the extent possible the institution would assist the member countries to secure bilateral or multilateral funds to cover the cost for the technical assistance rendered. A member of international financial institutions have made provisions in their lending budgets to finance this type of services.

Finally, once the institution is engaged in participating in the financing or investing in minerals projects, the current expenditure of the institution will be covered by charges levied as front-end fees on the project borrower or paid by the project in consideration of services rendered.

X. PERSPECTIVES OF OPERATIONS

101. The First General Conference made a number of detailed recommendations as to a future institutions activities. 1/ The proposed institution would fulfill these recommendations in the following manner:

1/ See E/CN.14/804, Par. 32, VII, (i)

Recommendations:

- to advise governments on appropriate investment incentives; and
- to prepare standard forms of agreement for possible use of member States in minerals projects in Africa.

Under the terms of a regional mandate the institute could both advise on investment incentives and preparation of standard agreements as well as their adaptation to fit national circumstances of the host country are part and parcel of the institution's assistance in preparing and establishing the groundwork for administering large-scale mining projects. Advice on investment incentives, in particular are a good example for the institution's activities. Finally, the position of the institution as a co-lender or co-venturer will provide it with the possibility of evaluating the impact of incentives on the project and proposing corrective action if these incentives do not correspond with the project's as the host country's interests.

- to set up a team of financial and other expert negotiators

102. The Institution's final aim of course is to have at its disposal a body of experts both in the financing and mining administration fields. The institution is designed to assist the government in all phases of project development and to overcome those problems that arise frequently when expert advice cannot be followed up or has been rendered without taking into consideration the conditions for its implementation.

- assist Governments in financing feasibility studies of high priority projects

103. As discussed in Chapter V of this paper feasibility studies are just one of the uses for finance which may be considered suitable for the institution because of their special impact on mineral investment. If the institution is of the opinion that external funds are available, e.g. for the financing of a feasibility study it will so advise the government. In case it feels that the money is not available but would be well spent as it would promote the financing of a viable project, the institution would step in with own funds. In this sense it would be a "lender of last resort" with the condition that its loans have to have a catalyst effect for other providers of funds.

- raise funds from member countries for financing, on favourable terms, mineral projects

104. This recommendation relates to the last phase of the institution's operations, i.e. the mobilization of investment or debt capital. At that moment the institution will have achieved a certain track record for technically and financially preparing projects and co-administering mineral loans or investment. Member countries' contribution to the institution's capital stock will allow the institution to contract loans on favourable terms. In addition, the host country guarantee of the project and the contributions of member countries to a capital stock will increase security of the institutions operation and by the same reduce costs of financing from external sources.

105. In essence then all recommendations made by the First Regional Conference can be fulfilled by the institution. In three distinct phases, each of them based on the successful completion of the preceding phase:

- 1st phase: advisory services for member country governments on the establishment or strengthening of non-physical infrastructure for mining projects;
- 2nd phase: co-lending or co-investing to projects in member countries that have received assistance;
- 3rd phase: mobilization of funds from external sources for projects that have a special importance for the region or the mining development of a country, with particular emphasis on creating an integrated mining industry in the region.

CONCLUSION

106. "Provided only that the right amount of investment capital and appropriate technology can be injected into the exploitation of these resources ^{1/} the tremendous African mineral wealth can be tapped."

107. The optimism thus expressed in 1975 by Dr. Gaositwe Chiepe, Minister of Mineral Resources and Water Affairs of Botswana, has given way to a more cautious attitude. The capital it was hoped would flow to minerals projects on account of the then much heralded "resource complementarity" between producers and consumers of minerals did not arrive in Africa, at least not to the extent and the conditions anticipated. African countries thus feel left out from the resources game that presumable provides a gain for all players.

^{1/} Address delivered to the conference in "Perspectives in Afro-German Relations" Bonn, October 8-10, 1975.

108. The potential African mineral wealth needs finance and investment before it can contribute to the countries' development. However, the conditions of this flow and thus of the utilization of their resources have often escaped the control of the mining authorities. Governments while they were formally entitled to participate in and control mineral project management were at all times unable to take advantage of this position and secure a lasting gain for their country's development. Mineral policy more often than not was conceived and executed in a way that deteriorated the terms for resource development as legal and administrative infrastructure gradually eroded. African mines thus become less and less accessible.

109. Under these circumstances a simple funding mechanism would have only added to existing problems and would have exacerbated the grave financial situation of African countries. So a somewhat more modest approach in terms of funding is called for which, however, is more demanding in terms of political co-operation, administrative consistency and financial expertise.

110. An institution has been conceived the combines assistance in the fields of policy making and administration with the mobilization of funds and their control. Its operation yields positive effects for both, its member countries and the sponsors and financiers of mining projects. Both will profit from the enhanced stability and consistency of the preparation and administration of mineral projects and their environment. Its successful operation shall contribute to the two overriding aims of African mineral policy: forging unity among mineral producers and reaching permanent sovereignty over African mineral resources.