THE SADCC MINING COORDINATION UNIT

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In 1981 Zimbabwe presented the SADCC Council of Ministers with a report on "Regional Cooperation in the Mining Industry", which outlined the importance of mining in the regional economies, emphasised the importance of southern African minerals as raw materials for the industrialised countries and also put forward that:

"It is arguable that the SADCC's relationship with the western world hinges on whether or not - and on what conditions - Europe and North America gain access to the minerals of the region".

Another fundamental issue raised by the document and also by Kalyala is that, given that mineral resources are a wasting asset, attention should be given to their conservation for future resource-based industrialisation, and that this should be done at the regional, SADCC, level. But the main focus of the document was to propose that mining become a new sector for regional coordination and to propose areas of possible regional cooperation such as:

1) mineral beneficiation,
2) manpower training,
3) minerals marketing,
4) mining financing and technology.

The responsibility for the coordination of the Mining Sector was delegated to Zambia at the same meeting of the Council of Ministers held in Blantyre, Malawi in November 1981, as it was, and continues to be, the country with the largest mining sector in the region. A year later, at the Council of Ministers Meeting in Luanda in 1982, Zambia presented a "Report on Cooperation in the Utilisation of Mineral Resources for Development" which proposed the following potential areas of regional cooperation:

1) manpower and training,
2) mineral exploration,
3) metal fabrication and utilisation of local mineral products in manufacturing,
4) manufacture of mining machinery and spare parts,
5) establishing a chemical industry to produce input materials necessary in the beneficiation of minerals,
6) legislation covering taxation, mineral rights and labour utilisation,
7) financing mineral projects,
8) marketing.

Thereafter it took yet another year for the Zambian SADCC mining sector coordinator to draw up six study projects to be submitted for funding. These were on mining manpower and training, the establishment of mineral-based fabrication and foundry facilities, mining machinery manufacturing facilities, mining chemicals, cooperative marketing/production arrangements and the establishment of a regional geological databank. Finally, in May 1984, the SADCC Council of Ministers meeting in Blantyre approved the mining sector programme covering nine studies and mandated Zambia to negotiate financing for them. The studies were:

1) regional skilled manpower survey,
2) small-scale mining processing and marketing,
3) geological and minerals inventory,
4) foundry, fabrication and machining facilities,
5) mining machinery manufacture and reconditioning,
6) mining chemicals and explosives,
7) sharing of mineral processing facilities,
8) iron and steel,
9) fertiliser minerals.

After that nothing happened until the mining coordinator was changed and a workshop was organised in January 1985 in Lusaka that for the first time brought together SADCC government mining and geology personnel, supported by the Commonwealth Secretariat’s Commonwealth Fund for Technical Cooperation (CFTC), Industrial Development Unit (IDU), who also undertook to carry out studies number 4), 5) and 6) above. The proceedings of the workshop were compiled as a document on “Analysis of Mineral Resources Development and Opportunities in the SADCC Region” and concluded that:

“The ultimate objective of the... (mining sector development) ...programme is to achieve coordinated investment and production in the SADCC region, through regionwide planning and promotion of both new projects and reactivation of existing capacity in mining, and mining linked activities.”

This is still the clearest policy statement for the SADCC mining sector and, importantly, starts out with the aim of coordinated investment and production. Six years later there still was no evidence of any coordination through the SADCC Mining Coordinating Unit of either mining investment or mineral production - only a seemingly endless stream of studies financed by the industrialised countries and, generally, carried out by their consulting companies. What went wrong?

The low priority given to the mining sector by the SADCC at its inauguration is explainable given the urgency of rehabilitating the infrastructure, particularly ports and railways. In that, in terms of value, minerals are by far the most important goods exported via the regional ports and railways, it can be argued that the overwhelming emphasis placed on its rehabilitation was primarily for the mining sector and that the success of this was and is the most important mining sector project, even though it did not come under the SADCC definition of this sector. The point being made is that via the reactivation of the regional infrastructure, the mining sector has benefited substantially from the SADCC initiative, probably more so than any other sector. But this success was in fact only recreating the colonial links between the region’s minerals and the mineral consuming industries of the First World, which had been severely damaged by the liberation wars of the seventies and South African destabilisation in the eighties. In effect the situation has essentially returned to the mid-sixties, with the only difference being that the Benguela Railway has been replaced by the Tazara Railway for Zambia’s minerals.

If the infrastructure recreated the colonial linkages, then it would rest with the SADCC Mining Sector to implement a regional minerals strategy to achieve SADCC’s overall objective of the reduction of dependence through collective self-reliance. If so, the initial list of project areas, such as downstream transformation, mining inputs manufacture, minerals legislation and marketing, together with the above quoted commitment to coordinated investment and production, would meet these objectives. However, three of the most important areas specified in both the 1981 Zimbabwean document and the 1982 Zambian document (minerals marketing, mining legislation and mineral resources conservation) had strangely disappeared by the time concrete study projects for funding had been drawn up. This omission has been explained by the generally cautious policies of the SADCC and that these three areas were considered to be too contentious given the widely differing mineral development strategies of the member states at the time, particularly as regards TNC investment and minerals marketing. However, despite this, in 1989 a World Bank drafted and funded project on investment in small and medium scale mining was approved by the SADCC Council of Mining Ministers. Why a World Bank initiative was accepted rather than a regional one (in 1984) could merely be due to the fact that by 1989
almost all the countries in the region had changed their mining and investment laws and were trying to attract TNC investment, or, more surprisingly, a World Bank initiative was thought to be more credible than a regional one.

The reasons why coordination of the mining sector took so long to get underway and why so little has been achieved are twofold: Firstly, the step-wise project approach of the SADCC without trade integration is extremely difficult to implement for productive projects beyond infrastructure and regional services. In this regard it is not only mining that has failed, there are no SADCC production facilities in any sectors. But this still does not explain why the mining sector has achieved so little in the regional coordination of non-productive mining aspects such as regional research and training strategies or facilities and the rationalisation of mineral processing facilities. This brings us to the second reason, the weakness of the Mining Unit in Lusaka, which can be attributed to two concrete factors: The first is that, unlike Transport and Communications (Mozambique) or Energy (Angola), Zambia has not created a full time post for the mining sector coordinator: instead, the already overworked Chief Government Mining Engineer doubles up as the regional coordinator and does not have the time to execute this, secondary, function effectively. The second factor is that, in common with several other SADCC states, the massive devaluation of the local currency has provoked a high rate of inflation and government salaries have not been increased at the same rate. This has resulted in Zambian government functionaries receiving extremely low and uncompetitive salaries which in turn makes it difficult to attract qualified and experienced local personnel to the Mining Coordination Unit. This has in turn resulted in the coordination of the mining unit principally being carried out by seconded foreign personnel on competitive offshore salaries.

The main functions of the Coordinating Unit include preparation of mining sector strategy, initiating, stimulating and identifying projects in close liaison with member states. The Unit is also responsible for mobilising technical, managerial and financial resources for project implementation. What actually happens is that member states, outside agencies (such as the World Bank and the EEC) and the Coordinating Unit propose projects that are then assessed for their regional character (in terms of the 1980 SADCC objectives) and then accepted or rejected at the Annual Council of Mining Ministers Meeting and then it is theoretically up to the Unit to seek funding for the project. In this way many essentially national projects find their way onto the SADCC mining shopping list for funding as they may theoretically reduce regional dependence on a mineral or mining input import and generally have more chance of attracting funding if they have a “regional” flavour.

The SADCC Mining Programme consists of 54 projects at an estimated cost of 70 MUSD of which 35 MUSD (50%), mainly foreign, has been secured. Several regional studies have been completed on the local (regional) manufacture of mining machinery and spare parts, the local production of mining chemicals and explosives, a study on regional iron and steel production (jointly with the SADCC Industry Sector), a regional mining manpower survey, a study on small scale mining, a study on mining data management, a report on fertilizer minerals, study on industrial minerals development, a market study for semi-finished copper products, a market survey of possible products from Sua Pan brines in Botswana, a feasibility study on the establishment of a refractory industry, a hydrogeological investigation of the SADCC region, a prefeasibility study on the establishment of an alumina/aluminium industry, a study on the processing of lime in the sub-region and a study on regional coal exploitation. In addition, a regional study on methods of promoting investment in small and medium scale mining will be carried out in 1990. Since 1987, the SADCC Mining Unit has been claiming that they are moving from the study stage to the investment implementation stage, but the studies continue and the first regional productive facility is still awaited.
The completed studies have resulted in a series of specific projects which were approved by the SADCC Meetings of Mining Ministers in 1987, 1988, 1989 and 1990, and the SADCC Mining Coordinating Unit is currently seeking funding for them (several have already secured funding). These can be grouped in the following broad categories:

a) Development of Industrial and Fertiliser Minerals: The Luzinada bentonite deposit (Mozambique), the Kindonocaxa phosphate deposit (Angola), the Sianyolo fluorspar deposit (Zambia), the Pugu kaolin deposit (Tanzania), vermiculite in Zimbabwe and Malawi, ceramic raw materials in Swaziland, the heavy mineral beach sands deposits of Malawi, Mozambique and Tanzania and an assessment of regional ornamental stone and gypsum deposits. These are all national projects which may or may not benefit another member, depending on whether they choose to import the product once available.

b) The Development of Strategic Regional Mineral Resources: Exploration for further lead/zinc reserves in Zambia to prolong the life of the Kabwe mine, exploration for bauxite reserves along the Zimbabwe-Mozambique border for the establishment of the region's first aluminium plant, increased output of tin from Kamativi (Zimbabwe), exploration of the Munali (Zambia) and Kabanga (Tanzania) nickel deposits, the reassessment of the Angolan and Swazi iron ore resources (both used to be major producers) and the development of the coal resources of the Moatize basin (Mozambique), the Livingstonia basin (Malawi), and the rehabilitation of the, already operating, Maamba Colliery. These are, once again, national projects that are deemed to be strategic to the region, but the regional dimension of the iron ore projects in Angola and Swaziland is difficult to fathom, as are the Malawian and Zambian coal projects and the Tanzanian nickel exploration project.

c) Development of Small Scale Mining: This includes projects on the small scale development of minerals such as coal, lime, gemstones and other selected minerals. Here again the regional dimension is non-existent or marginal except that a region-wide strategy is being developed and techniques and methods of small scale mining are being disseminated to member countries. An expatriate advisor on small scale mining took up post in 1989, to develop this sector in the region.

d) Strengthening of Mining Manpower Training: Included here are projects for the strengthening of university and technical college training, and in-company training at institutions in the region. This an area of critical importance to to regional development of the mining sector, but although the study was done in 1986 the recommendations have not been implemented except that an expatriate funded by the EEC will take up the post of SADCC Mining Sector Human Resources Development Officer in 1990. At an informal level, not through the Mining Unit, there have been several instances of mining personnel gaining on the job training on the mines, plants and research institutes of neighbouring states.

e) Reinforcing Mineral and Mining Knowledge in the Region: These projects include the setting up of national geological/mining databases and a regional one at the Unit in Lusaka, a regional geophysical and geochemical map compilation facility in Maputo, the implementation of a regional seismological network, a study of the regional Alkaline Complexes, a regional diamond exploration project and, an already operating, geochronology facility. This group of projects seeks to promote one of the few areas of regional cooperation that, like infrastructure, does not require trade integration, that of research and service facilities for the minerals sector. In 1985, on EEC prompting, a project was formulated for a regional facility to receive SPOT images to aid geological mapping, but the project was quietly dropped when it became clear that the French government was installing the facility in South Africa. These images can also be used for military purposes and could aid South Africa in destabilising the
region, but there has been no outcry or even comment from the SADCC Mining Unit. A similar facility, by McDonald Dettwiler, is now under consideration with possible Canadian aid.

1) Development of Import Substitution Industries for Mining Inputs: This includes the setting up of a regional mining inputs databank and the local manufacture of inputs such as refractory bricks, diamond tools and rockdrills, wear resistant liners and rail track and fittings, electrodes, activated carbon and metallurgical coke. In this regard two expatriate technicians took up post in 1990 at the SADCC Mining Unit, one to establish a region-wide databank on mining equipment and spares manufacture and consumption and the other to look at mining equipment manufacture in the region.

2) Optimizing the Utilization of Existing Facilities: This could be done, for instance, by the sharing of mineral processing facilities, training institutes and marketing bodies. A study on the regional potential for the sharing of mineral beneficiation facilities was on the original shopping list of 1984, but got no takers. Instead an expatriate mining engineer was seconded to the Mining Unit in 1990 to carry out this project. A joint project with the ESAMRDC on map compilation, under e) above, will augment an existing Mozambican state oil company facility. As opposed to the other areas of regional cooperation in mining that require the utilisation of the regional market for mining inputs or mineral-based products, this is one area that the SADCC step-wise non-trade approach could have worked for the creation of regional centres based on existing facilities for research and training and for mineral processing, but almost nothing has been achieved, in contrast to the Agricultural Sector which has several research facilities. In fact several regional initiatives have already taken place in this regard by mining companies, outside the ambit of the Coordinating Unit, the most notable being the project whereby about 13 kt of copper/nickel matte from the Selebi-Phikwe smelter in Botswana is being toll-refined by two companies in Zimbabwe (BNC and RTZ) thereby keeping more of the value-added in the region. Copper concentrates from the Mundonguara mine in Mozambique have been refined in Zimbabwe, at Alaska (MCM) and E.C. Meikle, a small Zimbabwean bauxite mining company, is currently exploiting Mozambican reserves on the other side of the border. But all of these initiatives received no help from the Mining Unit.

3) Regional Minerals Development Financing Facilities: This is essentially the creation of a regional funding facility for high risk venture capital for mineral resource delineation and appraisal currently under negotiation with the United Nations agency UNRFNRE.

From the above it is clear that the bulk of the SADCC mining programme consists of projects that are thinly disguised national projects that have found their way onto the SADCC shopping list because it was thought, by the national governments concerned, that they would have more chance of attracting funding. There are no production facilities in the SADCC mining sector set up to service the region, though the regional studies came up with several such facilities that would be viable given the regional market. This failure is principally due to the non-trade nature of the SADCC initiative. But, even in areas where most members would benefit without having to purchase a product, such as research facilities, information services, training facilities and financing mechanisms, the SADCC mining sector has made little headway due to the weakness of the coordinating unit; also, in part, presumably due to the low priority given by the Zambian Government to its SADCC sectoral responsibility in that it was not prepared to create a full time coordinator's post and only allocated adequate space (offices) for the Unit until 1990. However, with the recent strengthening of the Unit with four expatriate professionals and one foreign funded SADCC national (minerals economist), progress will most probably be made in the field of regional mining service facilities, but this flies in the face of the SADCC's founding objective, that of the reduction of dependence through collective self-reliance. Collectively the SADCC
has equally or more experienced and qualified people than the expatriates being brought in, but to attract high calibre personnel, posts with adequate remuneration must be created and funded. In addition, after their tour of duty, the expatriate professionals leave the region with all the experience and knowledge of the regional minerals sector gained while working at the Unit.

The reason why the Zambian government has given such apparently low priority to its SADCC responsibilities is not clear. In 1987 it was put to the then Minister of Mines that more resources needed to be allocated to the Unit and he wholeheartedly agreed, but was transferred to another ministry before anything was done. This casual attitude by Zambia is even more paradoxical when it is considered that Zambia would be one of the principal beneficiaries of a regionally rationalised mining development strategy, in that it has the largest mining industry, a substantial mining inputs industry (equipment, spares and explosives) and mineral transformation industry (copper, lead, zinc and manganese). In conclusion, what has always been admired as a strength of the SADCC, the decentralised structure with country sectoral responsibility, has in the case of mining proved to be a weakness as there is no effective means for the Secretariat in Gaborone to keep tabs on the efficacy of the sectoral coordination units nor is there an adequate mechanism for the member countries to assess the units and to take remedial action.

Footnote

4 An example of why this needs to be done is Zambia where just as the regional economy had reached the level of consuming substantial quantities of lead and zinc, the only resource of the region ran out after supplying Europe with lead and zinc for 85 years, though with the admission of Namibia, the region once again has an operating lead/zinc source, at Rosh Pinah.
5 Under the SADCC delegation of sectoral coordination, oil was included under energy and delegated to Angola. In 1986, all SADCC energy projects dealing with coal were transferred to the mining sector.
8 As the SADCC Mining Sector Coordinator is in fact the Chief Government Mining Engineer, when the latter is changed the Coordinator is automatically changed.
9 SADCC Mining Sector 1985. 10 SADCC Mining Sector 1985, page 163
11 Other than their constant reiteration that “The objective of SADCC regional cooperation for the Mining Sector derives from the principles and policies set out in the 1980 Lusaka Declaration and amplified in the Mineral Resources Development Strategy adopted by the SADCC Council of Ministers ... in Blantyre 1984 ... (and is)... fully consistent with the Lagos Plan of Action of 1980 ... (for)... minerals development:
   a) Establishment of sovereignty over natural resources,
   b) Development of mineral based industries,
   c) Development of indigenous skilled manpower capacity.
12 See Jourdan 1984, page 41.
13 See the country chapters below for descriptions of the mineral development policies of individual states.
14 In this regard the performance of the SADCC Industry Sector has been just as lackluster, see Ostergaard 1989a.
15 His primary function is his substantive post, that of Chief Government Mining Engineer.
16 From 1987 to 1989 the Unit had the services of an experienced mining engineer seconded by the government of France, who made a noticeable difference to the running and capacity of the Unit. Recently (1989/90) several more foreign technicians have been seconded to the Unit by the Nordic countries and West Germany.
17 Theoretically, because even though the development of a mineral or mineral product that is imported by the region in any single member country will reduce regional dependence, it is quite possible that other members will continue to import that mineral or mineral product after the regional facility is up and running as the SADCC includes no form of trade integration.

18 In 1990 an aid bureaucrat (SIDA) commented that they preferred to fund regional projects because it made them feel that their money went further.

19 This study was done by the author after the study done by the original consultants, Bonifica Spa of Italy, was rejected. The study was completely redone for 4% of the original budget.

20 This project was approved when Kabwe was still the only zinc/lead producer in the region. Since then the entry of Namibia with the Rosh Pinah mine has reduced the strategic aspect of Kabwe.

21 This project could take on a regional aspect if it proves to be feasible to smelt tin concentrate from the Choma Tin Belt in Zambia at Kamativi.

22 The Munali project could take on a regional aspect if it is feasible to rail concentrate to the Bindura smelter (BNC, AAC) in Zimbabwe, which is short of feed and has considered the Munali deposit.

23 Coke from Moatize coal would be suitable to replace Zimbabwean imports from South Africa.

24 For example, the Institute of Mining Research in Zimbabwe has trained personnel from Malawi and Tanzania in coal chemistry and in 1985 and 1990 it ran the regional 10 week course on Mining Geology, funded by UNESCO.

25 This facility was set up at the University of Zimbabwe before the SADCC Mining Unit got underway and it was incorporated as a SADCC project to get EEC funding for researchers from the region to use the facility to date their rocks. It is the only geochronology facility in sub-Saharan Africa outside South Africa.

26 European Space Agency.

27 East and Southern African Mineral Resources Development Centre, in Dodoma and Dar es Salaam, Tanzania.

28 United Nations Revolving Fund for Natural Resources Exploration.

29 Another contributing factor to the weakness of the Unit is the Zambian government “musical chairs” whereby the Minister of Mines has been changed almost yearly and, more importantly, the Permanent Secretary has changed almost as frequently.

30 1 Frenchman, 1 Finn, 1 Swede, 1 German and 1 Nordic funded SADCC national.

31 From 1987 to 1989 a French mining engineer had a marked impact on the performance of the Unit. He is now one of the most knowledgeable people in the world on the SADCC minerals sector, and is living in France!

32 For further details see the country chapter on Zambia and the chapter on potential regional strategies.