OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

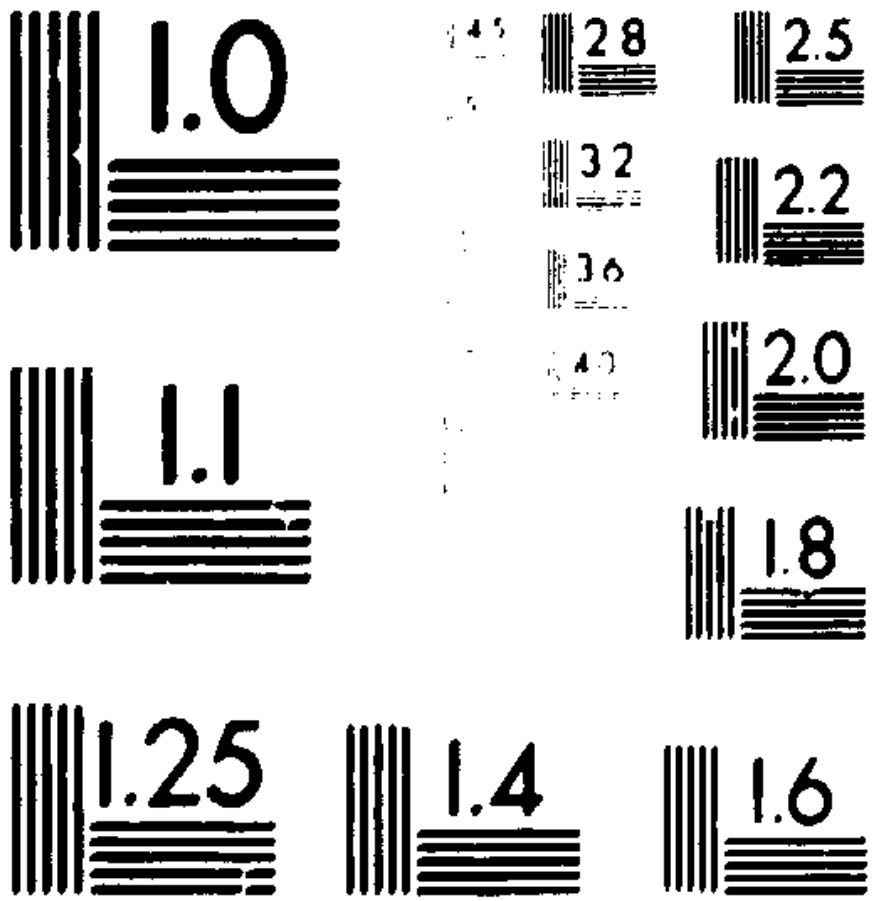
FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org



12860

INDUSTRIAL CO-OPERATION THROUGH SADCC*/

Preliminary Report

Prepared by the

Regional and Country Studies Branch
Division for Industrial Studies

cf. 12860

V.83-62115

PREFACE

It is axiomatic that industry has a major contribution to make in the production of goods and services that are required for meeting the basic needs of the people as well as for the improvement of their living standards. Indeed universal cognizance of the paramount role which industrialization can play in the improvement of the hitherto very low standards of life in Africa has led to the adoption of a variety of decisions, all of which emphasize and support such measures as would promote accelerated self-sustaining and self-reliant industrial development. Hence the decisions of the OAU Assembly of Heads of State and Government, the Third General Conference of UNIDO and the Thirty-Fifth Session of the United Nations General Assembly, which proclaimed the 1980s as the Industrial Development Decade for Africa, for, inter alia, the purpose of focusing greater attention and evoking greater political commitment and financial and technical support at national, sub-regional and international levels for the industrialization of Africa.

It is against that general background and within the context of the Lagos Plan of Action and the Industrial Development Decade for Africa that the Division for Industrial Studies of the United Nations Industrial Development Organization undertook, within its work programme for 1983, this study of the Southern African Development Co-ordination Conference (SADCC) sub-region. The study was, therefore, motivated by the importance which UNIDO attaches to subregional industrial co-operation, and the positive support which it is willing to lend to SADCC and its member countries severally and jointly in their efforts to industrialize during and beyond the 1980s. It was felt that a study of this kind would help reveal, albeit in general terms, such industrial

strategies and policies as should be adopted for the formulation and implementation of programmes associated with the Industrial Development Decade for Africa and the Lagos Plan of Action. It is not in any way claimed that the findings, conclusions and recommendations of the study constitute an exhaustive account of all the major factors affecting industrial co-operation and intra-SADCC trade in manufactures.

The study is based on information obtained from available documents and reports on the SADCC, as a single organization and as individual member countries. In addition, further information was sought by way of visits to the SADCC Secretariat, countries and co-ordination units in each country, where consultations and clarifications were sought from appropriate officials. It is deemed necessary to point out that despite the exemplary co-operation and assistance of everyone interviewed or consulted to provide information that would help paint a more complete picture, there still remain gaps. This is mainly due to the inadequacy of the statistical data both on SADCC and its individual member counties. This has, therefore, made it difficult to present coherent analyses of each and every important aspect of industrial co-operation and intra-SADCC trade. It will also be appreciated that since SADCC is still in its early formative years, the study is understandably not concerned with the evaluation of what has been achieved, for that would be tantamount to a pre-judgement of the performance of the Conference. An attempt has been made to raise issues and cite examples from other regions which are relevant to and are bound to arise in the SADCC efforts for fostering and promoting industrial co-operation. Doubtless, these will constitute useful lessons and guidelines regarding such measures as

SADCC may adopt for achieving the objectives and realizing the aspirations of its members. This drawback has not, however, had a negative or debilitating effect on the conclusions and recommendations of the study, some of which give such analyses as provide an insight into important aspects and facets of co-operation and intra-SADCC trade which call for further action or detailed studies.

Efforts have been concentrated on the identification and analysis of the constraints and prospects for increased industrial co-operation and trade in manufactures among SADCC member countries. Since the natural resource endowment in the sub-region has received exhaustive treatment in existing documents, they are therefore taken as given and references are made to them merely for illustrative purposes. It is hoped, in any case, that the conclusions and recommendations of the study will offer adequate tools for industrial policy-makers and strategists within SADCC and to donors of technical and financial assistance in discerning and selecting policy and strategy options for the most effective removal or at least alleviation of the problems constraining intra SADCC co-operation and trade in manufactures.

The study was prepared by a group of consultants in consultation with staff members of the Regional and Country Studies Branch of the Division for Industrial Studies. However, the designations in this report do not in any way imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitations of its frontiers or boundaries. The views and opinions expressed in this study are,

therefore, those of the authors and do not necessarily reflect the views of the Secretariat of UNIDO, nor those of anyone of the nine SADCC member countries nor its Secretariat.

CONTENTS

Chapter		Page
	Preface	i
I	Introduction	1
	General	1
	SADCC as a machinery for industrial co-operation	2
	Constitutional status and mandates of SADCC	4
	Some issues for consideration in intra-SADCC	18
	Overall approach	18
	SADCC as a framework for industrial co-operation	19
	Outline of the study report	24
II	Characteristics of the economic sector in the SADCC countries and their development experience in the seventies	27
	A brief review of the development experience of SADCC countries in the seventies	27
	Analysis by sectors	27
	Analysis by branches	37
	Resources for industry	41
	Analysis of current economic problems	44
	Appendix to chapter II	48
III	The potential benefits of industrial co-operation	50
	The meaning of industrial co-operation	50
	SADCC subregional economic co-operation/integration	51
	Trade and industrial development in SADCC	56
	Possible industrialization strategies in SADCC	59
	Market failure and the need for intervention	62
	Market size	64
	Foreigh exchange scarcity	66
	Bargaining power	67
	Summary	68
IV	Constraints on further progress	70
	Different levels of industrial development	70
	Foreign exchange constraints	71
	New investments or rehabilitation	72
	Differences in objectives between members	73

Chapter		Page
	Cost and quality of SADCC goods	74
	The absence of rules, monitoring and control	75
	Bilateralism	77
	Transport constraints	78
V	Implementing industrial co-operation within SADCC: The way ahead	80
	The need for rules restated	80
	Rehabilitation as a priority	81
	Domestic sourcing	81
	Product and process selection	82
	Project allocation and proposals	82
	Project operating procedures	84
	Project exclusivity and licensing	85
	Harmonization of trade and exchange rate policies	87
	Barter arrangements	88
	Other intra-SADCC related policies	90
	Programmes for trade liberalization	91
	Common external tariffs	93
	The Joint Industrial Programmes (JIP)	94
	The Sectorial Programmes for Industrial Development (SPID)	96
	The Industrial Rationalization Programme (IRP)	97
	Product reservation for lesser developed members	99
	Harmonization of economic policies and other aspects of co-operation	101
	Other areas of integration	103
	The General policy environment	104
	Importance of private sector activity	105
VI	Some of the other fields for SADCC co-operation	107
	Co-operation in the development of industrial human resources	110
	Assessment of industrial manpower needs	111
	Provision of facilities for industrial manpower development	111
	Technology	112
	Co-operation in research and development (R+D)	113
	Institutional organization for specialized industrial services	114

Chapter		Page
	Exchange of information and personnel	116
	Co-operation in the financing of industrial development	117
VII	Summary, conclusions and recommendations	120
	Conclusions	120
	Recommendations	125
	Functional content of an action plan to implement industrial co-operation within SADCC	128
	Action plan	133
Appendix A	Minerals and energy	165
Appendix B	Brief notes on agriculture in the SADCC region	205

I. INTRODUCTION

General

Conceptually, industrial co-operation is based on the willingness of the co-operators to pool together their resources as well as share the costs involved in order to reap more benefits than would otherwise accrue to them individually in the absence of co-operative efforts and arrangements. Co-operation is based on the readiness and willingness of each and every co-operating country to permit an enchroachment on its sovereignty by such authority as may be established by all the co-operators with specified mandates. The form, nature and extent of industrial co-operation and its effetiveness in the achievement of its objectives would essentially depend to a great extent on the mandates enshrined in its constitution and undertaken by the authorized or mandated institutional machinery. Central and fundamental to the effectiveness and success of whatever co-operative arrangements are established is the political commitment and unflinching and positive support from the co-operating state governments.

The status of the Southern African Development Co-ordination Conference (SADCC) and its nature, strength and effectiveness in attaining the main objectives for which it was established could, therefore, be viewed from its constitutional powers and obligations and the institutions which support it in the execution of its policies and those delegated to it by its member countries. SADCC co-operation in the field of industry could be viable if it

could provide more beneficial links between individual SADCC member countries and other non-SADCC countries either in terms of access and/or conditions of availability of such factors as: skills, technology, finance, etc. based on identity and mutuality of interest backed by the sincere spirit of interdependence. At present, the major part of interdependence continues to be between SADCC individual member countries on the one hand and the industrially more advanced countries on the other, partly as a result of perceived or real better options available from the latter countries, and partly as a continuation of traditional trade links.

It is appreciated that industrial co-operation takes many forms and there are divergencies in similar forms which arise from the peculiarities of co-operating countries emanating from political, economic, financial, social conditions and geographical situations. The political relationship of the SADCC member countries vis-à-vis the Republic of South Africa, the landlocked situation of a number of member countries and the shortage of foreign exchange and excessive indebtedness of some members are all inevitably influencing in one way or the other the nature and extent of industrial co-operation within SADCC. It is deemed necessary to outline in these introductory remarks the nature of SADCC as a machinery for industrial co-operation at the subregional level, and cite examples from other regions where lessons could be learnt for the effective pursuit of industrial co-operation in the Southern African sub-region.

SADCC as a machinery for industrial co-operation

The Southern African Development Co-ordination Conference (SADCC) is composed of nine member countries, namely: Angola, Botswana, Lesotho, Malawi,

Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe. SADCC was formally established at a meeting of Heads of State and Government held in Lusaka in April 1980, with the following objectives which are defined in the basic statement of aims adopted in the same year:

- Reduction of external dependence, especially dependence on the Republic of South Africa;
- creation of operational and equitable regional integration;
- mobilization of domestic and regional resources to carry out national, interstate and regional policies to reduce dependence and build genuine regional co-ordination;
- joint action to secure international understanding of, and practical support for the SADCC strategy.

The foregoing goals or objectives evidently have far-reaching implications in relation to the formulation and implementation of industrial policies, strategies and programmes for fostering, promoting and expanding intra-SADCC industrial co-operation. For instance, "reduction of external dependence" is construed as promotion of self-reliance and self-sustaining industrial growth[1/], as opposed to a contraction of trade and other business dealings with external investors, financiers and businessmen or official government agencies. This is so because there is a tendency for interdependence to expand with the increase in the diversification of industrial production and its attendant interlinkages. In this connection it is considered relevant and important to emphasize the significant role which SADCC could play in promoting or strengthening, for each individual member

1/ Self-reliance is taken to involve the maximum use of indigenous raw materials, indigenous labour and management, domestic and regional markets, etc. Self-sustainment relies on internal as opposed to external requirements and stimuli. See page 28, para 9 "A Programme for the Industrial Development Decade for Africa", by ECA, OAU and UNIDO.

country and the subregion as a whole, economic independence. In this context economic independence means the ability of a country or subregion to exercise its sovereignty over its resources. It is envisaged that SADCC could be well equipped to promote self-reliance, self-sustainment and economic independence of the member countries individually and as a subregion. Indeed the steps so far taken augur well for progress in this respect and direction.

The goal relating to the creation of operational and equitable regional integration is a commendable objective which would, however, necessitate the formulation of such policies and strategies as will facilitate the evolution of fundamental political and economic changes which would subsequently lead to an equitable subregional integration.[1/] Consideration could be given to initiating those changes by starting with an appraisal of the structure and powers of SADCC to perform such functions as would enable the countries to achieve their individual and joint objectives and realize their political, economic and social aspirations. This leads to the brief review of the status and functions of SADCC in the following few paragraphs.

Constitutional status and mandates of SADCC

SADCC was formally established by the Heads of State and Government in 1980 without a constitution setting out its structure, institutions, powers and duties. Nor is there a formal treaty among the nine member countries for the establishment of SADCC as a legal entity. SADCC is, therefore, a loosely

---

1/ Economic integration is very often distinguised from economic co-operation, for integration entails far-reaching measures, including a customs union, common external tariffs, identical fiscal policies, etc. Industrial co-operation does not necessarily go as far as that; it may even be on a project by project basis or on an ad hoc basis, or could be established to cover specified industrial fields or periods of time.

organized consultative machinery or conference[1/]. This appears to be a weakness which might be a retardatory factor to the operational activities of SADCC.

By the Memorandum of Understanding of the Southern African Development Co-ordination Conference (SADCC) dated 20 July 1981, the Heads of State and Government established the following institutions:

(a) The Summit of Heads of State or Government

This is the highest and supreme institution consisting of Heads of State or Government. It is responsible for the general direction and control of the functions of SADCC and the achievement of its objectives and it is the highest appeal tribunal in case of disputes among member countries.

(b) The Council

The Council consists of ministers appointed by each state and is responsible for the overall policy of SADCC. The Council prepares a work programme and designates a member state to co-ordinate activities in specific fields. It reports and is responsible to the Summit; and it is empowered to appoint ministerial committees for programmes in functional areas.

1/ President Q.K.J. Masire of Botswana, SADCC Chairman, at the 1982 Summit states "SADCC exists only to the extent that member states breathe life into its common programmes and projects. It does not have an autonomous existence, separate from the priorities of member states."

(c) Sectoral Commissions

The Summit is empowered to establish sectoral commissions each of which would be governed by a convention to be adopted by the council and ratified or acceded to by SADCC member states. The sectoral commissions are to report to the Council.

(e) Standing Committee of Officials

This Committee is responsible to the Council. Sub-committees may be appointed for programmes in functional areas.

(f) The Secretariat

The Secretariat, headed by the Executive Secretary, is reponsible for general servicing of and liaison with SADCC institutions, co-ordination and execution of the tasks of SADCC, custordianship of SADCC property, such other functions as may from time to time be approved by the Council, etc.

Since SADCC is at its initial years of inception, its institutional infrastructure may appear adequate. But when its operation goes beyond the stage of mere identification and allocation of industrial projects, effective industrial co-operation is likely to call for more institutions to perform such functions as are not included in the present set-up of the Conference but which are required for the promotion and sustainance of industrial development within the SADCC co-operative framework and arrangements.

So far, SADCC member states have opted to have a rather loose co-operative arrangements which minimize the central role of the SADCC

Secretariat in the co-ordination of various matters relating to industrial co-operation in the sub-region. The loose institutional set-up might have a temporary advantage of being realistic and flexible in the light of divergent views and industrial and economic situations of the co-operators.

In Southeast Asia the countries comprising ASEAN have established a rather loose co-operative framework to serve the objectives of regional "economic co-operation", the grouping having officially expressed no immediate desire for any far-flung "integration" objectives. Compared to those of, for instance, the Adean Pact, with its clear "intergration" objectives, the ASEAN co-operation programmes have been limited in depth and comprehensiveness in terms of building up a sizeable regional component in the overall ASEAN economy. Nor is there any sophisticated structure in the Secretariat of ASEAN, comparable to that in the Andean Pact. The implementational machinery of ASEAN is largely composed of a host of ad hoc committees or working groups, with the final decision-making vested in the ministerial meetings held at frequent intervals. In contrast to the "big push" method adopted by the Andean Pact, the ASEAN's approach is clearly piece-meal, following gradual steps. Much energy in the ASEAN co-operation has been absorbed in building up a consensus, and most co-operation programmes have to go through the long and tortuous course of negotiation before progress can inch forward.

It would seem best to characterize the pattern of ASEAN economic co-operation as a "laissez-faire form of regional co-operation", which leaves member governments a great deal of leeway to adjust to the regional demand. It is naturally tempting to jump to the conclusion that the powerful approach to integration by the Andean Pact is the most effective while the relatively "toothless" ASEAN co-operation schemes are ineffectual. While there may be some elements of truth in this, such a conclusion is also over-simplified.

For though the "integrated" approach of the Andean Pact certainly represents a remarkable achievement, the "big push" to regional co-operation/integration for these developing countries may not, in its implementation phase, have contained the flexibility and sensitivety to dynamic changes necessary, thus running the risk of over-stretching the integration system or outstripping the limits of the changing economic realities existing in these countries.

An "optimal" system of co-operation for a region is one which takes full account of the objective conditions of the region. It may be said that ASEAN has from the start tailored its co-operation programmes to suit its own needs and to fit its own circumstances. ASEAN has therefore placed top priority on nurturing consensus rather than seeking to reach unrealistic objectives. This process was considered indispensable for a region with so much inherent diversity and heterogeneity. In ASEAN, the political, social and cultural distance among the five members, though considerably narrowed over the years, remains wide. The physical distance is also there. What is really crucial for ASEAN economic co-operation is not the speed, but the direction. I clear that the process of regional economic co-operation for ASEAN wi long, drawn-out affair. There will be no likely sensational breakthrough. But neither will there be a turning back. Instead, the unmistakable trend of steady and gradual movement towards higher level of co-operation will continue. Such is the Southeast Asian way of regional integration, perhaps the only way for the region, to achieve that goal. It is no drawback for ASEAN economic co-operation to grow slowly and steadily, provided it has not lost its direction.

The ASEAN appraoch to reginal economic co-operation, characterized by gradualism and the consumate way of consensus building, is also a valuable

lesson for other Third World regional co-operation endeavours. The ASEAN experience is particularly instructive for countries short of favourable preconditions for regional economic co-operation.1/

On the other hand it could prove disadvantageous in that it may demonstrate inadequate confidence of member states into the organization, failure to establish a strong institutional infrastructure capable of vigorously pushing through such measures as are necessary for fostering and promoting industrial co-operation; unwillingness of member states to permit an enchroachment by a strong central authority on their sovereignty in matters of their mutual benefit in the field of industrial development and trade; inability to establish such co-operative arrangements as would win the confidence of potential investors and financiers in ensuring the existence of a large and protected market for the products of industries they may wish to establish and the security of the capital they may intend to invest, etc.

It is unlikely in most cases that the activities of SADCC should be left to evolve and expand so as to justify the establishment of certain institutions. On the contrary, certain institutions have to be established in order that they may be used as tools for the promotion of certain activities or performance of such functions as are essential to the fostering of strong industrial co-operation. Indeed, since one of the major objectives of SADCC is the "creation of operational and equitable regional integration", that in itself presupposes or at least demands the establishment and management of strong central authority right from the beginning for pushing through all the

---

1/ See pages 133-135 "Regional Industrial Co-operation: Experiences and Perspectives of the ASEAN and Andean Pact" - UNIDO/IS.401, 1983.

necessary measures for integration. For example, the Cartagena Agreement (the Andean Pact) developed specific methods and mechanisms for achieving the basic objectives of the members in a number of areas, such as:

- Trade liberalization programme;
- Common external tariffs;
- Harmonization and co-ordination of development plans;
- Industrial programming;
- Agricultural regime on physical integration;
- Technological policy;
- Financial co-operation;
- External relations policies;
- Special programme for the less developed member countries (Bolivia and Ecuador).

As has been brought out earlier in this Report, there is a clear distinction between "regional economic integration" and "regional economic co-operation", even though the two terms are often mixed up in common usage. The Andean Pact has officially referred to 11 its regional activites as "integration" whereas in ASEAN the word "integration" has never been put on official records and all regional activities are consciously referred to as "co-operation", implying less farreaching objectives. The use of different terms by these two regions is not accidental but deliberate. Right from the start, the Andean Pact was aimed at an ambitious integration objective along the lines of an econmic union. In fact, the Andean Pact broke off from the LAFTA primarily because the Andean countries were impatient over the lack of progress in the integraion schemes under the LAFTA or, rather, that the integratin benefits LAFTA tended to bias against the smaller members. To this

end, the Cartagena Agreement was designed to look beyond the mere establishment of a free trade zone as advocated by the Treaty of Montevideo for LAFTA, and to proceed with a much more intensive integration process for a more advanced form of regional set-up. Thus vigorous tools for the fulfilment of the integratin goal were devised by the Cartegena Agreement, attacking the problem of integration from several angles. First, an aggiessive trade liberalization programme was spelled out with the objectives of not just reducing existing tariff and non-tariff barriers among the member countries but also setting up a Common External Tariff eventually. Second, there were the regional industrial programmes, in particular, the so-called Sectorial Programmes for Industrial Development, to ensure industrial complementation and to avoid wasteful duplication. The third major instrument was the Andean Development Corporation (CAF) which is charged with the responsibility of studying and identifying new integration projects in the region as well as channelling financial resources to these projects. There were also other mechanisms for promoting integration, such as harmonization of economic and social policies in the Andean Pact subregion.

All these integration instruments were supposed to operate concomitantly. The objective was to promote regional integratin in such a way that it would lead to harmonious and balanced development for all the member countries. Clearly the Andean Pact's approach to regional integraton is unique. Many a reginal grouping in the Third World has too often contained "toothless" integration mechanisms, not effective for the purpose of achieving real integration. Others have taken a piecemeal approach, which may also not be very effective in ensuring the smooth progress towards real integration. In contrast, the Andean Pact followed a "big push" approach to integration from the outset, attaching the problem from a broad front. The overall

objectives were made known in a clear-cut manner to all the members, which would also pledge to work towards the common goals. Having set out the ambitious integration targets, the technocrats of the Andean Pact proceeded to build up an elaborate implementational machinery based in Lima. Thus the Cartagena Agreement is backed up by strong institutional and technical organs, complete with technical and administrative staff, for the implementation of the integration agreements. However, the Andean Pact programmes, such as the Sectorial Programmes for Industrial Development have, in their implementation phases, run into numerous difficulties and obstacles, resulting in non-compliance and other hinderances. Above all, the elaborate agreed programmes have turned out to be difficult to implement in times of dynamic changes.

It may be augued that the Andean Pact has several favourable pre-conditions for developing such a unique "integrated system" for reginal integration, which may not be immediately present in the case of other reginal groupings. To begin with, Latin America has inherited a strong integration movement. The Andean Pact was particularly highly motivated towards integration when the Andean Group decided to go ahead with their own subreginal agreements for integration. Many of the Andean Pact's work programmes and mechanisms were developed in an effort to avoid the mistakes and shortcomings of LAFTA, and the experience of LAFTA was very useful for the Andean Pact in devising its separate approach to integration. Socially and culturally, the Andean Pact countries are quite homogeneous, making it easier for individual governments to commit themselves to support such a high-profiled integration scheme. Even geographically, the Andean Pact countries form a compact group, which also facilitates physical integration.

Although in practice the direct physical transport and trading links are relatively undeveloped (and often much less developed than those with overseas countries through shipping). Still, few regional groupings in the Third World are endowed with all these initial advantage.1/

Of course, every region has its peculiarities and special issues which would warrant a particular type of institutional infrastructure and approach to its problems. Indeed, the success of any co-operative arrangement would depend upon the political commmitment and positive support of the co-operating member states. It is, however, deemed advisable to adapt some of the aspects of the Andean Pact or mechanisms in order to achieve within the shortest possible time the objectives and aspirations of SADCC's members.2/ The foregoing mechanisms being maintained and pursued by the Andean Pact countries are pertinent and crucial to the SADCC situation. There ought to be well-defined mechanisms or institutionsl arrangements for dealing with each one of these vital aspects which are central to industrial co-operation or economic integration.

Let us take, for example, the question of harmonization and co-ordination of development plans. In the main, the SADCC individual members' development plans are not geared to SADCC industrial co-operation; most of them are emphasizing import substitution without discrimination favouring SADCC member

---

1/ See pages 131-133 Regional Industrial Co-operation: Experiences and Perspectives of the ASEAN and Andean Pact, UNIDO/IS.401, 1983.

2/ Also the now defunct Treaty for East African Co-operation makes good provisions regarding institutions including the Appeals Tribunal, and their mandates. Some of these could be examined with a view to considering whether similar arrangements, with the necessary modifications, are feasible for SADCC.

states. Another factor of significance to the effectiveness of industrial co-operation within SADCC is the continuous existence of external forces which continuously come into play and which affect differently the industrial plans and economies of member countries. These dynamic forces which impose continuous changes inevitably compel individual members to adopt such strategies and policies as would necessitate restructuring and readjustments to meet the new conditions and challenges. The remedial measures adopted by one member may be the cause of problems in the others. Harmonization and co-ordination within the SADCC framework would be difficult if the measures were dictated by external creditors or suppliers of indispensable inputs.

Another important issue is the question of the settlement of disputes. There is a need, at least for the information of potential external investors or collaborators, for provision to be made for the most expeditious and equitable machanism for the settlement of disputes, some of which could affect significantly investment decision. At present, the Memorandum of Understanding states that the Summit is the highest authority for settling disputes, etc. It does not state the procedures nor the tribunals before the dispute goes to the Summit.

It is evident from the foregoing that if SADCC is to constitute an effective machinery for industrial co-operation, its status and institutional set-up have to be re-examined. No outsider would take the organization seriously if it does not have such mandates as would enable it to reach a decision, binding all its members, on issues which are fundamental and central, to the establishment and operation of manufacturing enterprises within the SADCC sub-region. It is, therefore, recommended that the SADCC

Secretariat be requested to arrange for further detailed examination of the status and mandates of SADCC in the field of industrial co-operation.

A permanent Secretariat is now in existence and functioning. Since the inception of SADCC there have been annual summit meetings, Council of Ministers' meetings, and conferences at which "members of the international community", including representatives of donors of technical and financial assistance, have been invited. There has also been a growing number of meetings of ministers and officials concerned with particular SADCC programmes. All these are indicative of the determination of member Governments to exercise, through the SADCC framework or machinery, whatever powers they may possess in order to attain the objectives for which the Conference was established. Indeed, one could visualize the useful purpose which a strong SADCC could play in the promotion of accelerating self-reliant and self-sustaining industrialization, economic development and social advancement in the sub-region. However, the strengthening of SADCC prominently points to the establishment of an adequate institutional infrastructure to perform a variety of functions which are inevitably pre-requisites to industrial development.

At present, each SADCC member state is assigned the responsibility of co-ordinating, on behalf of all the others, matters relating to a specific subject. For example, Tanzania is responsible for the co-ordination of industrial matters and an Industrial Co-ordination Unit was established within the Tanzania Ministry of Industries to handle SADCC matters. The Government of Tanzania formulated a SADCC Regional Industrial Plan which was approved by a meeting of SADCC Ministers and donors at Blantyre in 1981. Subsequently,

"sectoral profiles and project possibilities emerging from the plan were prepared.

It is noteworthy that the implementation and studies of specific plant proposals are to be negotiated and executed by the member states in which they are located. Tanzania, as co-ordinator, is to keep track of overall programme implementation, build up data base in respect of additional product groups and negotiate/implement studies that relate to an industrial sub-sector or product group."[1/] A similar approach is applied in the case of other sectors. It is clear that the co-ordination role should in practice be broadly based in order to effect appreciably harmonized incentive scheme to investors in the SADCC sub-region. Each country should therefore not undertakes its negotiations and grant concessions, etc. without reference to any other country or to specified authorities on what are considered to be the norms. At present the role of Tanzania is restricted mainly to project identification, largely through sub-sectoral studies. It does not cover harmonization of industrial policies, legislation, incentives, common external tariff protection and other protective measures to infant industries and overall industrial promotion activities and machineries. No doubt, there are some gaps in the co-ordination and harmonization efforts the closing of which call for the establishment of mechanisms or the adoption of certain measures for that purpose.

The present arrangements of assigning responsibilities for co-ordinating matters relating to specified sectors or fields have merits and demerits. One

---

1/ Paper presented to the Maseru Ministerial Meeting held in January 1983 - Overview: Southern African Development Co-ordination Conference, pp.16-18.

of the major demerits is that there is the danger for each sector to adopt a development programme in isolation of the others. This could result in lack of or weaknesses in sectoral interlikages and pursuit of unrealistic programmes or projects. This could lead to a creation of additional excess capacity and inability to maximize the utilization of indigenous resources and the achievement of self-reliance, self-sustained industrial growth and economic independence in the sub-region. It is suggested that consideration be given to devising a machinery to effect adequate consultations and harmonization of plans, strategies, policies and measures among all sectoral co-ordination authorities under SADCC. This is especially important because the sectors or specific fields or services for which other countries are responsible are closely related to industrial matters for which Tanzania is the co-ordinator. If such a machinery is established, all must be done to ensure that its overall co-ordination role is effective and bears the expected fruits. It is felt that the annual summits of the heads of state and governments are not well equipped to constitute the required machinery.

SADCC is a relatively new organization. It is still too early to evaluate its effectiveness or in any way to pass judgement on its overall performance so far. There is, however, evidence to suggest that the time has come to start considering establishing within the SADCC Secretariat certain institutions which would perform a number of functions or render certain services which are at present assigned to no government or organization for their accomplishment. The number of services and the extent to which they can be centralized under the SADCC Secretariat and the institutions to perform them are matters for the Governments concerned to decide. Some examples from other regions could, however, provide some useful guidelines to the decisions which are necessary for enhancing the effectiveness of SADCC. Industrial co-operation within the

SADCC framework will no doubt call for a package of measures relating to technology, finance and investment guarantees and security of investments, etc. There will also have to be a strategy for devising suitable measures in parallel to each other. It is also advisable that consideration should be given to establishing an effective machinery for consultations for identifying possibilities for full utilization of existing and potential complementarities for furthering SADCC industrial co-operation.

Some issues for consideration in intra-SADCC

Experience has shown that in industrial co-operation among developing countries, there are certain issues which are relevant to the SADCC situation and which should be taken into account in efforts for the promotion of strong and effective co-operative arrangements among the SADCC member countries. These issues relate to approach to such co-operative efforts and appropriate framework within which they should be pursued. Other aspects that need to be further studied are also elaborated in subsequent paragraphs.

Overall approach

SADCC co-operative efforts, in accordance with the policy of collective self-reliance, are aimed at improving co-operative utilization of the resources available within the sub-region, while the sub-region strengthens its position as a viable partner in the framework of global interdependence. Industry constitutes an important element of the self-sustaining development process and for a large number of developing countries, it may be

inconceivable without economic co-operation with other developing countries. It would also appear that, as widespread co-operation in the various sectors progresses, this process would by itself contribute to industrialization in the SADCC sub-region. With a few exceptions, today's industrialized countries were once small centres which reached the point where economies of scale became crucial and intense competition was followed by specialization and co-operation among themselves. Thus, today, economies of industrialized countries are integrated within each country and among one another.

No doubt, co-operation among SADCC countries offers the opportunity to take full advantage of existing and potential complementarities in the economies of member states, and efforts should be spent on identifying these possibilities in various fields, including trade and industrialization. However, SADCC statements have been rather reticent on issues concerning trade and payments. It is noteworthy that once implementation of agreements on industrial co-operation is to begin, trade and payment arrangements become central issues, for they are the means through which industrial co-ordination arrangements are given effect. These issues will be dealt with further in the following chapters of this paper.

SADCC as a framework for industrial co-operation

SADCC should be perceived as a framework which offers its member states an opportunity to take full advantage of existing and potential complementarities in their economies in the various fields of trade, industrialization, technology, food and agriculture, energy, raw materials, finance, etc. Each field must seek a framework in which effective practical

action is feasible. Frameworks for some of these fields are discussed in some of the following chapters. Thus, while efforts in the field of trade, technology, finance and investment may be perceived within a global framework, perhaps in the case of industrialization efforts aimed at establishment of expansion of production may have to be perceived within different frameworks. For example, in the field of trade, preferential tariff among members must be considered in the framework of SADCC co-operation and would serve as a complement to other efforts at subregional levels. The preferential tariff which is essentially intended to establish trade linkages among member countries may itself not lead to any spectacular expansion of intra-trade among those countries, nonetheless it might provide a framework, based on preferential tariff and some non-tariff measures, that would create an identity of interest and to which over a period of time other elements of economic co-operation could be added. That should make preferential tariff more meaningful and strengthen the collective self-reliance within the SADCC sub-region.

In the case of industrialization, action may have to be perceived somewhat differently. In broad terms, the promotion of industrialization within SADCC will call for a package of measures[1/] relating to technology, finance and investment, guarantees and security for investment, etc. However, when it comes to devising measures aimed at 'the harmonization and co-ordination of economic policies, particularly in the industrial field, and the greater utilization of industrial complementarity, taking into account economy of scale and specialization' (Lima Plan of Action), SADCC should

---

1/ Several measures in these fields have been elaborated in Industry 2000, New Perspectives.

establish specific machineries with clearly defined mandates and responsibilities which could have the authority of each member country. SADCC should be guided by the available experience of co-operative endeavours, existing forms of multilateral co-operation, their role in enhancing the degree of industrial co-operation and then examine whether any new forms could be devised to promote SADCC industrial co-operation in the most effective way. Of course, care should be exercised to adapt and not to adopt the measures being pursued in other regions.

An analysis of the existing forms of multilateral industrial co-operation indicates that the main development of such co-operation in recent years has been through growth of joint ventures, established within the framework of industrial co-operation and collaboration arrangements. Broader notions of industrial co-operation are to be found, within the framework of some regional/subregional economic integration groupings, where industrial co-operation has continued to develop mainly in two directions: the allocation of industrial activities among member countries (as SADCC has done in respect of co-ordination role of member countries for certain subjects), and the expansion of production through the establishment of joint ventures. In these co-operative arrangements larger economic latitudes resulting from liberalization of mutual trade among member countries are expected to create industry with potential for industry in achieving more broad, dynamic and efficient development than when based solely on each individual country's domestic market. However, even in such groupings industrial co-operation has yet to be developed to exploit to any appreciable degree the advantages to be gained by making use of economies of scale, external economies and specialization of production. This is evident from the experience of Latin

American regional integration (LAFTA, now ALADI), where integration was closely linked with the industrialization process despite which, while tariff preferences contributed to appreciable growth in intra-regional trade between 1960 to 1978, there has not been any significant growth of industrial co-operation arrangements.1/

Even at subregional levels there are real difficulties in promoting such co-operation, as is evident from the experience of the ANDEAN Group where industrial programming has been utilized as one of the basic tools of integration. While there has been some progress in the metals and machinery programme and in the automotive programme, the efforts put in over a period of several years have been of limited effectiveness.

For a variety of reasons trade of SADCC countries is directed towards the North and South Africa or countries outside the sub-region, and industrial structures follow the same pattern. A change of orientation in trade pattern will call for appropriate changes in industrial structures as well. For SADCC countries, this can best be attempted within the framework of SADCC economic co-operation arrangements. Indeed, groupings which through the liberalization of trade have taken first steps towards the formation of a regional/subregional market, would seem to provide better opportunities for the achievement of a broad industrial development, the establishment of optimum size plants, the reaping of economies of scale and a more efficient

---

1/ In fact, because of difficulties encountered in moving towards full-scale integration, member countries renegotiated LAFTA and under the Montevideo Treaty of 1980 (ALADI) provides for direct and practical means of co-operation through partial agreements between groups of countries. This is expected to foster co-operation and complementary agreements at the governmental or entrepreneurial level.

use of resources. Further, industrial co-operation efforts among any group of countries raises two issues: those related to problems of adjustments to the new economic situation, and those concerned with the establishment of mechanisms to ensure an acceptable form of distribution of benefits. Experience indicates that success of these efforts would depend to a great extent on arriving at acceptable distribution of costs and benefits. This can be attempted with greater chances of success within economic integration groupings.

Outside the framework of subregional integration groupings (aimed at the formulation of free-trade-area or customs union), industrial co-operation may be conceived on the pattern of economic co-operation arrangements within ASEAN. Experience of ASEAN in the field of industrial co-operation through the ASEAN Industrial Projects (AIPs) and the ASEAN Industrial Complementation (AIC) and the ASEAN Industrial Joint Venture (AIJV) programmes in fact highlights the need for promoting such co-operative endeavours, within a limited grouping of developing countries. The progress of some of the AIPs can to large extent be attributed to political commitment and support to economic co-operation, and the exercise of political will in resolving difficult issues that necessarily arise in any scheme of co-operation, based on the allocation of industries. The AIC and AIJV programmes illustrate the possibilities of involving private sector actively with the governmental efforts for the promotion of industrial co-operation.1/

1/ See Regional Industrial Co-operation: Experiences and Perspective of ASEAN and the Andean Pact, UNIDO/IS.401, 1983, pages 26-46.

In the face of this experience and other available experience of economic co-operation, it would appear that if any efforts have to bear concrete fruit in the foreseeable future, it would be advisable to conceive any programme for the promotion of SADCC industrial co-operation within the framework of economic co-operation arrangements or inter-governmental agreements among or between some of its member countries.

Outside the framework of economic integration or co-operative arrangements, meaningful and effective industrial co-operation may be considered within the framework of intergovernmental agreements. Their role in promoting industrialization, mainly through joint ventures, ought not to be underrated. In fact, there are cases where intergovernmental co-operation agreements are a prerequisite for industrial project co-operation. In this case development of models of co-operation related to specific projects of bilateral or regional co-operation could be useful, making use of the co-operation experience of Latin America, CMEA and the EEC.

Outline of the study report

The study is concerned primarily with an analytical approach to matters relating to industrial co-operation in the SADCC sub-region and draws lessons from the available information. Following this introductory chapter, the second one identifies the salient characteristics of the industrial sectors of the SADCC countries. The chapter draws attention to the fact that, in general, industrial production in recent years has been stagnant or declining rather than growing. Although the extent of industrial development in the region is

modest, those enterprises that do exist are generally working at far below their potential. They are doing so, not so much because of a lack of demand for their products but because they often cannot obtain the necessary inputs to operate nearer to capacity. A scarcity of foreign exchange to buy these inputs is one of the main reasons for under-capacity working. With an improvement in the availability of foreign exchange, enterprises could produce more if they were better managed, if the services they require, such as transport, were better managed, and if policy in the past had not produced so import-dependent an industrial sector.

It is argued that until existing industry is working more efficiently and nearer to capacity it would be a mistake to focus exclusively upon plans for expanding the scope of the industrial sector. The part that co-operation within SADCC can play in mitigating these problems should be given primary attention.

Chapter III examines the potential benefits of industrial co-operation and co-ordination under SADCC. The justification for inter-governmental intervention under SADCC is identified in the existence of certain "market failures", defined as the sacrifice of long-term social welfare maximization to immediate private gain. The benefits to be realized by such intervention are seen as a relaxation of the constraints of production imposed by foreign exchange scarcity, a wider market for enterprises enabling them to enjoy economies of scale, and an increase in the bargaining strength of Governments.

In Chapter IV, the constraints on further progress in industrial co-operation and co-ordination are examined. They are identified as the differences in the level of development among the SADCC countries, foreign

exchange scarcities, the tendency for Governments to give low priority to the rehabilitation of existing enterprises and to favour new, large-scale investments, differences in objectives between SADCC members, and the absence of rules of behaviour and procedures for monitoring and control. Chapter IV also discusses the extent to which the bilateral arrangements that have been developing between SADCC members constitute a constraint on the more general development of industrial co-operation and co-ordination.

Proposals for overcoming these constraints and for facilitating and stimulating the development of industrial co-operation are set out in Chapter V. These proposals include considering the possibility of greater domestic sourcing for inputs and capital goods in any new projects undertaken; ensuring that the overall policy environment is favourable to new enterprises; doing more to involve private sector interests, skills and priorities in co-operation schemes; agreeing in advance on project allocation procedures; and operating rules for facilities once they exist.

Some of the other fields for possible industrial co-operation in the SADCC subregion are briefly discussed in Chapter VI. Chpater VII summarizes the cnclusions as well as provides an outline of the recommendations, and lists some of the most important functional contents of an action plan for the implementation of industrial co-operation in SADCC.

II. CHARACTERISTICS OF THE ECONOMIC SECTOR IN THE SADCC COUNTRIES AND THEIR DEVELOPMENT EXPERIENCE IN THE SEVENTIES

A brief review of the development experience of SADCC countries in the seventies

Analysis by sectors

There is wide disparity in the degree of industrialization of the SADCC countries. As Table 1 shows, in 1980 the share of manufacturing in GDP ranged from 3 per cent (Angola) to 27 per cent (Swaziland).

Table 1. Distribution of GDP, 1960 and 1980 - SADCC countries

(Percentage)

Country	Year	GDP (in millions of current US dollars)	Agri-culture	Industry		Services
				Total	Manufac-turing	
Angola	1960	718	50	7	4	39
	1980	3,815	43	28	3	27
Botswana	1960	35	51	14	12	27
	1980	1,134	12	42	4	43
Lesotho	1960	32	67	0	0	33
	1980	314	26	12	5	51
Malawi	1960	180	...	...	...	...
	1980	1,452	38	17	16	38
Mozambique	1960	865	55	4	4	40
	1980	2,842	43	11	9	40
Swaziland	1960	35	32	20	6	44
	1980	675	24	36	27	37
Tanzania	1960	549	61	6	3	30
	1980	6,078	53	9	8	35
Zambia	1960	617	19	55	3	22
	1980	4,041	16	38	17	43
Zimbabwe	1960	845	19	27	16	47
	1980	5,168	13	36	24	48

Source: UNIDO Data Base; information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

As the absolute size of GDP in the SADCC member countries differs widely, no inference can obviously be drawn from these shares on the weights of industry in the SADCC region as a whole. Table 2 shows, for example, that the country with the largest share of industry in GDP, Swaziland, accounted only for the fifth largest share of total SADCC manufacturing value added in 1980. Indeed, industrial capacity in the SADCC is highly concentrated in a few countries, a tendency which increased in the seventies. The share of the two largest countries (in terms of manufacturing value added) increased from 54.4 per cent in 1970 to 60.1 per cent in 1980. Four countries - Zimbabwe, Zambia, Tanzania and Mozambique - accounted for 81.2 per cent of total SADCC manufacturing value added in 1980. This share could substantially increase in the future, should Mozambique and Tanzania be able to restore the levels of industrial activity they had reached by 1975 and return to paths of industrial growth.

These facts indicate the problems which might arise on SADCC's way to economic integration. Economic imbalances like the ones being reflected in Table 2 may lead to an uneven distribution of the gains and burdens arising from economic integration between the participating countries. The industries of larger countries, having already reached a certain level of economies of scale in their domestic markets, might outcompete the industries just being developed in other countries. Such problems caused serious set-backs in the process of Latin American economic integration. In fact, they led to a de facto disintegration of the Latin American Free Trade Association and the formation of the ANDEAN group, though within LAFTA, by the smaller LAFTA members in 1969. However, their attempt to avoid "unequal" gains, as produced by the free play of the market forces through industrial programming, i.e. the

Table 2. SADCC countries - Manufacturing value added by country, and share in SADCC total 1970, 1975 and 1980

(in thousands of US dollars, at constant 1975 prices, and percentage[a/])

	1970	1975	1980
Angola	173,474 (10.75)	103,064 (4.96)	110,438 (4.90)
Botswana	13,278 (0.82)	31,382 (1.51)	44,904 (1.99)
Lesotho	3,037 (0.19)	8,641 (0.42)	12,238 (0.54)
Malawi	52,286 (3.24)	87,467 (4.21)	114,850 (5.09)
Mozambique	234,211 (14.52)	288,936 (13.90)	224,472 (9.95)
Swaziland	48,675 (3.02)	94,455 (4.52)	140,456 (6.23)
Tanzania	210,829 (13.07)	272,883 (13.13)	253,099 (11.22)
Zambia	304,631 (18.88)	405,022 (19.49)	570,875 (25.31)
Zimbabwe	572,965 (35.51)	786,771 (37.85)	783,847 (34.76)
Total	1,613,386 (100.00)	2,078,621 (100.00)	2,255,179 (100.00)

Source: UNIDO Data Base; information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

a/ Percentage shares are given in parentheses.

allocation of sectors between countries through a process of political negotiations, did not appear to be an easy way out neither. In fact, just as the free play of market forces gives greater weight to the relatively more advanced industrial sectors of larger countries, so it does to the governments of these countries in the "political market" of negotiations.

The existing imbalances, whether one relies on the market forces or on political negotiations, will remain to be obstacles to a full integration of the SADCC countries, even though the present size of an industrial sector is not the sole indicator of its potential gains from an integrated SADCC market. In fact, the creation of a greater market, if successful, would also require changes in the existing industrial structures of the member countries.

Table 3 shows that among the most dynamic industrial sectors in the last decade have been the ones of the smaller countries like Botswana, Lesotho,

Table 3. SADCC countries' real growth rates[a/] of manufacturing value added
(per cent)

	1970 - 1975	1975 - 1980
Angola	-4.44	2.26
Botswana	18.47	7.21
Lesotho	35.07	7.14
Malawi	12.13	6.43
Mozambique	4.27	-2.05
Swaziland	12.90	8.39
Tanzania	5.54	-0.78
Zambia	6.74	7.53
Zimbabwe	6.81	7.53
SADCC	5.96	2.50

Source: UNIDO Data Base, Information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

a/ Trend growth rates, based on manufacturing value added at constant 1975 prices.

Malawi and Swaziland. It may turn out to be just industrial dynamism which would count more than economic size when it comes to seizing new opportunities and to adapting existing industrial structures to changes in demand brought forth by economic integration. This latter argument, however, which favours the more dynamic industrial sectors of the smaller countries, should not carry too much weight compared to the existing imbalances referred to before. This is so because the higher growth rates achieved by the smaller countries are favoured by their low bases. Setting up an (infant) industry in a protected market will allow substantial growth rates in the initial periods, but their continuation cannot be expected when these industries are confronted with the more advanced competition from the larger countries.

With the exception of Mozambique, the contribution of industry to employment is smaller than output, as can be seen from comparing tables 1 and 4. This is, of course, not surprising in view of the generally higher capital intensity and thus higher labour productivity in industrial production compared to agriculture. However, the ratios of industry's share in total employment to its share in total output vary considerably between countries. This points to different capital intensities of the (aggregated) industrial production functions in the individual countries and thus to different employment creation effects which would originate from growing industrial production.

In the past, the scope for industrial production has been limited, among other reasons, by the small size of the markets. Although there is no simple and satisfactory indicator of market size, figures of population, income per

Table 4. Labour force and employment, by major sectors

(Percentage)

Country	Population of working age, 15-64 years		Labour force						Average annual growth of labour force	
			Agriculture		Industry		Services			
	1960	1979	1960	1979	1960	1979	1960	1979	1960	1979
Angola	35	53	69	60	12	16	19	24	1.0	1.9
Botswana	57	48	92	83	3	5	5	12	..	..
Lesotho	57	55	93	87	2	4	5	9	1.6	1.9
Malawi	52	49	92	86	3	5	5	9	2.3	2.2
Mozambique	56	53	81	67	8	17	11	16	1.9	1.7
Swaziland	54	52	54	52	4	9	42	39	..	..
Tanzania	54	51	89	83	4	6	7	11	2.1	2.7
Zambia	53	50	79	68	7	11	14	21	2.3	2.4
Zimbabwe	52	50	69	60	11	15	20	25	3.2	2.6

Source: Accelerated Development in the Sub-Saharan Africa - An Agenda for Action, 1981. World Bank.

head and total GDP provide some indication. The populations of the individual countries ranged in 1980 from half a million to 18 million and the income per head from US $234 to US $1,382. (See Table 5). Total GDP in 1980 ranged from US $314 million (Lesotho) to US $6,078 million (Tanzania), as was shown in Table 1. When allowance is made for the fact that the figures of income per head are an average of a wide dispersion, it can be seen that the income of the mass of the population is extremely low. To put these figures in a wider context, the SADCC countries can be compared with the countries of ASEAN, one of the more successful regional co-operation groups. The smallest per capita GNP to be found in ASEAN is US $360 and the highest US $3,290. And aggregate GNP ranges from US $7,690 million to US $48,820 million.

These small sizes of the internal markets were limiting factors for industrialization efforts, preventing many enterprises from reaching efficient scales of operation. Besides this, the SADCC countries run into foreign exchange bottlenecks arising from the high import content in final production. Exporting has often been impossible due to the high cost of the final good. With the exception of Zimbabwe, production of capital goods is absent or in its infancy. In the majority of the SADCC economies there is little integration within the industrial sector - that is, products of one industry are only to a minor extent the inputs of another, leaving gaps to be filled by imports.

Plants usually operate at a very low level of capacity utilization, either because of market limitations or lack of inputs imposed by foreign exchange shortages and infrastructural weakness (lack of transport, electricity, water, etc.). This appears to be particularly true of Angola, Mozambique, Tanzania, Zambia and in certain sectors of Zimbabwe. At the same time each SADCC

Table 5. Population, area and GDP per capita - SADCC countries

Country	Population (in millions)	Area (in thousands of square kilometres)	GDP per capita (in current dollars)	Average annual growth (per cent[a/])	
	1980		1980	1960-70	1970-80
Angola	7.1	1,247	539	3.0	-7.7
Botswana	0.8	600	1,382	5.3	8.2
Lesotho	1.3	30	234	4.3	5.9
Malawi	6.2	118	236	2.9	4.1
Mozambique	10.5	783	271	2.6	-4.8
Swaziland	0.6	17	1,214	7.6	3.6
Tanzania	17.9	945	339	4.3	2.2
Zambia	5.6	753	716	0.1	-0.6
Zimbabwe	7.4	391	699	2.2	-2.6

Source: UNIDO Data Base; information sup-lied by the UN Statistical Office, with estimates by the UNIDO Secretariat.

a/ Growth rates based on GDP in constant 1975 US dollars.

etc.). This appears to be particularly true of Angola, Mozambique, Tanzania, Zambia and in certain sectors of Zimbabwe. At the same time each SADCC country suffers from shortages of final industrial goods, which cannot be imported due to foreign exchange limitations.

As to the external sector, at present the exports of the SADCC countries are very largely of primary products. Manufactures account for a very small share of total exports - under 10 per cent for many countries, as Table 6 shows. Many SADCC countries, including Angola, Mozambique, Tanzania and Zambia, experienced declining exports during the 1970s.

Table 6. Structure of Merchandise Exports

Percentage share of merchandise exports

Country	Fuels		Minerals and metals		Food and Beverages		Other Primary products		Manufactures	
	1962	1978	1962	1978	1962	1978	1962	1978	1962	1978
Angola	..	62	..	2	..	23	..	6	..	7
Botswana	..	..	..	..	..	..	..	..	..	..
Lesotho	..	6	..	26	..	23	..	9	..	36
Malawi	..	0	..	0	..	95	..	1	..	4
Mozambique	..	10	..	2	..	64	..	21	..	3
Swaziland	..	..	..	..	..	..	..	..	..	..
Tanzania	2	2	1	2	34	65	49	25	14	6
Zambia	..	(.)	..	94	..	1	..	0	..	4
Zimbabwe	..	..	..	25 a/	..	..	..	62 b/	..	13

Source: Accelerated Development in Sub-Saharan Africa - An Agenda for Action, 1981, by the World Bank.

a/ Includes fuels

b/ Includes food and beverages

Intra-SADCC trade is at a very low level (see Table 7), though recently the share of SADCC in Zimbabwe's trade has been increasing. The important trading partners are South Africa and the EEC. These figures show clearly the very limited contribution to the economic growth of the SADCC countries which can be expected in the foreseeable future from an expansion of their trade with each other.

Table 7. Intra-SADCC trade 1979

	Export to SADCC countries as a percentage of total export	Import from SADCC countries as a percentage of total import
Angola	0.1	2.6
Botswana	8.6	6.7
Lesotho	1.9	1.1
Malawi	4.4	3.5
Mozambique	2.6	2.5
Swaziland	1.9	1.2
Tanzania	1.6	0.5
Zambia	1.9	1.4
Zimbabwe[a/]	3.5	2.6

Source : Paper by C. Anonsen, mimeo, The Chr. Michelsens Institute, Bergen, October 1982.

a/ The shares of Zimbabwe have since 1979 increased to about 10 per cent.

Six SADCC countries signed the Lomé Convention: Botswana, Lesotho, Malawi, Swaziland, Tanzania and Zambia. Botswana, Lesotho and Swaziland are members of the South African Customs Union. The ESAPTA (Preferential Trade Area for Eastern and Southern Africa) Treaty has been signed by five SADCC countries, Lesotho, Malawi, Swaziland, Zambia and Zimbabwe.

Analysis by branches

An analysis of the development experience of the SADCC countries in the seventies and an appraisal of the potential benefits of economic co-operation for the participating countries needs to go down to the branch level, and probably even beyond that. Unfortunately, the coverage of the data available to UNIDO is satisfactory only for the year 1975, in which industrial censuses were made. In the following years the data supplied cover in most countries only a fraction of the industries for which data are available in 1975.[1/] It cannot be overemphasized that a broader data base for the recent years is essential for deriving sound and detailed policy recommendations.

Thus, more as an historical record than an approximation of reality in the first half of the eighties, Table 8 shows the distribution of manufacturing value added (MVA) by branch and by country in SADCC in 1975. Table 9, the shares of which are based on Table 8, gives information on the relative weight of each national branch in the MVA of the respective branch aggregated across all SADCC countries. Thus, the shares given in each row (apart from minor discrepancies resulting from rounding), add up to 100 per cent. In other words, each row separately gives information on the share of a specific branch in each country in the total supply of that branch within SADCC. This information, if it would be sufficiently updated, could be used for checking against demand and investment projections in order to identify bottlenecks which might arise in the future.

1/ See the Annex to this chapter

Table 8. SADCC countries - Manufacturing value added by branches, in 1975

(in thousands of US dollars, at 1975 prices)

ISIC	ISIC description	Angola	Botswana	Lesotho	Malawi	Mozambique	Swaziland	Tanzania	Zambia	Zimbabwe	Total
311	Food products	18,100	13,900	700	25,500	93,600	[24,200]	47,200	35,200	77,900	336,300
313	Beverages	7,000	2,900	-	7,300	29,900	[0]	12,200	18,200	50,100	127,600
314	Tobacco	4,600	0	-	7,200	19,700	[0]	17,100	5,500	25,800	79,900
321	Textiles	32,800	700	1,000	5,000	30,800	-	40,500	15,700	73,400	199,900
322	Wearing apparel, exc. footwear	1,600	-	[400]	3,500	7,500	100	4,700	27,800	49,000	94,600
323	Leather products	900	1,200	[0]	700	1,500	-	4,600	4,700	1,600	15,200
324	Footwear	200	-	[0]	800	2,700	-	4,200	1,900	18,400	28,200
331	Wood products, exc. furniture	400	400	-	2,800	7,500	[3,400]	4,200	14,200	12,600	45,500
332	Furniture and fixtures	500	400	700	300	4,800	[0]	2,300	10,400	15,000	34,400
341	Paper and paper products	2,800	200	-	1,300	3,000	41,000	3,100	10,800	23,200	85,400
342	Printing and publishing	2,300	200	1,100	1,600	11,300	12,800	12,200	12,800	34,100	88,400
351	Industrial chemicals	1,600	-	-	[7,300]	3,300	-	15,700	17,900	41,300	87,100
352	Other chemical products	1,700	300	-	[0]	17,300	-	7,100	29,900	45,100	101,400
353	Petroleum refineries	200	-	-	0	3,300	-	10,700	14,800	200	29,200
354	Petroleum and coal products	-	-	-	0	0	-	0	900	2,600	3,500
355	Rubber products	1,800	-	-	1,200	4,500	-	9,100	19,500	16,300	52,400
356	Plastic products	1,300	-	-	700	4,200	-	4,800	3,700	14,400	29,100
361	Pottery, china and earthenware	-	-	100	3,400	100	-	0	600	600	4,800
362	Glass and products	600	-	-	0	2,400	-	200	600	300	4,100
369	Other non-metallic mineral products	12,000	-	800	4,500	11,900	-	7,300	21,400	38,200	96,100
371	Iron and steel	2,000	-	-	0	4,800	-	3,700	7,800	114,200	132,500
372	Non-ferrous metals	0	-	-	0	0	-	3,100	1,600	12,000	16,700
381	Fabricated metal products	2,400	2,700	100	[7,400]	13,700	-	7,200	44,400	76,600	154,500
382	Machinery, exc. electrical	500	-	-	[0]	3,300	-	1,900	15,700	32,200	53,600
383	Electrical machinery	600	-	-	[0]	5,400	-	4,600	19,500	24,800	54,900
384	Transport equipment	1,300	-	-	[0]	10,100	-	9,100	16,600	33,900	71,000
385	Professional and scientific equipment	-	-	-	0	0	-	0	300	800	1,100
390	Other manufactured products	600	1,500	400	1,700	2,400	2,200	3,200	2,400	10,200	24,600
	Total	97,800	24,400	5,300	82,200	299,000	83,700	240,000	374,800	844,800	2,052,000

Source: UNIDO Data Base; information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

Table 9. Manufacturing value added by branches, 1975: shares of countries in SADCC - total [a/]

(Percentage)

ISIC	ISIC Description	Angola	Botswana	Lesotho	Malawi	Mozambique	Swaziland	Tanzania	Zambia	Zimbabwe
311	Food products	5.38	4.13	0.21	7.58	27.83	7.20[e/]	14.04	10.47	23.16
313	Beverages	5.49	2.27		5.72	23.43	0.00	9.56	14.26	39.26
314	Tobacco	5.76	0.00		9.01	24.66	0.00	21.40	6.88	32.29
321	Textiles	16.41	[illegible]	0.50	2.50	15.41		20.26	7.85	36.72
322	Wearing apparel, except footwear	1.69		0.42[b/]	3.70	7.93	0.1	4.97	29.39	51.80
323	Leather products	5.92	7.89	0.00	4.61	9.87		30.26	30.92	10.53
324	Footwear	0.71		0.00	2.84	9.57		14.89	6.74	65.25
331	Wood products, except furniture	0.88	0.88		6.15	16.48	7.47[f/]	9.23	31.21	27.69
332	Furniture, except metal	1.45	1.16	2.03	0.87	13.95	0.00	6.69	30.23	43.60
341	Paper and products	3.28	0.23		1.52	3.51	48.01	3.63	12.65	27.17
342	Printing and publishing	2.60	0.23	1.24	1.81	12.78	14.48	13.80	14.48	38.57
351	Industrial chemicals	1.84			8.38[c/]	3.79		18.03	20.55	47.42
352	Other chemicals	1.68	0.30		0.00	17.06		7.00	29.49	44.48
353	Petroleum refineries	0.68			0.00	11.60		36.64	50.68	0.68
354	Misc. petroleum and coal products				0.00	0.00		0.00	25.71	74.29
355	Rubber products	3.44			2.29	8.59		17.37	37.21	31.11
356	Plastic products	4.47			2.41	14.43		16.49	12.71	49.48
361	Pottery, china, earthenware			2.08	70.83	2.08		0.00	12.50	12.50
362	Glass and products	14.63			0.00	58.54		4.88	14.63	7.32
369	Other non-metallic mineral products	12.49		0.83	4.68	12.38		7.60	22.27	39.75
371	Iron and steel	1.51			0.00	3.62		2.79	5.89	86.19
372	Non-ferrous metals	0.00			0.00	0.00		18.56	9.58	71.86
381	Fabricated metal products	1.55	1.75	0.06	4.79[d/]	8.87		4.66	28.74	49.58
382	Machinery, except electrical	0.93			0.00	6.16		3.54	29.29	60.07
383	Machinery electric	1.09			0.00	9.84		8.38	35.52	45.17
384	Transport equipment	1.83			0.00	14.23		12.82	23.38	47.75
385	Professional and scientific equipment				0.00	0.00		0.00	27.27	72.73
390	Other manufactured products	2.44	6.10	1.63	6.91	9.76	8.94	13.01	9.76	41.46
	Country share in total SADCC MVA	4.77	1.19	0.26	4.01	14.57	4.08	11.70	18.27	41.17

Source: UNIDO Data Base; information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

Footnotes:
a/ Shares based on the values given in Table
b/ Includes also 323, 324.
c/ Includes also 352.
d/ Includes also 382, 383, 384.
e/ Includes also 313; 314.
f/ Includes also 332.

If properly and carefully analysed and used, the information given in Table 9 might even serve as a (helpful, but not exclusive) basis for decisions on where and how to tackle such impending bottlenecks. Guiding principle for decisions of such kind should of course be the consideration of the comparative advantages of the various countries. The last line of Table 9 gives for each country the share of its total manufacturing value added (across all branches) in the total for SADCC (across all countries). Checking the columns of Table 9 against the last line will certainly not identify comparative advantages, but it may serve well as a starting point for their identification. Whereas comparing the figures in each line separately leads to the logical conclusion that the biggest countries generally account for the greatest shares of the supply in all sectors, comparing the values in each column with last the entry in the respective column provides information on the relative specialization at the branch level of each country in the framework of SADCC. Each figure in a column which is substantially greater than the last entry in the same column indicates a relative specialization in that branch of the respective country in the frame of SADCC. For example, whereas Malawi contributed only 4.01 per cent to the combined MVA of SADCC in 1975, its pottery, china and earthenware branch (ISIC 361) accounted for 70.83 per cent of the total branch MVA in SADCC; Zimbabwe, which generally contributed a very high share to total MVA in 1975 (41.17 per cent), showed a clear relative specialization (86.19 per cent) in the iron and steel branch (ISIC 371).

However, such results should be interpreted carefully, not to confound "relative specialization" within SADCC with "comparative advantage" (which should be assessed with respect to the world anyway). Obviously, patterns of relative specialization as can be derived from Table 9 should be based on

underlying forces of comparative advantage; however, economic soundness as derived from economic theory and economic reality do not necessarily coincide. With (im)proper policy intervention (almost) any pattern of economic development can be achieved, with, of course, inefficient patterns of development resulting in low levels of economic activity (or rates of growth, respectively). Hence, results as the ones shown in Table 9, if properly updated, should serve as a basis for analysing existing patterns of relative specialization with respect to conformity with or divergence from underlying forces of comparative advantages. This kind of analysis could and should serve as a basis for development planning at the group level.

As mentioned before, analysis along these lines cannot be performed presently due to data limitations. Therefore, just for information, Table 10 presents the available data for 1979. The lack of data in many countries does not allow to compile a table for 1979 which would correspond to Table 9.

Resources for industry

The sub-region is as a whole rich in minerals. Angola, Botswana, Mozambique, Zambia, and Zimbabwe have large resources of chrome, bauxite, tungsten, nickel, cobalt and uranium. The sub-region is well supplid with energy. The Appendix offers more information on minerals and energy in the SADCC region. Zambia and Zimbabwe are self-supporting in electricity. Angola has an export surplus of oil and Mozambique has in the Cabora Bassa one of the largest power stations in the world. The Cunene power station in Angola, close to the Namibian border, has the potential to become an important energy source in the future.

Table 10. SADCC countries - Manufacturing value added by branches, in 1979 [a/]

(in thousands of US dollars, at constant 1975 prices)

ISIC	ISIC description	Angola	Botswana	Lesotho	Malawi	Mozambique	Swaziland	Tanzania	Zambia	Zimbabwe	Total [b/]
311	Food products	30,227	17,792	945	30,855		[27,830]	51,920	32,032	92,701	284,302
313	Beverages	7,560	4,060		9,125		0	14,274	16,562	51,102	102,683
314	Tobacco	4,600	0		7,128		0]	21,033	5,005	25,800	63,566
321	Textiles				6,500			41,310	19,625	71,198	138,633
322	Wearing apparel, exc. footwear				2,345						
323	Leather products				2,345			4,794	34,750	40,670	82,559
324	Footwear				910			7,360			8,270
331	Wood products, exc. furniture				1,040			6,720		21,160	28,920
332	Furniture and fixtures				3,640		[4,386]	4,200	12,780	13,608	38,614
341	Paper and paper products	2,800			330		0]	2,300		13,200	15,830
342	Printing and publishing				1,430		46,330		16,664	20,880	83,104
351	Industrial chemicals				1,760					37,851	39,611
352	Other chemical products							785	18,258	37,170	56,213
353	Petroleum refineries	254			0	3,234		6,106	30,498	40,590	77,194
354	Petroleum and coal products							7,490	18,500	180	29,658
355	Rubber products				0	0		0	918		918
356	Plastic products								19,890		19,890
361	Pottery, china and earthenware								3,774		3,774
362	Glass and products				3,502			0	720	420	4,642
369	Other non-metallic mineral products				0			218	720	210	1,148
371	Iron and steel	5,280			4,635			7,957	11,342	26,740	55,954
372	Non-ferrous metals	0			0			4,329	9,126	103,922	117,377
381	Fabricated metal products				0	0		3,844	1,472	10,920	16,236
382	Machinery, exc. electrical							5,832	27,972	69,706	103,510
383	Electrical machinery								9,891	29,302	39,193
384	Transport equipment							6,532	12,285	22,568	41,385
385	Professional and scientific equipment								10,458	25,086	35,544
390	Other manufactured products				0	0		0	189		189
					1,870				1,512	11,730	15,112
	Total	50,721	21,852	945	75,070	3,234	78,546	197,004	309,943	766,714	1,504,029

Source: UNIDO Data Base; information supplied by the United Nations Statistical Office, with estimates by the UNIDO Secretariat.

a/ No estimates were done for missing values

b/ Totals not to be compared with Table 8 because of different coverage.

The minerals sector is being co-ordinated by Zambia. Initial areas for studies have been identified and include manpower training, metal fabrication and closer product links to manufacturing, manufacture of machinery, spares and chemicals for use in mining, mineral marketing, finance, legislation related to mineral rights and taxation. At present the SADCC countries are extracting minerals for export as raw commodities. Most of them rely very heavily on South Africa for capital, technology, management and marketing. The opportunities for the establishmen of mineral-based manufacturing industries within the SADCC subregion are not very many. It is, however, foreseen that the existence and strengthening of SADCC will increase opportunities for the establishment of the mineral processing industries up to relatively more advanced stages, as well as make feasible the establishment of industries within the SADCC countries for the production of some mining equipment, etc. There is a need for identifying whatever mineral-based or allied potential industries there may be, especially in view of the desire to reduce economic dependence on South Africa and the influence of transnational corporations.

Most of the member countries have suitable land and climate for agriculture. Lesotho and Botswana are not, however, well endowed with arable land. More information on agriculture is provided in the notes of the Appendix. There are many opportunities for the promotion of agro-based and allied industries in the subregion. This will largely depend on the success in promoting efficency in agricultural production in the area.

Analysis of current economic problems

In general, the present state of the industrial sector in the member countries of SADCC does not appear to provide a solid base for industrial advance, although the bleakness of the scene varies from country to country. The general picture is one of serious under-capacity working of enterprises and of a contraction rather than an expansion of industrial production.

In Mozambique and Tanzania industrial production at constant prices even has fallen in the 1975-1980 period (see Table 2). Indications at the time of the fieldwork were that, in the case of Tanzania, industrial output for 1982 would show a further contraction. The field reports on some other countries also point to stagnant or contracting industrial output. This situation should be viewed as a matter of the greatest seriousness, both for itself and for its effects on the prospects for industrial co-operation under SADCC.

There is not one single cause which could be blamed for the present underutilization of installed economic capacity. Enterprises cannot get adequate supplies of raw materials; their machinery is old and subject to frequent break-downs; they cannot easily get spare parts; supplies of electricity, of water, of fuel-oil and so on are erratic.

Obviously at the heart of many of these supply side problems is a lack of foreign exchange. However, one should not be too optimistic regarding the possible contribution of economic co-operation among the SADCC countries towards easing this constraint. Clearly, in the medium and even in the long

run the possibilities of the grouping as a whole to save foreign exchange substitution of imports of capital goods, spare parts and semi-manufactures needed as inputs for further processing by corresponding manufactures produced inside SADCC, will be very limited.

There might be, however, potential for saving on foreign exchange which has not yet been fully utilized. Increases in the efficiency of management and the skills of the labour force should lead to more efficient use of imported materials and products, thus reducing the input coefficients for inputs imported from outside the grouping. The utilization of this potential, of course, will be a time-consuming process, but the foreign exchange requirements of efforts aiming into this direction should not be high and there may be some promising scope for intra-SADCC co-operation (e.g. by the foundation and common operation of a management training institute and/or other institutions contributing to raising "X" efficiency).

It is not only at the level of the enterprise that management (or policy) has its responsibility. The enterprises that have been established may, as a result of policy, have been made highly and unnecessarily dependent on foreign exchange. It has been suggested (Killick, Industry and Development, No. 7, pp. 77-8) that one "reason for this is that the Government has been content to leave the choice of technology to foreign contractors, who may have strong pecuniary interests in drawing designs that result in large orders for equipment. There may also be a prejudice within Governments against the adoption of labour-intensive technologies regarded as technologically backward. Thus, the contract for a (financially disastrous) fertilizer factory specified that the foreign contractor should "select the most modern

processes corresponding with the latest technical development in the chemical industry."

Governments are, of course, now well aware of these problems of industrial management, and are giving high priority to their solution. SADCC also places emphasis on improving the productivity of what already exists. Among the causes of the present crisis in the SADCC countries, a SADCC document lists the fact that "resources have not always been used as efficiently as possible", arguing that "no matter what has caused the crisis, national and regional action is essential to overcome them." And at the 1982 summit meeting in Gaborone, the President of Botswana said:

> "It is important to remember, however, that SADCC co-operation should not be seen simply in terms of new projects or dollars. SADCC provides a vital framework for consultation with one another on how to make existing systems work to their full capacity."1/

The need to concentrate on the rehabilitation of the present, extensive transport network is clear, even though substantial extension of the transport system will be necessary for the full development of co-ordinated development. But the present industrial sectors are of modest size and industry would not be the predominant economic activity even if existing industrial enterprises were all working to capacity. Although co-operation between the SADCC countries could contribute significantly to the more efficient operation of the present industrial structure in ways that are discussed later in this report, there is no doubt that the major contribution of SADCC could be to the growth of the industrial sector. It might be

---

1/ Overview: SADCC, Maseru, Lesotho, 27/28 January 1983, p.3.

thought, therefore, that too much attention has been given in this chapter to the failings and deficiencies of existing industry. The emphasis was deliberate. It would not be helpful to divert attention from the problems of the existing industrial sector in order to concentrate on raising capital for grand new projects. In the first place, the field studies have indicated that investment in the rehabilitation of existing enterprises would often yield a greater return than new investments. But of even greater importance is the fact that it would be unconvincing, unpersuasive for potential investors, and possibly disastrous if the investments were made, to embark on industrial expansion when the modest existing industrial sector cannot be made to operate with reasonable efficiency. It would be a different matter if the under-capacity working and high costs could be attributed solely to the smallness of the market. If that were the case, it would be easy to see the potential contribution of co-operation and co-ordination under SADCC. But at present under-capacity working goes along with dire shortages of goods to serve domestic demand. And until a way of solving the supply-side problems can be found, to embark on significant industry growth would be likely simply to compound the existing problems. It is, therefore, to a mitigation of these problems of the industrial sector that in the first place the contribution of co-operation among the SADCC countries should be sought.

Appendix to chapter II

The availability of more recent industrial statistics is an absolute precondition for any sound, quantitative analysis of the economic base of SADCC and its promises for the future. This information, though urgently needed, is not available to UNIDO at present. The following Table shows the coverage of the UNIDO data base with respect to industrial production as by 30 August 1983.

Coverage of UNIDO data base - indices of industrial production

	1975	1976	1977	1978	1979	1980	1981
Angola	100	(- - - - - - - - - - - - - - 45.71 - - - - - - - - - - - - -)					
Botswana	100	(- - - - - - - - - - 68.85 - - - - - - - - - -)					
Lesotho	100	(- - - - - - - - - - 13.21 - - - - - - - - - -)					
Malawi	100	(- - - - - - - - - - 79.81 - - - - - - - - - -)					57.91
Mozambigue	100	(- - 85.52 - - -)		(- - - - - - 1.10 - - - -)			
Swaziland	100	(- - - - - - - - - - - - - - 81.96 - - - - - - - - - - - - -)					
Tanzania	100	(- - - - - - - - 81.92 - - - - - - - -)				30.42	27.46
Zambia	100	(- - - - - - - - - - 92.05 - - - - - - - - - -)					82.39
Zimbabwe	(- - 100 - - -)		(- - - - - - - - - - - - 95.77 - - - - - - - - - - -)				

Taking the coverage of the 1975 censi as 100 per cent, the Table shows that the coverage of the data fell dramatically in some countries in subsequent years. To give an example: the branches, which are covered by the indices of industrial production for Lesotho in the 1976 to 1980 period, accounted for only 13.21 per cent of total manufacturing value added as recorded in 1975. As it is

highly improbable that so many industrial branches in Lesotho and other countries have simply disappeared, it becomes clear that a quantitative assessment of industry in SADCC at the beginning of the eighties would not be warranted by the available data.

III. THE POTENTIAL BENEFITS OF INDUSTRIAL CO-OPERATION

Industrial co-operation, as SADCC documents themselves have argued, is central to the purposes of SADCC. Industrial development must play an increasingly important role as the development of the countries of the region proceeds, and it is a basic thesis of SADCC that this development will be the more successful in each individual country the greater the degree to which there is co-ordination and co-operation between the different members. Such co-ordination and co-operation is essential not only for successful progress in industrial development, but also for reducing the "dependence" on South Africa, which at present, far from being diminished, is increasing. It may be truly said that "dependence has increased, is increasing and ought to be diminished." Industrial co-operation is essential if that end is to be achieved.

The meaning of industrial co-operation

What, in summary, does "industrial co-operation" mean? The decisions of SADCC that there shall be no attempt to establish a supra national authority, and that the implementation of policies is to be firmly in the hands of the Governments of the individual members, imply that industrial co-operation certainly does not mean the formulation of an industrial development plan for the region. The elements of industrial co-operation can be collected into several groups:

(1) Measures to ensure that the inputs of industry as well as ancillary services (design, marketing, consulting, etc.) in the SADCC members, where they are imported, come to the greatest extent possible from other SADCC members;

(2) Measures to ensure that SADCC members, when importing industrial products, import them to the greatest extent possible from other SADCC members;

(3) Measures to ensure that investments in new industries within SADCC countries are to the greatest extent possible complementary rather than competitive.

In addition, there are other possibilities for the use of established and effective co-ordinating mechanisms, such as arrangements for the bulk purchasing of industrial inputs, which would bring economies and benefits to the participating countries.

SADCC subregional economic co-operation/integration

One of the major goals of the Southern African Development Co-ordination Conference (SADCC) is "the creation of operational and equitable regional integration." Economic co-operation or economic integration are two different terms which are often used interchangeably though imprecisely.[1/]. They have at any rate now become widely accepted as an important instrument and

---

1/ Integration often refers to the more positive and specific process of economic co-operation. According to Bela Balassa, co-operation includes various measures designed to harmonize economic policies and to lessen discrimination, whereas the process of economic integration comprises those measures designed to suppress or remove discrimination. For example, an international agreement on trade belongs to the broad area of economic co-operation, but the abolition of trade restrictions is an act of economic integration. ("The Theory of Economic Integration" in Miguel S. Wionczek, ed., Latin American Economic Integration: Experiences and Prospects, New York: Praeger Publishers, 1966).

potentially an effective means for facilitating development in a group of developing countries. It is, therefore, worth examining the requirements of industrial co-operation and its implications for the SADCC sub-region as a whole and its member countries individually. Traditionally, it was taken that international trade theory could yield concepts or produce variants which would be adequate for explaining the process of regional economic co-operation/integration. Thus the problem was often analysed on the basis of the theory of customs union if welfare losses from the trade diversion effect could be offset by the welfare gains from the trade creation effect arising from integration. It was later conceded that, for developing countries, the basic economic rational for co-operation/integration might not be found in the static, efficiency criteria of resource and production reallocation effects as provided in the theory of customs union, but rather, in terms of "dynamic" considerations associated with the growth and development potentials for the countries involved in integration.

SADCC countries (being small - with weak economic structures) are vulnerable to the deteriorating international economic environment, would be better off if they were increasingly inclined towards seeking a more autonomous means or greater self-reliant pattern of development, and when national self-reliance proves to be too unrealistic a policy to pursue, then self-reliance on a subregional basis would seem to be the logical and acceptable alternative. This is an idea which was also incorporated in the New International Economic Order. Hence the post-energy crisis period in the 1970s witnessed renewed attempts and fresh efforts among groups of developing countries at regional economic co-operation, which were also strongly endorsed by many development economists as a form of South-South economic co-operation.

The objectives and functions of regional economic co-operation/integration have become more complex and grown in significance; and the net benefits of any regional economic co-operation/integration scheme among developing countries should be understood in a broader institutional context. The bases and rationales for regional co-operation/integration are apt to differ substantially from one sub-region to another or from case to case, and the various schemes should therefore be judged for success or failure in accordance with the institutional conditions and economic problems specific to the individual regions. Above all, the progress of economic co-operation/integration must not be measured in purely economic terms, but be put in the larger context of the political reality and the historical circumstances from which such efforts have evolved. These general observations should provide a broadly-based approach to industrial co-operation in the SADCC sub-region.

The discussion in this study report focuses on regional co-operation in the field of industry, which plays a pivotal role in regional economic co-operation schemes. Most regional schemes start off with co-operation in trade through selective liberalization or tariff reduction, which is administratively easier to implement. However, real breakthrough in regional economic co-operation is achieved usually with successful progress in the area of industrial co-operation. This is particularly true with economic co-operation efforts in the Third World, where intra-regional trade is normally small and the scope for its further expansion is limited unless there is a dramatic shift of the intra-regional trade structure from one based on

traditional items to one based on manufactured products. But the expansion of trade in manufactures among Third World countries is often constrained by their lack of industrial complementarity, apart from the fact that the export markets for the major industrial commodities are extremely competitive and tend to be dominated by the highly industrialized countries as well as by a handful of dynamic, newly industrializing countries. One effective means to promote subregional trade in manufactured products among SADCC countries would be through co-ordinated measures to increase their industrial complementation; hence the need for industrial co-operation. Industrial co-operation not only holds the key to the continuing growth of intra-regional trade but also to the region's success in its overall industrialization effort.

It is well-known that the domestic markets of the member states of SADCC are too small to permit the efficient operation of a whole range of manufacturing industries. Smaller economies could, of course, concentrate on a limited number of carefully selected manufactured products in order to realize sufficient economies of scale. Such a pattern of selective development of manufacturing industries is known as "truncated industrialization", for which regional industrial co-operation can act as a catalyst. But truncated industrialization is most effective and efficient where there is a large neighbouring industrialized country which can readily supplement or complement the inputs produced domestically. Thus regional co-operation among SADCC countries will not necessarily develop into a sub-regional autarky, but the process could well lead to closer economic independence with larger industrial centres outside the region. In this case measures will have to be taken to ensure that South Africa, which would have otherwise positively contributed, is excluded for political reasons.

In the short run, regional co-operation offers the opportunity for member countries to pool their domestic markets and therefore operates as a convenient arrangement for the extension of the import-substitution process. But taking advantage of such short-term gains which would result in the prolonging of the otherwise stagnating import-substitution phase through the creation of an artificially expanded regional market might create long-term problems. SADCC co-operation would work best when member countries are in the initial stage of looking outward for export expansion. In this way, SADCC would be linked up with the more positive industrialization strategy based on sharing export expansion. This can be done by structuring regional co-operation arrangements towards the promotion of more outward-looking industries and towards capturing world-wide opportunities for trade expansion. There are clear advantages for a subregional body to formulate a common export-promotion strategy, because many export-promotion measures can be more cheaply and efficiently implemented through a regionally co-ordinated framework.

Effective industrial co-operation among SADCC countries can further be envisaged in a "dynamic" context. In the long run, industrial co-operation can lead to co-ordinated industrial planning on the SADCC basis, which will increase the industrialization potential of the sub-region as a whole. Furthermore, the processes of SADCC industrial co-operation and the sub-region's industrial development can be self-reinforcing. Industrial co-operation provides an impetus for further industrial growth in the region through opening up opportunities for the establishment of new industries to take advantage of the subregionally based division of labour and specialization in production. At the same time, rapid industrial growth will increase the capacity and flexibility of the sub-region for greater industrial co-operation.

Trade and industrial development in SADCC

There is no express reference to intra-SADCC trade in the main goals of the Conference as defined in the basic statement of aims adopted in 1980. Subregional integration and economic co-operation do inevitably imply trade and payments arrangements to be established. Even the allocation of industrial projects to member countries is in itself an indication of the realisation of the central role of intra-SADCC trading in industrial co-operation and development. However, many crucial issues relating to trade among member countries of SADCC have so far not been given proper attention. Since industrial development and trade go hand in hand, questions relating to allocation and promotion of specific industrial projects must be considered side by side with those relating to trade and payments arrangements between or among the co-operating countries of the sub-region.

The SADCC economies depend for their growth on primary exports. Most of these primary products are destined to OECD countries. Consequently, trade is both an engine of SADCC's economic growth and a mechanism by which the SADCC economies become highly dependent upon the industrial world. Moreover, trade dependency is but one aspect of the sub-region's overall system of economic dependency on the industrial countries, which includes, apart from trade, finance, capital as well as direct foreign investment and technology. It may be stressed that SADCC's dependent economic relationship on the industrial countries has not been working entirely to SADCC's disadvantage.

As one consequence of SADCC's high trade dependence on industrialized countries, the volume of intra-SADCC trade is relatively low. Indeed, the lack of immediate growth potential in intra-SADCC trade in manufactures tends to support the argument that the factor endowments of the countries of the sub-region seemed so similar to each other that further integration would only result in more trade diversion than trade creation. In practice, however, economic policies are rarely formulated within a narrow, purely economic framework, but are in fact based on wide-ranging dynamic considerations. Viewed in this light, the present limited growth of intra-SADCC trade should not be taken to reflect the absence of real benefits from future regional economic integration or co-operation. On the contrary, the low volume of intra-SADCC trade turnover may be viewed as pointer at the existence of potential for future growth.

SADCC's high trade dependence on the advanced countries, and in fact much of the structural weakness in SADCC's foreign trade sector, arise from, or are aggravated by its high commodity concentration. The whole problem can be viewed from two angles: the short-term instability of markets for primary products as reflected in wide year-to-year fluctuations in prices and export earnings; and the adverse long-term price trends as reflected in the deteriorating terms of trade and the slow growth in export earnings. From the perspective of the SADCC countries, these problems are compounded by the fact that whilst the prices of most of their primary products face a long-term declining trend, the prices of their manufactured imports from the developed countries, fuelled by rising inflation, have risen steadily over the years.

SADCC countries as exporters of primary products would clearly stand to gain if the long-term price trends of their main primary exports were steadily

moving up and were sustained, so that greater resources could be transferred to the region for development. In the long run, SADCC needs to develop its own comprehensive commodity strategy for the more efficient management of its primary resources in the face of the rapidly changing international economic environment. This would include diversification and various stabilization measures. Ultimately, successful operation of any commodity policy depends on many crucial external factors emanating from the advanced countries as much as on its effective implementation on the part of the primary exporting countries. This means that SADCC could take advantage of the subregional framework to bear on the individual industrial countries or to negotiate with them as a group (e.g. the EEC) on matters such as the reduction of their effective protection of processed primary products. An effective commodity policy also cannot be divorced from joint international action as reflected in some successful international commodity agreements. SADCC countries could also do well in other international arenas if they were to act in unison by following a subregional approach.

While the overall trade structure and pattern of SADCC might provide a fertile ground for greater regional economic co-operation, the restrictive trade policies pursued by some SADCC countries, especially connected with import, have not been generally conducive to that effort. It is generally recognized that if restrictive trade policies are followed by most SADCC countries, they would, on balance, produce unfavourable effects on their economies, largely by distorting their economic structures. The original intention of such policies is to discourage the importation of consumer goods so as to stimulate industrialization largely based on import substitution. As a result, a number of less efficient industries of import-substitution type spring up, while export industries suffer and the balance-of-payments

situation deteriorates. There are many examples in SADCC countries to support this view. Clearly, such an inner-directed development pattern would not be conducive to SADCC economic co-operation because: (a) a restrictive trade protection system would be likely to be harmful to subregional trade; and (b) the industrial structure built under import substitution would be likely to pose more obstacles to subregional industrial co-operation, as will be more fully discussed in the next section.

Possible industrialization strategies in SADCC

A common aspiration among the leaders of the developing countries throughout most of the post-war period has been to industrialize rapidly; manufacturing industries were to provide a dynamic force for economic progress towards high standards of living and full employment. Underlying this notion was often also their argument that the post-colonial economic structures in their countries, heavily dependent upon primary exports, did not have the lead to a real development breakthrough, limited spread-effect of their past traditional trade-led type of economic growth, and partly due to unfavourable long-term movements in the prices of their major primary exports.

The industrialization strategies that were being promoted throughout the SADCC sub-region are the familiar import-substitution strategies except in Zimbabwe where a stage has been reached for the promotion of export-oriented industries. The problems of the import-substitution industrialization are well known. Suffice it to say that industries set up behind protective tariffs tend to be small, inefficient and inward-looking, so that they can rarely look beyond their national boundaries to the competitive foreign markets.

Nevertheless, the process of import substitution is constituting a major source of industrial growth for the SADCC sub-region hitherto. Thus in Zimbabwe, import substitution has been a major source of its industrial growth since the unilateral declaration of independence and the trade sanctions which followed.

Largely as a result of the import-substitution strategy, certain structural issues or problems have emerged in the process of industrialization which are common to the manufacturing sector of most SADCC countries. These problems will pose some obstacles to SADCC industrial co-operation efforts. Firstly, the SADCC economies are still highly dependent on manufactured imports, despite years of industrialization efforts. This is in part due to the operation of import substitution, which tends to replace only consumer goods plus some categories of intermediate goods while on the other hand the import demand for producer's goods, industrial raw materials and energy in value terms is often well in excess of the reduction in the import of consumer goods. Thus import-substitution-based industrialization in SADCC countries has in effect contributed to a large extent towards a deterioration of their balance of payments situation.

Secondly, the internal structure of the manufacturing sector of all the SADCC countries has developed a peculiar dualistic pattern. On the one hand, it is characterized by the proliferation of "small" industries, typically reflecting the early stages of industrial evolution. On the other hand, a small number of large establishments tend to dominate the whole industrial scene in terms of output and capitalization and even employment. Such a heavy concentration of industrial activities in large firms reflects the past biased preference of the SADCC governments as well as distortion due to the working

of the import-substitution policy. Consequently, the structure of the manufacturing sector in most SADCC countries remains rigid, unbalanced and fragmented making it inherently more difficult for it to enter into large-scale industrial co-operation on a subregional basis.

Thirdly, there appear to be locational imbalances among cities or regions in anyone SADCC country. To some extent, the present lopsided locational patterns have been the unanticipated consequences of the past development policies, e.g.. industries set up under import substitution in the region naturally congregate in big cities as these industries are producing primarily for consumption in the urban enclaves. Suffice it to say that regional industrial imbalance in the individual SADCC countries could also complicate arrangements for regional industrial co-operation.

The role played by foreign investment in the SADCC industrial promotion and development is very important. There is now a high degree of foreign economic participation in national economies of SADCC countries. Much of the sub-region's foreign investment originally stemmed from a colonial background, initially operating in areas connected with the natural resources sector and trading. Later, foreign capital was increasingly drawn into the manufacturing sector in response to the promotional policies of the host governments. Since foreign enterprises have already exerted such extensive influence on the manufacturing sector of the SADCC economies, it is economically prudent and realistic to permit foreign enterprise participation in some form or other in the process of regional economic integration. Indeed, foreign economic components should be utilized at some stages to accelerate the sub-region's industrial co-operation efforts.

As the manufacturing industries of SADCC are, in various ways, not geared up to the challenge of the 1980s, the international economic environment, due to the slackening of world trade and the reduction of international flows of capital and technology, has made it much more difficult for the sub-region to promote industrial growth. It is beyond doubt that the export markets for manufactures will be highly competitive in the 1980s. The rise of domestic and international problems in the 1980s could, therefore, create greater opportunity for more serious subregional economic co-operation endeavours. To cope with mounting protectionist barriers in the industrial countries, the SADCC countries will find it more effective to act as a group in pressing for significant tariff concessions from advanced countries, or for easier access to the markets of these countries. The bargaining advantage of a regional economic co-operation framework is more obvious in times of economic crisis. Meanwhile, as the manufacturing industries in SADCC are forced to undergo structural adjustments to meet new international and domestic pressures, the scope for regional industrial co-operation will also increase. With a more efficient and outward-looking industrial structure, member countries will have greater flexibility to go into various forms of regional co-operation.

Market failure and the need for intervention

The point here is that there are various levels of ambition in a regional grouping. There is the level of simultaneous bilateral agreement between various members, a framework of extensive agreements between several members, and a framework of such agreements between all members. What is important is that SADCC should offer a framework which can accommodate different members' moving toward more complete integration at different speeds.

The desirability of assuming certain short-term costs for the advantage of longer-term benefits is the basis for industrial protection policies of the "infant industry" type and for the particular application of such policies which takes the form of preferential trading groupings of developing countries. The market does not detect the benefits of industrial growth in the longer term which it is the purpose of protection to bring about. It is cheaper for most industries in SADCC countries to buy most of their industrial inputs from non-members of SADCC. Correspondingly, it is cheaper in most SADCC countries to buy most industrial products from non-SADCC members than from other members of SADCC. The high cost of transport between the members of SADCC is an important contributory factor, and the progress under SADCC in the improvement of the inter-member transport is therefore of very great importance for the progress of industrial co-operation. A "market failure", in other words, needs to be overcome in the rehabilitation and development of transport links between the SADCC countries. Another market failure has to be overcome if purchases are to be switched to SADCC sources, from sources which are at present cheaper, in the interest of the industrial progress of the SADCC countries. This is a matter of trade policy, which is discussed later.

Market failure through a lack of information has numerous manifestations. It is not only the failure to trade off short- against long-term benefits that is the cause of the present extremely low level of intra-SADCC trade in industrial inputs and outputs. The established patterns of trade (and the institutions which support them) are largely with non-SADCC countries, so that even if SADCC sources were competitively priced they would be unlikely to feature much more in the trade. Measures to provide information on the availability and price of SADCC sources of industrial products would therefore be necessary to overcome this type of market failure.

Market size

Although the problems currently facing existing industries require the urgent attention suggested later in this chapter, the major reason for the low level of trade in industrial inputs and outputs is that the development of the industrial sector is at a relatively low level in all member countries, and at an extremely low level in most. The major focus of SADCC industrial co-operation, once the short term problems have been dealt with, must therefore be on investment in new industries. Industry will remain of minor importance in the economies of the members if it is confined to the existing industrial structure.

Much of the existing industry in the SADCC countries is small scale, established to serve the local market, and which can operate efficiently on the scale of the local market (whether it does in practice operate efficiently is an entirely different matter, of course, as was indicated in the previous chapter). There is undoubtedly scope for a good deal of further investment in industry of this kind, and little co-operation and co-ordination will be needed for such industrial development. But co-operation and co-ordination become of vital importance when investments are being considered in large-scale industries. Particularly where investments are being made by transnational corporations in industries which can most efficiently serve a wider than national market, and which will have a large demand for inputs which cannot be satisfied from national supplies, co-ordination and co-operation among the countries of SADCC could bring great benefits.

The benefits of industrial co-operation are unlikely to be realised unless there is a corresponding degree of co-operation in trade. In fact, trade may be viewed as the vehicle which conveys the benefits of industrial co-operation to the co-operating countries.

A major argument for co-operation in trade between developing countries - the potential increase in the size of the market open to producers within the co-operating countries - applies as strongly to the SADCC countries as to other groupings. Each member of SADCC is small and poor. There are, of course, great differences in size and poverty between different members, but it is true of every member that its domestic market is too small to provide adequate economies of scale for many industries. The population of the smallest country accounts for less than one per cent of the combined population of the member countries, and for the largest country for 32 per cent. For even the largest member country, therefore, the size of its domestic market is relatively small in relation to the size of the combined market of the SADCC members.

The presentation of these figures should not be taken to imply that it is realistic to think that, with the development of co-operation, the combined market will automatically become available to producers in the individual countries. There are many reasons (discussed later) why it would be unrealistic to think in such terms. But the figures do indicate that there is substantial scope for market enlargement for the members of SADCC through co-operation in industry and trade.

Foreign exchange scarcity

Although the benefits of co-operation in industry and trade are commonly expressed in terms of market enlargement, it has been shown in Chapter II that at the present time in most SADCC countries the expansion of industry is not constrained by lack of demand. The important and serious constraints are to be found on the supply side.

Co-operation between the SADCC countries could relieve these supply side constraints by providing what may, indeed, be a second-best solution, but that is clearly greatly preferable to the present situation in which gross under-capacity working is imposed on industry by the scarcity of foreign exchange. Elements of a scheme to mitigate supply side constraints imposed by foreign exchange scarcity are to be found in the various bilateral and 'barter' arrangements that are being established between different SADCC countries. These arrangements may foster trade and production, but they are highly inefficient in comparison with a multilateral scheme. Such a scheme would provide for balances earned in intra-SADCC trade to be inconvertible, or only partly convertible, after a lapse of time, into foreign exchange, but freely convertible into other SADCC currencies.

A multilateral clearing arrangement would have distinct advantages over bilateralism and barter and would provide a stimulus and complement to industrial co-operation within the SADCC grouping. The design of the scheme would have to be based on detailed analysis of trading patterns and production prospects, and would require careful negotiation between the co-operating countries. It would be a benefit of such co-operation under SADCC that the

level of industrial production could be determined more by the demands of the member countries than by their ability to earn foreign exchange. It would be a direct contribution to a reduction in dependency.

Bargaining power

Many benefits of industrial co-operation can be seen as deriving from improved information. Information provided through the SADCC arrangements could prevent two countries from embarking on investment in the same industry, the success of each investment assuming access for the products to the whole SADCC market. Co-operation could also increase the bargaining power of the countries of the grouping and make it difficult for an international investor to play one country off against another.

The basis of this argument is that in the minerals sector, at least, the great bulk of the processing, refining, transporting and marketing is carried out by a few companies, based in developed countries. When one company bargains with several developing country locations over such issues as royalty payments for mining, it will enjoy the bargaining advantage of monopsony unless the potential sellers band together in an attempt to extract better conditions for themselves. What is to be avoided above all is for one country to be underbidding another in rivalry to attract a particular investment. The best that can be hoped for still falls short of bilateral monopoly, since the processing company will usually have other potential sources in other continents, and even with bilateral monopoly the outcome cannot be predicted to be particularly advantageous to the seller, since it depends in part on other factors such as the existence of substitute materials. There is, therefore, no panacea here; merely a possibility of enhanced bargaining terms.

In conditions where foreign investment in manufacturing is being negotiated, it may be that SADCC as a unit can at least appear more plausible as a source of local content than would an individual member negotiating alone.

Summary

In summary, the potential benefits from industrial co-operation under SADCC, together with corresponding co-operation in the associated matters of trade and payments, are substantial both in the short term and the long term. It has been argued that various elements of 'market failure' make it unlikely that these benefits could be achieved without market intervention of one sort or another, and that the co-operation envisaged under SADCC would provide an appropriate form of such intervention.

In the short term, industrial co-oeration supported by a multilateral clearing arrangement would to some extent free industrial production in the member countries from the constraints of foreign exchange scarcity and make possible a higher level of utilization of existing industrial productive capacity.

Agreements between the members to give preferential access to the markets of the SADCC countries would provide wider markets for the additional output of the existing industrial enterprises. Such agreements on preferential access would, in the longer term, provide markets for newly established industries which could operate more efficiently in the wider market area than in their domestic markets.

Co-operation between the member countries could bring the benefits of co-ordinated industrial development and a strengthening of their bargaining power with potential investors.

IV. CONSTRAINTS ON FURTHER PROGRESS

The following is a summary of the main constraints to further industrial co-operation which were identified during the field trips and from analysis of SADCC data. The constraints derive both from fundamental differences in the eocnomic position and characteristics of the various SADCC members and from the internal policies pursued by the various members.

Different levels of industrial development

The SADCC members vary considerably when it comes to the level of industrial development. Botswana, Lesotho and Swaziland are at a comparatively early stage of development, have few linkages established and produce little in the way of intermediate goods. On the other hand, Zimabawe, has a relatively sophisticated industrial structure which produces a variety of items ranging from capital goods to consumer goods.

The difficulties which this fact imposes on a co-operation scheme can be considered under two headings. First, the more developed the industrial structure and the more advanced the infrastructure of water supply, power supply, roads, warehouses, etc., the greater the attraction of that location. It may be the case that the economy which is already more advanced would be awarded the bulk of the new projects due to its better availability and more reliable supply of inputs. To the extent that these factors are reflected in unit costs being below those likely to be achieved by neighbouring countries, there is a further impetus to selecting the more advanced economy.

What is important for SADCC in these circumstances is that the organization should be absolutely clear about its objectives, and about its

priorities within those objectives. For a conflict between the objective of reducing the membership's income inequality on the one hand and operating industries at minimum cost on the other could arise when location decisions have to be made in the face of countries with heterogenous facilities and eonomic characteristics.

Next, just as, on the one hand, too great a difference between members can impede much dissemination of new projects between the SADCC members, so too can similarities of industrial structure impede the growth of trade between members. For it is frequently the case that member countries have similar goods to offer one another, particularly in respect of consumer goods. To some extent this is a reflection of countries having pursued, more or less simultaneously, policies of import substitution.

Foreign exchange constraints

It is virtually a characteristic of developing countries that they run persistent deficits on their current accounts. Only a very few countries, and then only briefly, have escaped this constraint.

Precisely how a foreign exchange constraint might impede further progress toward industrial co-operation needs to be made explicit, before ways of circumventing the problem can be put forward. There are three ways of looking at this.

First, to the extent that foreign exchange is at a premium there will be problems involved in importing capital goods in the first place. Although many economists would argue that in the past foreign equipment has been used too readily, before the possibility of domestic sourcing had been fully

explored, there are undeniably some cases where equipment from abroad has to be used.

Allied to this is the second problem that spare parts and accessories often have to be imported as well. Maintenance of machinery may often be inadequate, requiring unnecessarily large purchases of spares, but, once again, a further difficulty arises if disparities in trade values cannot easily be settled due to foreign exchange shortages on the part of certain SADCC members. In these cases, unless trade volumes are simply to shrink to the point where equilibrium is attained, a means of settling foreign currency debts must be arrived at. Chapter V will discuss the attractions of a policy of barter, or of periodic hard currency settlements coupled with trade credits.

An alternative approach to the balance of payments issue is to examine the possibility that a foreign exchange constraint encourages, rather than inhibits, trade between SADCC members. The argument here is that when importing from developed countries, which are usually the preferred source, is not possible due to a lack of hard currency, there may be a trade diversion effect whereby demand is switched toward fellow SADCC members, if their exports do not have to be paid for immediately in hard currency. The extent of this phenomenon depends on the arrangements made for settling trade debts, of course.

New investments or rehabilitation

Elsewhere in this report the existence of substantial idle capacity distributed throughout the SADCC members' industries has been noted. This excess capacity is a reflection both of supply-side (e.g. lack of co-operant inputs and spare parts) and demand-side (e.g. domestic demand being filled

chiefly from imports) forces. There is, however, a further impulse at work, which is the tendency for Governments - often acting under the influence of aid agencies - to prefer to build new plants before those already existing have been restored.

The extent of this problem should not be overstated. For instance, the SADCC Industrial Co-operation Sectoral Profiles Handbook, published in March 1982, states clearly that in Angola the authorities plan to "rehabilitate and rejuvinate" several textile factories and in Mozambique three existing footwear factories are to be refurbished. Nonetheless, the impression given by the summary of the projects submitted to the SADCC Maseru Conference in January 1983, for consideration by aid donors, is that the great majority of projects being pursued are new projects.

The field study reports indicated several times that the returns to a dollar spent in refurbishing tended to outstrip by a wide margin the returns to a dollar spent in wholly new projects.

Differences in objectives between members

One can easily foresee difficulties arising if there are differences in objectives, and of priorities between objectives between the various member country Governments. Aims may indeed also differ between ministries within a Government. The possibility of this happening suggests a clear need for explicit rules to be set up, and in particular for a statement of the scope of the SADCC arrangements to be made. For instance, if, as in the case of Tanzania, there is a declared preference for small-scale projects, not only does this have to be stated in advance, but the extent to which SADCC is intended to be the vehicle for fulfilling this objective also needs to be

thought out. For, in the nature of things, there will be SADCC-oriented proposals which, while benefitting a member country overall, will not fulfil all that country's development priorities.

Among the more obvious priorities which will have to be agreed are those between:

- public and private ownership and management;
- rural and urban location;
- pursuit of geographically dispersed development or concentrated growth poles; and
- employment levels versus unit costs, etc.

Cost and quality of SADCC goods

An obvious difficulty with an industrial co-operation scheme, especially at the early stages, is that goods and services offered by non-members may be preferable to those offered by firms located in fellow member countries. The extra-SADCC sources may be preferable on grounds of cost, quality design, servicing, speed of delivery, access to prolonged credit on favourable terms, established reputation, or any combination of these factors. This problem has been cited by government officials and businessmen in several SADCC member countries.

There is, of course, a degree of cumulative causation in this problem, in that until demand increases, supply will tend to stay becalmed at an inefficiently low volume. At the same time, however, this need not and should not be used as a case for diverting demand to SADCC sources simply because they are within SADCC: ultimately, all firms have to break into a market by offering something better than their competitors.

The absence of rules, monitoring and control

Following the discussion of conflicts between objectives at the macroeconomic or national level, the likelihood of conflicts in day-to-day operating decisions must also be anticipated. But how are these to be managed?

The question of control naturally arises in the context of industrial co-operation. Just as divisions of a large private corporation may enjoy substantial operating autonomy, but must in the final analysis be bound by some overriding rules, set (and presumably policed) by the corporate staff, so must any international scheme have explicitly delineated lines of authority and responsibility.

In evaluating supply bids - both for producers' inputs and for consumer goods - from SADCC sources vis-à-vis outside sources, purchasers should be aware of the possibility of conflicting objectives. Suppose the objective of an agent in Country A is least-cost purchasing and fellow member country B offers to supply at higher prices than non-member country C. How is B's bid to be interpreted? It may turn out, on examination, that B's bid is higher than C's because part of B's unit costs are accounted for by a plant, elsewhere in SADCC, that is operating with high unit costs, possibly due to maladministration, or because it is new and it has yet to exploit learning curve effects.

The points which arise in cases such as this are that: (i) there is a need to set ground rules so that SADCC and non-SADCC sourced bids are evaluated carefully and not purely on the basis of bid prices; and (ii) that there is a need for rules to determine when an uncompetitive bid is to be accepted because of the gains it offers for SADCC as a whole. In corporations, divisions frequently have authority to go outside for inputs, if

they are cheaper than would be supplied by another division of their own firm. But in SADCC the position is more complicated because its raison d'être transcends straightforward cost minimization principles. Thus, it can be seen that SADCC membership implies a willingness to contemplate two (potentially inconsistent) objectives, as the next section discusses. Finally (iii) some way of accounting for the trade-offs described under (ii) needs to devised, and agreed upon beforehand so that all members will be content to adhere to the same rules. Only if such rules are set can trade-offs between the objectives of short-run domestic welfare maximization (sourcing from the cheapest bidder, irrespective of its being a member or not) and long-run co-operation (accepting a more costly bid when it can be shown that there is or will be general welfare gain thereby) be made in an enlightened way, and misunderstandings minimized.

As well as a need for rules in the sense of overarching principles of strategy, SADCC also needs rules for governing operating decisions. An instance is the need for rules of origin to determine how an item is to be treated for tariff purposes. The field studies noted several firms in one member country being persistently undersold by a firm located elsewhere in SADCC, but with the latter firm selling goods manufactured, in whole or in part, in South Africa and simply relabelled. Given that it is intrinsic to the operation of SADCC that trade between members should be relativly liberalized, questions such as rules of origin have to be decided multilaterally and then tariffs imposed as goods enter SADCC for the first time, rather than afterwards. An instance of this was provided by a plant in Botswana selling air conditioners to Zimbabwean customers, with duty-free access to their market. In fact the Botswanan value added was minimal, so that

in effect a Zimbabwean firm was being persistently under-bid by a South African firm with a Botswana subsidiary. Clarifying the degree of SADCC local content in these goods would go some way to mitigating this problem, but clearly there still will exist the question of deciding whether more costly goods from Zimbabwe are to be bought in preference to those from Botswana and South Africa.

Bilateralism

Having examined these various constraints, it is useful to consider the extent to which bilateralism (defined here to refer to agreements between two SADCC member countries only) within SADCC might impede progress toward full multilateral co-operation. It is clear that bilateralism is thriving; the Luvuma Free Trade Area Treaty, which involves trade between Mozambique and Tanzania, is just one example.

What are the attractions and problems associated with bilateralism within SADCC? As for the attractions, the major one is that an agreement with only two partners is likely to be reached faster, stated less ambiguously and policed more easily than one with nine partners. Many of the institutional arrangements such as barter, discussed later in this report, will tend to proceed more smoothly with fewer members. Given the geographical dispersion of the SADCC members, and the often inadequate transport linkages between them, bilateral agreements may often be preferable to the theoretically more attractive use of one supply source able to exploit economies of scale. This is because there are locations where high transport costs can swamp the cost gains normally derived from economies of scale, dictating the building of several plants rather than merely one.

There are, however, problems. The most significant is probably that bilateral agreements can give rise to sub-contracting and the duplication of capacity within the larger organization.

The case of the Andean Pact's experience in the automobile industry provides a warning of how untrammeled bilateral agreements can erode the principles of industrial co-operation. In that case, countries which had been allocated, through the organization's central mechanism, production rights to certain components, in many cases bargained with other countries to reallocate production rights, sometimes as quid pro quo for other agreements quite unrelated to the automobile industry. Co-operation in the Pact has probably been unfavourably affected by this.

Transport constraints

The fact that six of nine SADCC members are landlocked focusses attention on transportation as a real or potential bottleneck for greater industrialization, whether within SADCC or not. Although economic distance rather than straighforward geographical distance is the important factor here, there is no doubt that some SADCC members - for instance Malawi - suffer from lengthy and uncertain supply links through neighbouring countries.

The uncertainty that exists in transporting industrial inputs from the Mozambican ports of Beira and Nacala have increased since the independence of Mozambique in 1975. Handling at the Mozambican ports is inefficient and the railroad from Mozambique to Malawi suffers from frequent breakdowns, partly because it is old. Furthermore, since Mozambique's independence, and in

particular in the recent years, it has been a target for the Mozambique National Resistance Movement (MNR), a movement opposed to the present Government of Mozambique. These activities have made the Mozambique route very unreliable for Malawi importers and exporters. The mission learned that this problem is so serious at the moment that Malawi is considering alternative transport routes, one of the possibilities being through Tanzania. Malawi could still import through other longer distance ports like Durban and by road through Zimbabwe but the cost of this diversification is very high. For example, the cost of coal delivered in Malawi from Mozambique is K105 per metric ton. The same metric ton of coal delivered from Zimbabwe will cost K189. This type of action threatens to make Malawi industry less competitive in the SADCC market. For the industries which are dependent on imported inputs, the transport uncertainties have raised considerable difficulty, forcing them to purchase and maintain buffer stocks of inputs. This makes them tie up a lot of operating capital in stocks and, therefore, face problems of liquidity. Normal industrial practice in the region calls for three months' supply of inputs. Stocks in Malawi, however, are the equivalent of 4.5 months' use for the manufacturing sector as a whole (excluding tea and tobacco which use fewer imported inputs) and are much higher in some industrial branches. Up to two-thirds of current assets are held in the form of inventories. The mission was informed that the problem of transport is now worse than in 1975 and that the chronic current capacity underutilization (industry is operating at an average of 35 per cent capacity) is as much to be explained by transport bottlenecks as it is by currency shortages.

These observations serve to illustrate the problems for enhanced intra-SADCC trade that will persist until better transport facilities are avialable.

V. IMPLEMENTING INDUSTRIAL CO-OPERATION WITHIN SADCC: THE WAY AHEAD

This chapter describes some policies which might be considered when thinking of the future of SADCC. The policies discussed here reflect to a great extent both the problems which currently exist within SADCC member countries (as sketched in Chapter II) and the constraints which are felt likely to impede progress in future (as outlined in Chapter IV) unless changes are made. It also discusses issues which the members, either individually or collectively, would do well to study during the early stages of the scheme. The chapter also deals with some implementation issues - questions of exactly how life is to be breathed into the schemes.

The need for rules restated

First, the field studies, combined with experiences in other similar organizations, point to the critical importance of setting clear rules to cover the main eventualities likely to confront firms and Governments in SADCC member countries. Specifically, a set of guidelines is needed to cover:

- preference for SADCC inputs and final goods over non-SADCC sourced items;
- Rules of origin for traded goods; and
- priorities between project proposals.

Such rules will at least diminish the scope for misunderstanding between the members.

Rehabilitation as a priority

Second, in view of the fact that many underutilized factories and other installations already exist, and the observations of the field studies that it is in some circumstances it is by a wide margin more rewarding financially to rehabilitate plants than to build afresh, a policy of taking stock of what already exists is recommended. Carefully evaluating the present landscape of plants, and identifying their problems, is of course less dramatic and appealing than embarking upon grand new schemes. But to the extent that the rapid build-up of output, rather than expenditure upon inputs, is desired, this should be tried first.

This is not of course, to say that no new plants or facilities should be built under the auspices of SADCC except in the longer term: rehabilitation and fresh building are not complete substitutes for one another.

Domestic sourcing

The third point is indeed concerned with the commissioning and building of new plants. Here it is suggested that the initial proposals be examined with the criterion of domestic sourcing of parts and inputs in mind, rather more forcefully than has typically been the case in the past. Although aid donors frequently attempt to tie large orders of capital equipment deliveries to their proposals, even here there is likely to be scope for negotiating some extra domestic content, at least in ancillary activities such as warehousing, parts handling, packaging, distribution, etc.

Product and process selection

Related to the notion of choice of technology is choice of product. Projects should be appraised just as rigorously from the point of view of what they are to produce as they should be from the standpoint of how they will produce. The important point here is that product and process should not be regarded as independent decisions. One can always design a production system to do some things well, be they cost minimization, quality maximization, flexibility with respect to output-mix or volume, or dependability of supply. What it important for new plants in SADCC countries is that the desired product characteristics be made explicit and then used to shape the choice of production system. If this were done more thoroughly, one might well find greater scope for local inputs and indeed local capital goods, since robust quality and low prices are likely to be the desired characteristics of the products.

Project allocation and proposals

The question of project allocation has proved to be a stumbling-block for regional co-operation schemes in the past. As was suggested in Chapter IV, what makes this issue sensitive is the fact that the members' different stages of industrial and - even more important in some respects - infrastructural development, make some sites persistently more attractive than others for new projects.

Yet to have the overwhelming bulk of the new projects sited in one member may undermine SADCC to some extent, whatever the rationale in strictly

economic terms. This problem must be anticipated in the early days of the scheme and principles drawn up. Unless all conscious efforts at rational location decisions are to be abandoned, and the principle of locations rotating between members used, agreement on criteria will be needed. It will probably be unwise, in determining the rules of allocation, to give too little weight to productivity considerations in order to satisfy those of equity. It is also suggested that there should be no attempt to allocate industries to member countries in advance of investors coming forward with specific project proposals.

This point raises the question of who is likely to be proposing projects in the first place. The nature of SADCC is such that there will be no central machinery responsible for putting together lists of project proposals. Instead, each individual member will pursue, in its own framework, new projects. For instance in Angola the Government is following at the same time a policy of encouraging private foreign investment and also taking a very active role in setting up new industrial capacity such as a TV assembly line.

In ASEAN, recognized regional industry associations or federations are invited to identify potential joint ventures. This way both the interests of public officials, in taking the initiative, and of private business, in being able to offer a speedy assessment of the ideas' nests, are harnessed. Although a prerequisite for this type of co-ordination is, of course, the existence of well-run trade or industry associations, in practice what appears really to matter for ASEAN is not so much the framework of formal agreements as the confidence which the businessmen get from being involved together, and sharing their doubts and successes.

Project operating procedures

Just as in Chapter IV, a set of rules for strategic decisions was urged upon the SADCC members, equally important is a set of operating procedures. This would set out the following steps for all members to follow when thinking about beginning a project under the auspices of SADCC:

- what type of project may be suitable (due to the optimal volume of output, and its need for inputs, say) for SADCC, and what type better suited to purely domestic use;
- What procedures for formal project appraisal are to be adopted;
- within the above heading, whether agreement be reached regarding a common SADCC discount rate (interest rate); or (when suitable) payback period;
- can a common timetabling system be arranged so that other members know roughly how long a Government will take before reaching a decision on project enlargement or creation;
- can other countries' experts, businessmen or others be consulted easily and without cumbersome procedures?

The advantages of such a set of procedures is of course that they help overcome one of the great problems facing any co-operation scheme - information about what other members are doing. The greater the consistency with which the members identify and appraise projects, the greater the confidence that will grow between the countries.

Project exclusivity and licensing

A danger arises when, once a certain indutry or product line has been allocated, other firms (perhaps in other countries) will be tempted to pre-empt the former firm by entering production faster. There is thus a need to consider a system of industrial licensing.

A licence would probably have to be a legal necessity, and the project or product definitions would have to gazetted from time to time so that entrepreneurs will know exactly where they stand with respect to intended production. It is essential that the license be defined as narrowly as possible, so that entrepreneurial initiative is not stifled by unnecessary licencing requirements, bureaucracy or ambiguities.

One can well imagine that sloppy drafting of industry or product definitions might cause prohibition of the production of some perfectly innocent commodity until the licensing body has chosen to determine whether a license is requried at all and if so, whether is should be at all granted, and if so, to what extent. It is a fact of industrial life that very different commodities can become substitutes for each other (like aluminium for copper or synthetics for natural fibres). Questions of licensing might, therefore, have to include consideration of near substitutes, if the purpose is to be functional rather than merely formalistic.

On the basis of past experience in other sub-regional groupings, one can also say with considerable certainty that SADCC members are likely, sooner or later, to allocate a project to a member when something similar already exists in one or more of the member states. After all, industrial statistics do not have perfect coverage, and statistical classifications are far from perfect as

a means of identifying industrial products. In order to avoid overlap the industrial licensing committee should consist of representatives from all SADCC countries.

When this happens, conflicts are bound to arise. Should an existing enterprise have to close down or gradually schedule out its production line? Should it abandon its planned expansion? Many such problems will arise, including taking a decision about whether existing or planned output really will compete or might, on the contrary, complement the proposed SADCC project. In an integrated industrial complex, such as SADCC might eventually hope to become, it is not only rival producers who present problems in the context of industrial licensing. There are also the interests of users who might have to change inputs, qualities, standards, etc., if a new SADCC project will result in the scheduling out of existing supply.

In particular, it can be expected that enterprises which are using imported inputs wll be worried at the prospects of having to use (perhaps exclusively) a new SADCC-sourced product differing from what they are accustomed to. Almost by definition, new SADCC products will enjoy certain restrictions in competition. This often means that a firm in country A now buying inputs in a number of international markets, and able to play off one supplier against another, in future will be confined to a supplier in country B who might not necessarily keep qualities, specifications, prices or delivery schedules to the satisfaction of the user in country A. The licensing arrangements will thus have to provide against abuse of licenses.

It might, therefore, be necessary to include terms and conditions for a licence, such as to ensure that supplies shall not be disrupted or other needs

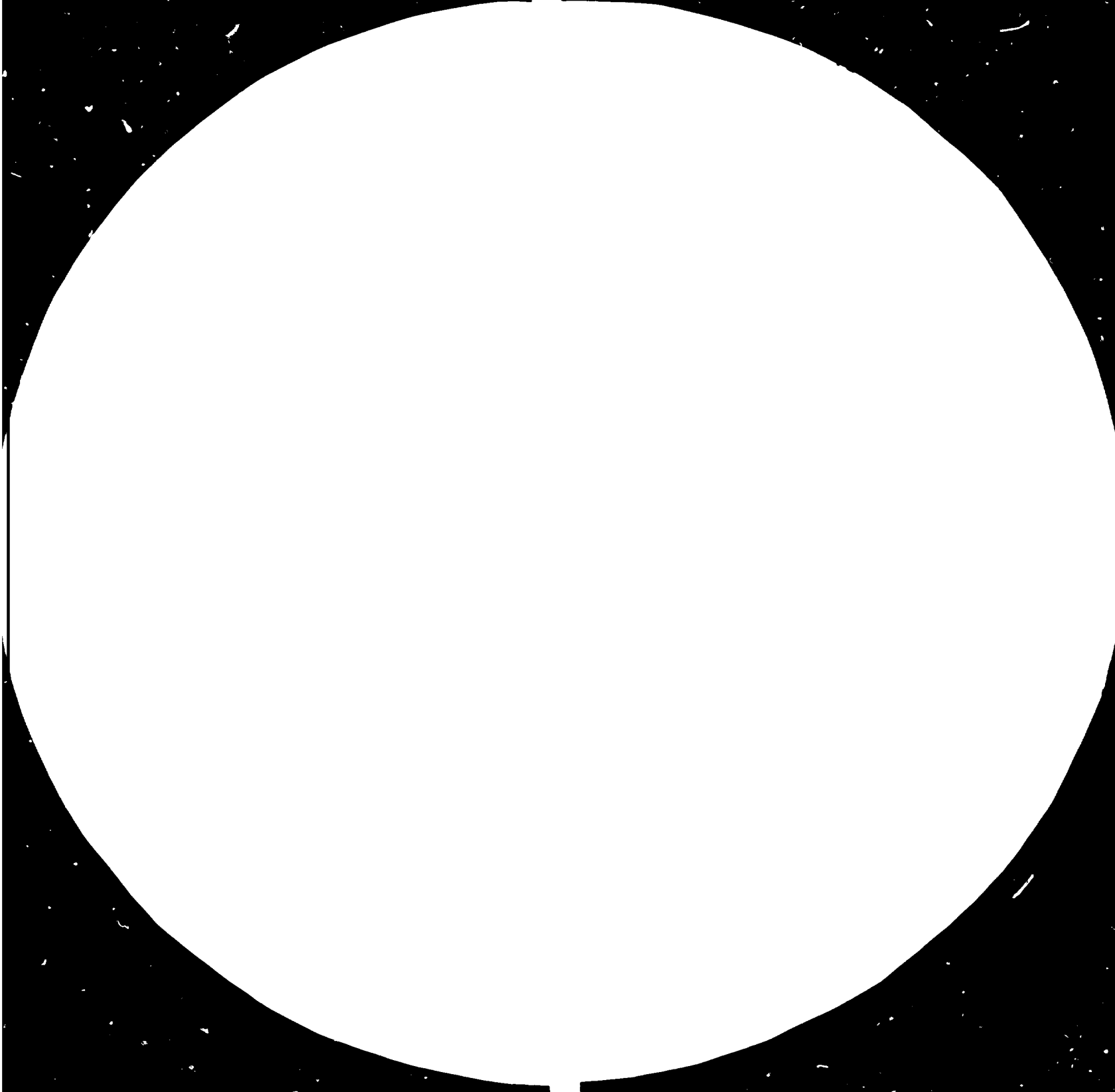
of users be set aside. The license might specify that production shall commence within a certain time, or it will cease to be exclusive. The licencee might also have to undertake to maintain certain standards of output, and quality or price.

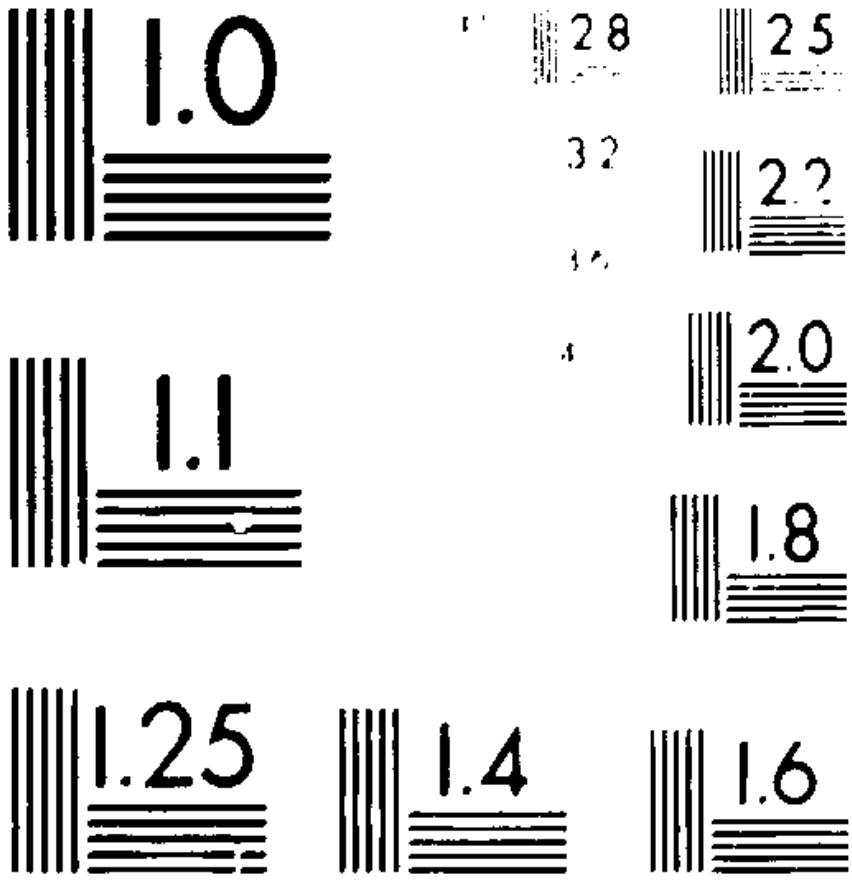
Harmonization of trade and exchange-rate policies

The issue of industrial co-operation inevitably spills over into those of trade, tariff and exchange-rate harmonization. Reference was made in Chapter IV to the possibly disruptive impact of a proliferation of bilateral trading agreements on the development of full multi-lateral SADCC trade, but before devising policies for this it is suggested that the pros and cons of different sorts of trade arrangements be studied. This need is made all the more compelling by the fact that, at present, some, but not all, SADCC members have joined the Lomé Convention, while others are also members of SACU, the South African Customs Union. The issues to be borne in mind in evaluating the desirability of all these overlapping schemes are: the likely extent of trade creation and trade diversion effects; the extent to which membership of other groupings such as the Lomé Convention will encourage a re-orientation of industry towards developed country demand patterns and away from SADCC members' needs; and the impact of tariff and non-tariff barrier changes induced by membership of Lomé and/or SACU on the trade policy posture adopted towards SADCC. In all of these studies the objective is to ensure that membership of groups other than SADCC does not move the country further away from being able to participate fully in the programmes of SADCC itself.

Implied in trading arrangements are levels of tariff and non-tariff barriers which protect a country less from its fellows' exports than from


86.01.10
AD.87.04
11 5.5+10





other countries' exports. The overall impact of a protectionist trade policy posture should, however, also be borne in mind in SADCC members. Experience elsewhere in the world shows that a high level of protection afforded to domestic producers can encourage inefficiency and sluggish reaction to changing market exigencies.

Barter arrangements

There is a great deal of official support for barter arrangements within SADCC, as a means of increasing trade volumes without involving use of already scarce foreign exchange. Indeed, there is also showing interest in this form of trade elsewhere in the world, for instance in the Scandinavian countries, and with some oil-exporting countries such as Libya. In the simplest form such commodity barter is a direct exchange of matching values of two commodities, between two firms in different countries, each of which needs the commodity offered by the other.

Such barter possibilities are, however, very limited. First, there are organizational problems. In Zimbabwe the UNIDO mission encountered a firm which had tried, unsuccessfully, to engineer a barter deal involving two firms in Zambia, both of which were parastatal, but falling under different state corporations. A Zimbabwean exporter needed a raw material input from a Zambian corporation and could pay for this by delivering some of its finished output to another Zambian corporation which needed it. But the deal could not be consummated, although all three parties were to benefit, because there was no approval mechanism in Zambia which would allow one parastatal to receive payments from another for goods delivered from abroad (or which would enable a Zambian exporter to get paid locally for exports).

The above case is not an argument against barter, but rather an illustration of the need to facilitate barter by allowing for some form of clearing mechanism. There is no doubt, however, that entrepreneurs would have to go to considerable lengths to find matching links and then to construct a transaction chain which easily could involve four or more enterprises.

Complications regarding foreign exchange controls, over- and under-invoicing and other tricks of the trade are considerably greater here than otherwise, while the possibilities of creating a chain of transactions get progressively reduced by the number of links needed. It is the weakest link - here, the firm with the smallest needs - which determines the strength of the whole chain. Secondly there are problems of valuation in such schemes: values still have to be determined for each of the goods involved, and agreement on values where there is not a straightforward market transaction may not always be easy to achieve.

The next step beyond barter trading is a form of bilateral trade agreement where firms in each country will buy up to a given amount of value from the other, with national balances to be settled periodically in cash.

The main problem here lies in the ability of the two countries to match their trading volumes so that no cash settlements have to be made. Settlement of balances in non-convertible currency simply means that the deficit country has an incentive to buy but little incentive to deliver. The deficit country will receive a certain amount of hard currency import content in the goods it is buying.

Thus, settlement in non-convertible currency may become a foreign exchange cost to the country in surplus, which presumably has used convertible foreign exchange to pay for fuel and other imported inputs. The export surplus partner in the bilateral deal will therefor be inclined to restrict this form of trade.

Another matter which has to be considered in this context is the extent to which involvement in a barter scheme constrains a member's exchange-rate policy. Members should be aware that the design of any barter arrangement should take account of the possibly disruptive impact of actual and anticipated devaluations by other members.

Other intra-SADCC related policies

The nine countries are small economies and as such, they are also "open", involving a large extent of external operations. Furthermore, industrialization in a small developing country cannot be self-reliant or be completely free from international economic influences. Hence, the policy apparatus which determines the size and levels of foreign economic interaction needs to be discussed. In the following paragraphs, attention is paid to other matters related to trade and examples are cited from the Andean Pact to illustrate how solutions are being provided through co-operation in order to maintain economic integration. The examples from the Andean Pact might provide guidelines to SADCC in its efforts to establish similar co-operative arrangements.

Programmes for trade liberalization

Industrialization of some of the SADCC countries has reached the crucial stage of intensifying import-substitution activities into the more advanced sector comprising many basic industries of capital-intensive industries. Some industries are in the process of making the crucial transition from import-substitution into export expansion. For a smooth transformation, many of the structural shortcomings in the manufacturing sector would have to be overcome.

Since all the SADCC countries are relatively small economies, the obvious structural constraint of the manufacturing sector of these economies is the limited domestic markets which are easily exhausted in the initial phase of import substitution. But most dynamic industrial activities with specialization in production demand a scale of operation to exceed that of domestic markets. But the world export markets for manufactured products are extremely competitive and tend to be dominated by a few efficient industrial countries. Worse still, access to the markets of the industrial countries for manufactured experts from the developing countries have become increasingly more difficult due to rising protectionism. In the circumstances, regional economic integration is therefore seen as an attractive and realistic option for these small countries to achieve wider and more stable markets for continuing their industrial growth.

SADCC industrial co-operation could promote the sub-region's further industrialization efforts in two ways, namely: to make the import-substitution process more rational and more efficient, by looking beyond the narrow horizon

of the individual member country markets; and the second consists in the progressive introduction of competition into the sub-region's industrial development process. One mechanism of the subregional economic co-operation is the automatic and irrevocable liberalization of reciprocal trade among member countries and the establishment of a common tariff barrier against the rest of the world (the common external tariff)[1/].

Consideration could be given to special treatment to the least developed SADCC member countries whenever possible.[2/] Thus certain products from these countries could be treated with preferential margins so as to facilitate the access of their products to the more competitive subregional markets. Secondly, in order to protect national production activities which are just starting, or which are susceptible to competition from similar products produced under better conditions by other member countries, SADCC members may be allowed to exclude certain products from the list of tariff liberalization and from the Common External Tariffs. Experience has shown that as a result of implementing trade liberalization through progressive tariff reduction and harmonization of foreign trade, trade among co-operating countries has registered most remarkable growth. The real significance does not lie in the rapid growth of intra-subregional trade as much as its structural change.

1/ There is a trade liberalization programme of the Andean Pact whose objective is to eliminate duties and restrictions on all goods emanating from member countries. The aim of the Andean Pact was to establish a common market right from the beginning. The programme is based on a customs nomenclature of products (NABANDINA) drawn and agreed upon by members.

2/ The Andean Pact Liberalization Programme gives special consideration to Bolivia and Ecuador, the relatively least developed members. See pp. 74-80, Regional Industrial Co-operation, Experiences and Perspectives of ASEAN and Andean Pact. UNIDO/IS.401, 1983.

The share in traditional regional exports tends to decline while that of the manufactured exports increases. The expanded subregional trade opportunities would be mainly captured by the relatively more advanced co-operators.

Common external tariffs

More than the elimination of tariffs and non-tariff barriers to subregional trade, the pattern of a subregional integration scheme has to be shaped by common external tariffs (CET). While the removal of tariffs fosters growth in intra-subregional trade, the CET is a crucial instruments that fosters subregional industrial growth and subregional industrial co-operation, as the CET affects the degree of protection to be granted to subregional industries. In the longer run, the CET will determine whether the SADCC subregional co-operation will tend to prolong the import-substitution process or will lead to a new stage in its industrial development. It is needless, therefore, to stress the necessity of SADCC member countries to adopt and enforce a common external tariff. At least potential investors will wait for it before they reach investment decisions on SADCC industrial projects. Since the common external tariffs constitute one of the most important incentives to investments in subregional projects, the implementation of projects already allocated to member countries is dependent upon the adoption of that incentive by all members. It will be necessary to start negotiations for the establishment and maintenance of mechanisms for that purpose in the near future.

It should be appreciated that tariffs are imposed for revenue purposes apart from the protective aspects. Thus a common external tariff could have revenue implications to some member countries; it may lead to diminished

revenue, which is vitally important to a country and for which it must receive matching benefits. The level of the protection required might diverge among members. Some might opt for a high level while others could look for a low level of protection. To some countries a big reduction in the protection rate could result in disrupting the strongly protected domestic industrial sector of the SADCC group by exposing it to world markets, apparently with no immediate direct benefit whatsoever to subregional integration efforts. It thus appears that measures for reducing effective protection in order to bring greater efficiency to domestic industry could well clash with those undertaken to promote regional integration in order to encourage further development of import-substitution industrialization. Such a dilemma is often faced by subregional groupings in the devloping world. A heavily protected process of import-substitution always demands considerable sacrifices in terms of sub-optimal allocation of resources. The adoption of a common external tariff is a matter calling for careful study and negotiations to ensure that differences are avoided as much as possible from the start.

The Joint Industrial Programmes (JIP)

Subregional co-operation in trade and subregional co-operation in the field of industry go hand in hand. The sharp rise in the intra-subregional trade in manufactured products would be a major source of growth of intra-subregional trade. But the increase in the subregional trade for manufactured products depends on progress in regional industrial co-operation as well as the implementation of the selective trade liberalization programme. Thus in the long run it is advance in the field of industrial co-operation that would provide the dynamic impetus for further progress in SADCC economic integration.

SADCC might consider adapting the Andean Pact Joint Industrial Programmes (JIP). Apart from fostering industrial growth in the sub-region, the JIP is designed to achieve a regionally balanced pattern of industrialization and to prevent the uneven distribution of costs and benefits arising from economic integration. Thus the Cartagena Agreement has committed member countries to the process of regional industrial development through joint planning in order to realize, inter alia, the following major objectives: (a) Greater expansion, specialization and diversification of industrial production; (b) maximum utilization of the available resources in the sub-region; (c) improvement in productivity and more efficient use of the productive apparatus; (d) the operation of scale economies; and (e) equitable distribution of profits. In addition, the Cartagena Agreement has also made special provisions for Bolivia and Ecuador by assigning special production facilities and locating plants in these two countries under the overall regional industrial programme.

According to the Cartagena Agreement, The JIP is to be the main instrument for achieving a harmonious and balanced development of the sub-region. To fulfil its objectives, the JIP is to operate through the major mechanisms of: the Sectorial Programmes for Industrial Development (SPID); the Industrial Rationalization Programmes (IRP); and the product reservations for Bolivia and Ecuador. The major mechanisms are explained here below.[1/]

1/ For further information see pp. 81-95, Regional Industrial Co-operation: Experiences and Perspectives of the ASEAN and Andean Pact; UNIDO/IS.401, 1983.

The Sectorial Programmes for Industrial Development (SPID)

The Sectorial Programmes for Industrial Development (SPID) are the major apparatus within the framework of the Cartagena Agreement for regional industrial planning and for the equitable distribution of the benefits of the integration process. The SPID mechanism was designed to correct the potential imbalances and inefficiencies that some less developed member countries had feared would appear when they were grouped together with the more developed member countries in a single market. It was also envisaged that industrial programming under the SPID would not be restricted to just geographical allocation of sectors or activities. To achieve an efficient growth for some manufacturing industries, other decisions were also centralized, e.g. marketing and technological development, within some kind of "multinational Andean corporations".

Needless to say, there is a substantial difference between national industrialization programmes under import substitution and the regional industrial development under the SPID. The difference arises from the size of the market and hence also the scale of operation. Typically, national industries under import substitution in the Andean Pact countries are characterized by the lack of economies of scale and high unit costs. This is similar to most SADCC countries. Their continuing existence is made possible by strong effective protection created by high tariff and non-tariff barriers. Furthermore, inefficiency is not just a temporary phenomenon as in the case of an infant industry, but has rather become a permanent feature of the manufacturing sector in many countries. In contrast, the SPID is designed to cater for a regional market several times bigger than any individual national market. More significantly, the SPID is not supposed to

allow more plants to produce a commodity than will be efficient once the regional market is fully developed. i.e. only efficient plants in terms of economies of scale are contemplated. Thus from the start, the SPID had to take into consideration the conflicting demands of national and regional interests.

The Industrial Rationalization Programme (IRP)1/

Apart from the SPID, the Industrial Rationalization Programme (IRP) is the other pillar of the Andean Pact Joint Industrial Programmes. Whereas the SPID is largely geared towards the development of large capital-intensive industries, the IRP is concerned with restructuring and streamlining of the existing (largely the traditional) industries in the sub-region, activities that are excluded from the trade liberalization scheme. From the standpoint of regional integration, the SPID forms the core of the joint industrial programming. But the IRP is no less important, especially viewed from the less developed members, whose traditional industries are not sufficiently efficient. The rationalization process would first result in the upgrading of the less efficient industries and then bring them out from the "exception list". In this way, the IRP would expand the scope of regional industrial integration.

It was only in 1976 that the Board produced the first conceptual documents for the IRP, which attempted to provide clear guidelines for the future rationalization activities. The document linked IRP to the formation of the

---

1/ The concept of the IRP is contained in article 36 of the Cartagena Agreement. Decision 25 of the Commission further defines industries for rationalization as those which are not included in the "reserve" for SPID or those not subject to the automatic tariff reduction. This is sometimes quite confusing as products "reserved" for SPID such as automobile are also products from the "existing industries".

enlarged Andean market. The process of the IRP could result in the reduction of protection and then increased efficiency for certain firms.

Early 1980 the Board published a study on the methodology for the choice of priority industries in the exception lists and other technicalities concerning rationalization.[1/]. New perspectives have been increasingly brought into the IRP; which include: (1) Linking IRP to structural adaptation of firms as their long-term strategy; (2) A shift of emphasis on the negative aspects of the intra-Andean trade to its positive aspects due to the widened regional market; (3) An explicit policy of implementing IRP by providing incentives and assistance to firms rather than by direct intervention; and (4) A procedure for generating IRP processes in the member countries through the existing technical, financial and training institutions. The economically less developed members of the Andean Group, Bolivia and Ecuador, (which together account for only 10 per cent of the Andean Pact's total industrial output), are to receive special attention for IRP treatment. The relatively backward industries of Bolivia and Ecuador are badly in need of an increase in the competitive efficiency; it seems relatively easy to organize rationalization efforts for these two countries as their industrial structure is still simple.

1/ At the micro level or plant level, rationalization is traditionally linked to industrial engineering and other production techniques which can boost productivity. In the organizational sense, rationalization includes simplification of administrative procedures and management re-organization. Besides, rationalization also involves higher-level decisions such as take-overs, mergers, and multi-plant streamlining of product lines, and so on. From the standpoint of the economist, rationalization ultimately involves more efficient allocation of scarce resources. In this sense, trade liberalization would indirectly constitute one of the best rationalization programmes, as it could lead to the rise of more efficient industries due to increased competition.

At the outset, the small and medium industry in the sub-region was supposed to be the main target for industrial rationalization. In fact, some Andean Pact countries have special organizations to promote small and medium industries because of their importance in employment creation. It was later felt, after some analytical studies of small and medium industries, that rationalization of industries, large or small, would have to fulfil the objective of efficiency test rather than subsidizing the inefficient industries for certain social goals. This brings to the fore some inevitable conflict between a broad support for small and medium industries on the one hand, and the primary requirement of rationalization for achieving efficiency and growth on the other. The official position of the Board is that action regarding the small and medium industry of the Andean Pact should be oriented towards improving the efficiency of the enterprises under IRP.

Product reservation for lesser developed members

Third World economic co-operation efforts oft n run into hitch because their constituent member countries are often not at the same levels of economic and social development. Most economic integration programmes tend to carry uneven distributin of benefits and costs so that the more developed members tend to stand to gain more than the lesser developed ones. In the case of the Andean Pact group, the lesser developed are Bolivia and Ecuador. From the outset, the Cartagena Agreement provided for preferential treatment of these two countries so as to avoid unbalanced development following from the regional economic integration process.

More significantly, markets were reserved from April 1974 on for a range of products originating from these two countries in order to promote their own industrial development. The list of products has since been updated and

extended. To facilitate the development of SPID in these two countries, certain products not produced so far were also reserved for their production by Decisions 28, 108 and 137.

To start the reservation process, Colombia, Peru and Venezuela immediately opened up their markets completely for exports from Bolivia and Ecuador for a specific period, which in some cases extended up to 10 years. To reciprocate, Bolivia and Ecuador would open up their markets to the products on the reserved list from Colombia, Peru and Venezuela; but these products were subject to tariffs as though they were produced from outside. In this way, products reserved for production in Bolivia and Ecuador were assured of margins of protection.

After the Board had established a list of products reserved for production in Bolivia and Ecuador, other member countries undertook not to adopt measures to encourage similar activities in their own territories. Once production for the reserved products had started, other member countries would set up the CET for these products accordingly. On the other hand, Bolivia and Ecuador were obliged to go into production of the reserved products in their favour within given periods, failing when the market reservation process would lapse. The mechanism of product reservation seems to have provided the less developed members, Bolivia and Ecuador, ample opportunity to initiate new industries or to upgrade the existing facilities to gear to regional integration. In practice, however, not all the opportunities thus created have been fully utilized by Bolivia and Ecuador on account of their own institutional constraints or other domestic economic problems.

Harmonization of economic policies and other aspects of co-operation

The success of regional economic integration efforts depends on the co-ordination and harmonization of the members' overall economic and social policies; this would create a favourable precondition for the smoother implementation of the various integration programmes. Hence the need for the harmonization of economic and social policies and the co-ordination of national economic plans in the SADCC sub-region.

Some of the main subjects calling for serious consideration and decision of appropriate authorities of SADCC in the field of harmonization of economic policies include: (1) Common regulations for the treatment of foreign capital, trade marks, patents, licensing and royalities; (2) Convention to prevent double taxation between member countries; (3) Uniform regulations governing multinational corporations and treatment applicable to subregional capital; (4) Rules to prevent or correct practices which might be harmful to the well-being of the economy of the sub-region such as dumping, hoarding, unfair competition etc.; (5) Moves to harmonize legislation for industrial promotion in the member countries; (6) Establishment of a common tariff nomenclature for SADCC; (7) Means and measures for harmonizing or co-ordinating national development plans; etc.

Common policy towards foreign investment

There must be a common policy towards foreign investment. The policies should cover a number of rules and regulations for foreign capital and foreign technology to operate in the SADCC countries in order to safeguard the interest of the member countries. When liberalization of reciprocal trade is

not accompanied by co-ordinated industrial development policies and uniform treatment of foreign investment, the integration process could well weaken the position of the member countries vis-à-vis big transnational corporations. This is because integration, in opening up the region's markets, offers TNCs access to the markets of all the member countries and provides an opportunity to take undue advantage of some member countries. Hence the need for a unified and definite policy to cope with foreign investment on a collective basis. The Andean Pact countries adopted a common foreign investment policy some of whose fundamental aspects are explained in the following paragraphs.[1/]

Firstly, the policy cannot be modified unilaterally but only through the consensus of several member countries. Secondly, it is sufficiently selective as each new foreign investment requires the express authorization of a national body responsible for approving foreign investment projects. Thirdly, the agreement regulates the use of internal and external credit. Fourthly, automatic reinvestment of profits and purchases of shares in domestic enterprises are restricted in order to prevent foreigners from acquiring large interests in domestic companies. Finally, it recommends the exclusion of foreign interests from certain strategic sectors such as financial activities, advertising and communications media.

Norms have also been set for TNCs to transfer ownership to domestic firms. Three categories of firms are defined, according to the composition of their capital: national, mixed and foreign. In the case of the Andean Pact it is

---

1/ For further information, see pp. 97-98, Regional Industrial Co-operation: Experiences and Perspectives of the ASEAN and Andean Pact, UNIDO/IS.401, 1983.

stipulates that all foreign firms taking advantage of the expanded regional market are required to be transformed gradually into mixed enterprises generally within a period of 15 years, or they would not be accorded the benefits of integration such as reduced tariffs within the Andean Pact market. Enforcement of this provision is to be left to the individual member countries. It is also specified that foreign investors can repatriate profits up to 20 per cent a year, but the individual member countries are given the authorities to alter this percentage.

The policy also gives individual member countries sufficient flexibility to fine-tune their own foreign investment policy as well as the authority to implement the Decision. It is felt that such a common approach to foreign investment would in the long run work to the advantage of the SADCC sub-region, for it would increase the effective bargaining power of the SADCC countries vis-à-vis the normally powerful TNCs while at the same time operate as a screening mechanism for channelling the right types of foreign capital and foreign technology to meet the sub-region's economic deve

Other areas of integration

Although harmonization of national economic policies of the member countries will increase regional economic integration, harmonization of social policies could also contribute to the goal of integration. Thus the Cartagena Agreement contains measures for co-operation in the fields of education, culture, science, labour and health. Activities in these areas are designed to increase the general consciousness of the people in the sub-region towards regionalism and to promote fraternity between member countries, so as to

develop a strong regional identify. In fact, harmonization of social and labour legislation, and co-operation in science and education can produce concrete results in terms of making direct contribution to regional integration efforts. So does co-operation in publis health. Many of these activities carry spillover effects in the sub-region as a whole, and co-operation is necessary even if there were no Andean Pact.

Of even greater importance is "physical integration", which refers to regional co-operation activities involving energy, communications and transport. The Council of Physical Integration was created to take charge of arrangements which would promote the physical contact of member countries through such projects as interregional highways. Development in this area has actually produced favourable side effects such as the growth of regional tourism and intra-regional trade.

In short, the subregional economic integration in the Andean Pact is proceeding on a wide front. While substantive progress of the integration still depends on such formal instruments as trade liberalization and the sector-based industrial programming, harmonization of a wide range of economic and social policies have also directly and indirectly contributed to the successful endeavour of the Andean Pact group towards regional economic integration.

The general policy environment

However successful the members of SADCC are in overcoming the constraints enumerated in Chapter IV, their efforts will be seriously undermined unless

the framework of overall economic policy is also conducive to growth and development. In recent years there has been renewed interest in the idea of domestic economic policy itself having been at times sub-optimal in Africa: suffice it to say in this context that internally inconsistent or arbitrarily applied policies can only harm SADCC co-operation. In the area of exchange rates (where rates have often been kept unrealistically high by policy-makers), prices (price structures have often not been allowed to fulfil their role as conveyors of information), incomes (sometimes urban and/or public sector incomes have been artifically raised by government action to the detriment of other sectors) and other areas, there is a continuing need to re-examine the stance of existing policies to ensure that they do not frustrate the intentions of SADCC.

Importance of private sector activity

There is a tendency for discussions of schemes framed and executed by public authorities to understate - or even ignore - the significance of private businesses' part in what actually takes place. Yet in most SADCC member countries it is after all through the efforts of the private sector in investing, producing and marketing that the fate of industrialization will stand or fall.

It is therefore suggested that at the very least, business interests be consulted in drawing up lists of priorities for joint investment projects. Private business will also tend to be better informed about markets for inputs and finished goods and may prove useful in this respect in shaping projects and determining priorities. Indeed, it may be that in many countries it is precisely those interests who initiate project ideas in any case.

The extent to which private firms' interests are to be given free rein within SADCC will depend on the various members' national objectives and ideological preferences. Some countries may construe their task in SADCC as being one of allowing private firms the greatest freedom possible to identify and act upon profit opportunities; others will wish to see private firms play a minor role in the interstices set by public enterprises. Whatever the choice, the important point is that, by their very nature, private businessmen tend to have more accurate and recent information on market opportunities than anybody else; this is a resource which should not be ignored.

VI. SOME OF THE OTHER FIELDS FOR SADCC CO-OPERATION

Discussions and analyses in the foregoing chapters have focussed almost exclusively on specific industrial projects, their allocation among member countries, markets, trade and payment arrangements relating to the products of those industrial projects. Industrial co-operation, however, covers a wide range of fields or activities. The following paragraphs are, therefore, devoted to an examination and analysis of some of the other aspects of industrial co-operation which are of paramount importance to the SADCC member states. However, some of these, although very crucial to the establishment and operation of efficient industrial enterprises, are not directly tied to specific industrial projects; they are organized and managed independently, though they are necessary and crucial to industrial development.

Perhaps it would help clarify the spheres and modes of industrial co-operation by briefly examining the inputs needed for the establishment and operation of an industrial enterprise, in order to understand the elements which, individually or in combination, comprise industrial co-operation. It is hoped that this approach will adequately illustrate the linkages and mechanisms which should promote and maintain industrial co-operation in the SADCC sub-region.

An industrial manufacturing unit goes through a cycle of events which starts with the conceptualization and formulation of a project, its implementation through inputs of technology, consulting engineering and design, capital equipment, trained human resource, and finance, till it reaches its operational stage. At the operational stage, it needs industrial

raw materials, utilities and services, manpower and operating finance or working capital. It also needs a market - domestic and foreign - for its products. An industrial manufacturing unit operates in an ambience which includes government policy, strategy and planning framework on the one hand, and industrial infrastructure - electrical energy, water, transport, communications - on the other. To sustain an industrial unit a host of institutions are also needed, which form the institutional infrastructure. These include R+D institutes, consulting and design engineering firms, standard institutions, industrial safety units, productivity centres, industrial finance institutions, vocational training and academic institutions, etc. No significant industrial manufacturing base can be sustained over a period of time without the supportive institutional infrastructure. During the operational phase of the industrial manufacturing unit, several problems arise relating to efficiency of operation, capacity utilization, market changes, product line diversification, etc. These call for a well-developed management consultancy profession.

It is worth being reminded that there are four principal spheres of possible co-operation in the industrial field which the SADCC authorities should be focussing at, namely:

- Industrial development policies, strategies and planning;
- Industrial manufacturing unit, and its critical elements:
  - Technology;
  - Consulting engineering and design;
  - Capital goods and equipment;
  - Finance;
  - Human resource;
  - Marketing;

- Institutional infrastructure for industry:
  - R+D;
  - Engineering consultancy and design;
  - Standards institutions;
  - Industrial safety;
  - Productivity centres;
  - Industrial finance institutions;
  - Management consultancy;
  - Vocational training and academic institutions;
- Physical infrastructure for industry.

SADCC industrial co-operation can take place in the spheres outlined above either through commercial channels (i.e. between public or private industrial enterprises) or non-commercial channels when the actors involved are not necessarily seeking a monetary reward or profit. The latter activities in general are executed by governments and their agencies through different types of agreements, in a bilateral or multilateral manner, not infrequently with the participation of international organizations which provide part of the resources needed to establish co-operation flows. The two types of industrial co-operation - non-commercial and commercial - can be regarded as complementary. In many cases non-commercial co-operation sets the stage for commercial co-operation activities carried out by enterprises, or gives the latter information, technological and scientific inputs that enhance their efficiency.

Some of the subjects enumerated above are being co-ordinated by specified SADCC member countries. Information relating to strategies, policies, institutional infrastructure, etc. for meeting the needs fo industry in the

sub-region is so scanty that it is not easy to discern the SADCC co-operative efforts. In view of the crucial importance of co-operation to the development of certain essential industrial services it is necessary to discuss further here below some of the criterial requisites for the operation of industrial production units, i.e. human resources, technology, energy and finance (marketing having already been discussed).

Co-operation in the development of industrial human resources

Trained manpower with adequate and appropriate skills is one of the most important requisites for the operation of industrial production units. However, there is a critical dearth of personnel with the necessary capabilities for manning effectively manufacturing enterprises in all the SADCC states. The development of human resources is a long process requiring collosal funds which may be beyond the reach of individual SADCC countries. Establishing, equipping and running training institutes entail heavy expenditure. On the other hand, there are already national training institutions and facilities in the sub-region which are not being utilized to maximum capacity. Considerable scope exists for increasing co-operative activities already taking place in this area, particularly when one considers that industrial training in another SADCC country should be more appropriate, as the training conditions, environment factors and problems to be solved are likely to have much greater similarity, and the costs would be relatively less.

Assessment of industrial manpower needs

The development of industrial manpower requirements in the SADCC countries calls for a systematic assessment of the present and future manpower needs and the existing training and technical assistance facilities to meet those needs. The approach to the reliable identification of the industrial manpower and training needs would require national and subregional industrial planning and policies for the indiginization of the middle and top level cadres in every industrial field for a specified period.

Estimates of the manpower requirements have been attempted by each member country of SADCC in the past. It is not yet clear to what extent co-operative arrangements have been established and pursued for meeting industrial manpower requirements. Doubtless, close co-operation, in so far as co-ordinational roles are concerned, will be necessary between Swaziland and Tanzania in the assessment of industrial manpower needs for the SADCC sub-region, and in the formulation of a plan, strategy and policies for the development and supply of the required personnel.1/

Provision of facilities for industrial manpower development

It has already been observed that institutional facilities and equipment for the training and development of manpower in each country are expensive.

1/ Swaziland is responsible for co-ordinating matters relating to manpower on behalf of other SADCC member countries. It is not clear to what extent efforts have been spent in exploring and developing intra-SADCC co-operation in the manpower field. There appears to be wide scope for co-operative efforts which would benefit all members.

On the other hand, facilities already exist in SADCC countries which could serve other countries, at least for the time being, thereby save funds and time in the construction of new ones which may not even be used to full capacity. For instance Botswana, Lesotho and Swaziland started at one time with one University for the benefit of all the three countries. Schemes could be started or extended for in-service or in-plant training of nationals of SADCC countries in a SADCC country where such facilities exist, at reasonable cost or ex gratis.

The main task is to identify the facilities and the needs which they are capable of satisfying, in addition to the national needs, and any additional facilities which might be needed to meet the additional needs emanating from co-operation and how they would be financed either by the co-operating countries, technical assistance, or both.

Technology

SADCC countries depend almost entirely on external sources, including the Republic of South Africa, for technology. The way out of technological dependence, or in order to lessen that dependence, SADCC countries need to include the development of technological capability in industrial production. In fact, without a concerted effort on the part of SADCC countries, mainly through industrial co-operation, they stand little or no chances of developing or acquiring new and emerging technologies, to any appreciable extent. As in the case of human resources, the development and acquisition of technology in the SADCC countries will require close co-operation among the member countries themselves, and between SADCC

countries and external sources of technology, both bilateral and multilateral. There is a need for co-operation in the establishment and financing of research and training centres. These need not be entirely new ones. They may be based on the improvement and expansion of existing national centres or institutions, through better equipment, etc. Joint financing could be negotiated among or between any SADCC countries which intend to use the facilities and share the cost and benefit in agreed proportions. Where subregional centres are established, such centres could be instrumental in the systematic building up of linkages with national centres including assistance in the creation of such centres, and the promotion of subregional centres and networks in their respective fields of specialization. For instance there is already a Centre for Central African Standards in Zimbabwe. This centre could serve all the SADCC sub-region or at least such members as agree to share its costs and benefits in agreed proportions by those who jointly run it.

Co-operation in research and development (R + D)

R+D institutions have been functioning for over two decades in a number of developing countries of Africa, including the SADCC sub-region but R+D activities in the SADCC countries are still in their very initial stages. The main retardatory factors appear to be critical shortage of funds and manpower with the necessary capabilities. These two factors, inter alia, point prominently to the need for SADCC countries to establish co-operation for the development of new centres. Co-operation could be envisaged in the establishment of joint subregional R+D centres or institutions, or through exchange of information between or among national R+D institutions. Networks of R+D institutions on a SADCC basis, would be of great benefit for

undertaking joint R+D projects for which specific need exists in one or more countries of the sub-region. There should also be co-operative arrangements for interaction among national networks of R+D institutions for exchange of information and experience, pooling of resources and sharing of knowledge. The forms and fields of co-operation are many and diversified. The choice of any form and field will depend on the interests of the SADCC co-operating countries. It is emphasized in any case that industrial development calls for increased industrial and scientific research which would necessitate pooling together human and financial resources in the sub-region.

Institutional organization for specialized industrial services

The foregoing services covering economic, industrial and scientific research; development and acquisition of technology; engineering and other industrial and managerial consultancies, specialized training; etc. could be conveniently put together in the category of "specialized industrial services". These services are so crucial to industrial co-operation and development that their development and expansion calls for decision by the appropriate SADCC authorities. To begin with, it is necessary to decide whether these services are to be centralized to a certain extent, or whether they are to be allocated to specified SADCC countries for co-ordination purposes, or whether their development should be the responsibility of individual member countries.

As mentioned already, some of these services demand, for their successful development, large sums of money which individual countries might find too exorbitant or even prohibitive. Secondly, they may demand personnel with

specialized capabilities which may not be available to one country. There would, therefore, appear to be room for co-operation between or among SADCC countries for the establishment, financing and management of institutions or machineries for rendering specified industrial services. This matter should attract close consideration; a list of industrial services should be drawn up, indicating to what extent existing facilities or institutions are providing the required services and what new ones are envisaged and to what extent co-operation could be fostered within the SADCC context to promote and render those services more effectively. The pooling of financial and human resources under co-operative arrangements could prove more economical and effective and would avoid the duplication of efforts within the sub-region. However, every proposal for co-operation should be considered on its own merits, for in some cases, individual approaches might be more realistic, with other members being allowed to use the facilities on payment of a reasonable fee or rental. Having identified the services required, the appropriate SADCC organ or authority should make recommendations on the financial and human resource requirements and mechanisms.

In the field of science and technology, it would be advisable to initiate a concerted programme, covering well defined fields of common interest, with priorities being accorded to the most urgent ones and in the light of available resources. It is emphasized that special care should be taken to ensure that the selected services would assist in the promotion of further industrial development and advancement of science and technology or would constitute a response to existing needs of industry in specified areas. In other words, areas of common interest should take into account the resources and capabilities of the SADCC members concerned in terms of capital, infrastructure, manpower and technical skills in order to ensure that the benefits of such co-operative programmes would accrue to every co-operator.

Exchange of information and personnel

Economic, scientific and technological centres usually accumulate a wealth of useful information which very often does not reach the users for which it is intended, that is the industrialists. Similarly some SADCC countries might be in possession of industrial information which could be of vital importance to another member country but which remains unutilized because of lack of communication. Thus, SADCC should consider devising ways and means for exchanging industrial, scientific and technological information among its members on a systematic, regular and continuous basis, or on ad hoc bases, depending upon the nature of the information. This may or may not require the establishment of formal mechanisms for that purpose. Of course there are very many ways and media for communicating information. The exact mode of communication would be devised and adopted by those concerned. It is, however, evident that co-operation within the SADCC framework is essential in the gathering, compilation and dissemination of information which is vitally necessary for harmonized, co-ordinated and self-sustaining industrial development in the sub-region.

Another way in which the expansion of industrial co-operation could be considered is the exchange of personnel in various industrial, scientific, economic and technological fields and at different levels. For example, research institutes could establish programmes or schemes for research undertaken by their personnel jointly; in-service or in-plant training could be provided by the country possessing facilities in that field to personnel from institutions in SADCC countries where such facilities do not exist, or co-operation at enterprise level could be established for interchange of

personnel and exchange and acquisition of knowledge and experience of a general or specialized nature.[1/]

Co-operation in the financing of industrial development

Industrial development in the SADCC subregion will require large funds for financing various specific industrial projects, programmes and services. Raising the necessary funds will inevitably necessitate the tapping and mobilization of savings and dormant financial resources in each individual member country as well as from external sources. It is appreciated that the already existing critical shortage of funds, and the inability to save of most countries in the subregion would make mobilization of resources within the region very difficult. On top of that, the dearth of foreign exchange would severely hinder the transfer of whatever savings there may be from one member country to any other where it may be required for financing industrial projects or programmes.

It is, however, envisaged that co-operative arrangements will have to be established in order to facilitate the participation of citizens of the SADCC subregion in the ownership and management of industrial enterprises in their areas; external resources should not be taken as substitutes for domestic ones. The follwoong are some of the ways in which funds could be raised within SADCC to finance industrialization:

1/ There may be some cases where a technology or scientific knowledge possessed by one SADCC member is not readily exchangeable because of patents, copyrights, trade marks and other restrictions with third parties. Naturally agreement should be sought and reached with the party concerned. Otherwise contractual obligations between SADCC members and non-SADCC parties could constrain co-operation in the exchange of information between or among SADCC members.

- equity participation by states, public and private enterprises and individuals; and

- loans, line of credit or supplies' credits;

- joint financing on an ad hoc basis or through long-term joint ventures.

Co-operation in financing industrial development would sooner or later call for the establishment of an institutional machinery for mobilizing financial resources both from within and without the SADCC subregion. A jointly owned development funds or bank is envisaged for inviting subscriptions of seed equity capital for subsequent financing of various "SADCC industrial projects or programmes". Further information on the necessary action to be instituted in financial matters is provided later in section "C" and "J" of the list of functional content of an action plan. A financial institution could also play a major role in such promotional activities as the identification, formulation, evaluation and launching of specific industrial projcts and programmes. It should be appreciated that the attraction of an increasing in flow of extrnal capital into the SADCC region will depend to a great extent on the availability of well formalated commercially viable projects and programmes. The bank or fund should also locate potential invetors or collaborators as well as establish links with external sources of funds, technology markets, etc. There is, no doubt, a need for detailed study for the establishment of financial joint ventures in

the SADCC subregion to support industrial co-operation.[1/]

The other way to establish co-operative arrangements for joint financing is through the promotion and launching of industrial joint ventures. The participants and the terms and conditions of joint ventures, should be determined in accordance with the wishes of the promoters of the project and the government concerned. It is conceivable that SADCC could formulate guiding principles to the establishment and operation of industrial joint ventures.

It is envisaged that a wide range of industrial projects could be identified and initiated on a co-operative basis and through joint ventrures based on the participation of two or more member states, state-owned industral corporations or financial institutions or agencies, privately owned companies or individual subscriptions to the share capital of the joint ventures. Provision could be made for participation of external investors in certain SADCC industrial projects. It is appreciated that foreign enteprises have already played an advantageous role in the industrialization of each one of the countries in the subregion. It is foreseen that industrial joint ventures with foreign participation would enable the subregion to acquire technical and managerial know-how, with marketing linkages and access to external capital funds through foreign collaborators. Indeed participation by extenal interests would enhance the chances for the SADCC projects to succeed.

1/ In pursuit of 'financial self-reliance', ASEAN established in 1976 the ASEAN Banking Council (ABC) as an institutional mechanism for promoting co-operation in banking in the region. In 1981 the ASEAN Finance Corporation (AFC) was established with an initial paid up capital of US $50 million, divided equally among the five member countres, with shareholders drawn from major banks and other institutions in each member country. The objective of the corporation is to provide financing facilities for regional co-operation projects. The East African Development Bank is the other example of a jointly owned financial institutions which was established to support co-operative efforts of the three members in the promotion of industrialization in these countries.

VII. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Economic co-operation or integration is based on the agreement of two or more nations (persons or organizations) to pool their resources together and to bear the costs involved in equitable proportions in order to reap for each one of them more benefits than would otherwise accrue to each in the absence of co-operative arrangements. A distinction should be drawn between co-operation and integration. Economic integration (in the Andean Pact context) entails the establishment of a common customs union, common external tariff, common market, common strategies and policies in major fields, etc. Economic co-operation (as practised in the ASEAN) does not go as far as integration; it covers such areas as may from time to time be agreed upon by the co-operators.

The form, nature and extent of co-operative arrangements essentially depend, to a great extent, on the objectives of those arrangements, the mandates as defined in the constitution or agreement establishing the co-operative machineries. Central and fundamental to the effectiveness and success of economic co-operation/integration is the political commitment and positive support it receives from the co-operating state governments.

Economic integration would require a strong central institutional infrastructure to constitute a co-ordinational mechanism through which

co-operative plans, strategies and policies would be channelled, harmonized and executed according to the objectives and aspirations of the co-operators who delegate the powers to that central authority (the Secretariat). Indeed, economic co-operation/integration is subject to the willingness and readiness of co-operating states to permit the inter-state organization to enchroach on their individual sovereignty in the fields and to the extent defined in the agreement or constitution establishing the co-operative machinery.

One of the goals of the Southern African Development Co-ordination Conference (SADCC) is "creation of operational and equitable regional integration". This and other goals have far-reaching economic and political implications; the attainment of these goals would demand the establishment of a central body (Secretariat) which is empowered by the member states to execute such plans, strategies, policies and programmes as are in conformity with their joint and several objectives and aspirations.

The Southern African Development Co-ordination Conference (SADCC) is so far a very loosely constituted organization. The Secretariat is not empowered to initiate and push through such measures as would subsequently lead to economic integration. Thus this "built-in" weakness does not augur well for SADCC. Needless, therefore, to stress that SADCC does not seem to be well equipped for shouldering the responsibility of providing the framework for the creation of an operational and equitable economic integration in the Southern African sub-region. It is evident that steps should be taken to rectify the situation if SADCC is to constitute an effective framework or machinery for promoting "economic integration" among its member states.

So far, the co-operators are reluctant to create "a supra-national body". Reliance on member countries to co-ordinate matters in speficied fields on behalf of others has its limits and disadvantages. To begin with, the co-ordinating countries are already short of staff and other resources. Secondly their national interests in the subjects they are co-ordinating could eclipse those of other SADCC member countries; thirdly the co-ordinating countries may not be in a better position to attract external assistance which may be required in respect of the fields in which they may be the co-ordinators; fourthly SADCC remains somewhat fragmented instead of presenting itself as one sub-region to which potential investors, financiers and industrialists should look; in other words, there is no subregional attraction to investors; many matters and fields of particular importance to industrial development remain unassigned to specified member countries, and therefore unco-ordinated since the Secretariat is not responsible for them either. If member countries are willing to allow their subregional organization to enchroach upon their national sovereignty and powers, SADCC will progress at an impressive pace to the establishment and operation of an equitable subregional integrated economy.

Some of the fields which are not properly covered by existing arrangements for co-ordination assigned to member countries include: tribunal, procedures for arbitration and settlement of disputes; development of industrial manpower, as opposed to manpower development generally; acquisition and development of appropriate technology, co-operation in economic, industrial and scientific research; institutional arrangements for specialized services; intra-SADCC trade and related matters such as payments in settlement of accounts; protection to SADCC industries such as common external tariff; etc. All these and others demand an in-depth study leading to recommendations of

specific measures to be adopted for strengthening the organization and operations of SADCC.

There is a host of constraints to the establishment of an "operational and equitable economic integration" in Southern Africa. They include: different levels of industrial development of member countries; transport, manpower and critical shortages of foreign exchange; differences in the objectives of the members; cost and quality of SADCC goods and services; absence of rules and control over certain agreed norms relating to industrial co-operation; inadequate institutional infrastructure in member countries; external economic, financial and trade relationships which tend to pull away individual members from SADCC-agreed industrial strategies and policies, etc.

SADCC industrial integration should, therefore, envisage severing or reducing economic and commercial activities of its members from their traditional ties with advanced countries, at least in the long run, and redirecting economic and commercial activities towards their subregional focus. However, economic integration appears to be a desirable long-term objective for the sub-region as a whole, without necessarily being of immediate crucial importance to individual member countries since it is unlikely to bear immediate benefits during its initial stages when some members may be preoccupied with the solution of their national domestic economic, social and political problems. Hence the possibility of governments to subordinate subregional industrial co-operation interests to those of their nation.

Furthermore, SADCC industrial co-operation may be constrained by the mere fact that the approach to industrialization in each member country has been on a national basis rather than on a subregional one. Thus import substitution

has been the strategy for every country, and within each country industries have been established in localities, scales and linkages geared to national demand and policies designed to ensure their viability as national establishments. SADCC will have to formulate, harmonize, co-ordinate and implement industrial policies, strategies and programmes which are designed for promoting subregional industrial co-operation as opposed to national ones, but at the same time bearing in mind that subregional integration schemes, to be effective, must not be independent of national development policies of their members.

There are also external forces which come into play to upset industrial integration processes or arrangements due to the institutional constraints and structural problems which they cause and the usually long time taken by individual countries to introduce measures for institute-effective readjustments and restructuring. In addition, the indebtedness of some members sometimes subject their policies and strategies to the wishes and dictates of their external creditors or collaborators; the policies, strategies or remedial measures adopted may run counter to the SADCC industrial co-operative arrangements and aspirations.

The ability of member countries to effectively co-ordinate specified subjects on behalf of others could be adversely affected by: shortage of resources, and likely conflicts between national and SADCC interests, particularly when industrial development goes beyond the stage of merely allocating industrial projects. Hence the need for establishing a complementary central co-ordinating machinery to deal with such matters as industrial licensing, external common tariff, development and acquisition of technology, economic, scientific and industrial research, etc.

Recommendations

It is strongly recommended that the Southern African Development Co-ordination Conference (SADCC) be given definite identity of its own right from the beginning if it is to be recognized a a body capable of mobilizing the confidence and support of potential investors and donors of technical and financial assistance. To this end, the Memorandum of Understanding (which appears to be a sketchy constitution) should be expanded or converted into a more detailed constitution, in which the mandates, structure and status of SADCC should be clearly defined.

It is also recommended that a well defined and co-ordinated institutional infrastructure be established. The nature and number of institutions will of course depend upon the activities, services or functions to be performed or rendered by SADCC. In this connection, it is suggested that a list of functions which may expeditiously be brought under the supervision of SADCC and its Secretariat should be drawn up for discussion and agreement by the appropriate authorities. The functions will, for example, include: industrial licensing, industrial protection including common external tariff, settlement of industrial and trade disputes; economic, industrial and scientific research, development and acquisition of technology, etc. Then consideration should be given as to whether institutions should be established with specified responsibilities for defined services, activities or functions.

The dynamic situation in which industries operate suggests that fairly regular reviews of the economic and industrial conditions in the SADCC sub-region be carried out at fixed intervals in order to enable industrial

policy-makers, planners and strategists in SADCC to keep abreast of developments and prevailing conditions. It is accordingly recommended that a detailed study of potentials for industrial development and co-operation in the SADCC sub-region be undertaken. The study should provide information on resources which are available in the sub-region and make an analytical presentation of potential resource-based industries and their prospective location; analysis of current strategies and policies in the sub-region and any changes which are foreseen for meeting the challenges of new situations and problems which may be retarding or militating against industrialization and co-operation among the member countries of the sub-region.

It is recommended that a machinery for the collection, compilation and dissemination of up-to-date statistical data, economic and industrial information be established in the SADCC Secretariat. The availability of vital information on all member countries and the SADCC sub-region as a whole will facilitate industrial planning, programming, promotion and co-ordination through SADCC. The machinery and the information it provides will provide useful material and guidelines for the formulation, harmonization and implementation of industrial strategies and policies for SADCC as one integrated sub-region, as well as facilitate the allocation of industries on a more equitable basis.

There are crucial areas in which co-operation could be established on an ad hoc basis or for a limited time. It is recommended that a programme be drawn up covering fields in which ad hoc or short-term co-operative arrangements are necessary for the benefit of member countries. The fields may include training, formal and informal, in various industrial fields, industrial and scientific research; standardization and quality control; etc.

This exercise would require consultations with national institutions within SADCC which possess the necessary expertise and facilities sought.

Consideration be given to the organization of a conference of African subregional organizations to discuss all matters which are considered vital to the establishment and maintenance of industrial co-operation among African countries. The meeting could provide an opportunity for the exchange of ideas and experiences as well as suggest ways and means of fostering intra-subregional co-operation in Africa. The involvement of participants from the Andean Pact and ASEAN may merit careful consideration.

FUNCTIONAL CONTENT OF AN ACTION PLAN TO IMPLEMENT INDUSTRIAL CO-OPERATION WITHIN SADCC

1. The following action List of proposals for functional content of an action plan to implement industrial co-operation within SADCC has been drawn up for consideration by the appropriate authorities in SADCC and member governments. The purpose of the proposals is to accelerate the process of effective industrial co-operation, which, until now, has been very slow. A number of measures are suggested for consideraiton. It is believed that, unless positive concerted action is taken little will be achieved in industrial co-ordination during the 1980s because the present arrangements make no systematic provisions to reduce future conflicts of interest between SADCC members. Experience elsewhere has shown that such conflicts are likely to arise.

2. The List is far from being exhaustive but it concentrates on what are regarded as first priorities. The proposals fall under three main headings:

   - General framework for SADCC projects; criteria for selection, allocation, licensing and implementing industrial projects.
   - Financial and monetary framework.
   - Miscellaneous issues.

   For each proposal there is a suggestion of allocation of responsibilities or functions between organs of :

   - SADCC
   - the Governments of member states
   - the industrial sector of member states
   - donor Governments
   - International Organisations

3. In many proposals there is a need for creating specific bodies or institutions to handle specific problems.

SADCC: List of proposals for functional content of an action plan to implement industrial co-operation

(Listing not necessarily reflecting order of importance or priority)

at SADCC level	at national level	sectoral actions	donor functions	intern.org.functions
A. Definition and interpretation of criteria for SADCC projects for: industries, projects and products with regard to rehabilitation, expansion and new enterprises.	Proposals by governments.	Proposals by industry and by investors ; comments on proposals by other countries.		UNIDO, UNCTAD, ITC, GATT, Commonwealth Secretariat.
B. Allocations of industries on subregional basis. Criteria for: implementation time-table, industrial licensing at SADCC level, registration, monitoring of implementation.	Proposals for allocations of industrial projects; time-tables, licensing at national and SADCC levels, draft legislation at both levels.	Consultations between government and industry.	Arrangements for use of patents, know-how, copyrights etc. at SADCC level and not merely on national levels.	Same as above plus World Intellectual Property Organization (WIPO).
C. Standardized SADCC framework for joint ventures, ownership arrangements, registration of commitments to finance projects. Registration of terms and conditions of guarantees to supply inputs to SADCC projects or to purchase outputs. Monitoring of implementation.	Undertakings and commitments. Monitoring of implementations.	Consultations between enterprises and government and third parties to safeguard interests of all concerned.	Bilateral technical assistance.	Advisory function for UNIDO and IBRD (IFC).

at SADCC level	at national level	sectoral actions	donor functions	intern.org.functions
D. Registration and monitoring of agreements on preferential treatment of SADCC scheduled products. Determination and adjudication of grey areas (competing products). Relations to Preferential Trade Area, to GATT, EEC, SACU.	Corresponding action at national level. Customs tariffs and import licensing arrangement; single marketing.	Reporting on implementation and infringements. Consultations.	Bilateral consultations.	GATT, UNCTAD on compatibility with other rights and obligations. Assistance with secretariat functions
E. Clearing house for intra-SADCC payments.	Monitoring national position vis-a-vis clearing house.	Consultative.		Advice and assistance from B.I.S., OECD, EMS and I.M.F.
F. System of settlement of balances in convertible or non-convertible units of account.	Harmonizing settlement strategy with other members.	Consultative.	Technical assistance based on experience of EPU and EMS.	Advice and assistance from B.I.S., OECD, EMS and IMF.
G. System of swing fund/and short-term credits.	Negotiations on access to credit.	Consultative.	Financial assistance to swing fund.	IBRD financial assistance and monitoring.
H. Harmonization of foreign exchange rates and monetary policies within SADCC and vis-a-vis rest of the world.	Establish criteria.	Reporting changes in competitiveness intra and extra SADCC.	Consultation and interaction.	UNCTAD, IMF, BIS.
I. Export credit fund for members. System for allocating expert credits. Negotiation machinery for dealing with donors.	Export credit allocations at the national level.	Consultative.	Financial assistance to set up export credit fund. Technical advice.	Advice from UNCTAD and UNIDO. Financial assistance from IBRD.

GONOD Pierre F.

Un outil : l'analyse de la complexité technologique. Revue d'Economie Industrielle No. 20, 2e trimestre 1982.

JANTSCH E.

La prévision technologique. OCDE, 1969.

KISSINGER H.

Power and diplomacy - in the dimensions of diplomacy. The John Hopkins Press, Baltimore, 1964.

MORENO POSADA Felix.

La politica de importacion tecnologica en Colombia. Cien. Tec. Des., Bogota, Octubre-Diciembre 1979.

PERROUX F.

Pouvoir et économie. Ed. Bordas, 1973.

SABATO Jorge A.

El comercio de la tecnologia. OEA, Marzo de 1972.

SCOTT R.; CARTER J.A.; CUMMINGHUM J.E.; LANGEL D.

Mission oriented technology. Technical Information Service of Canada, June 1969.

VAITSOS V. Constantino.

Comercializacion de tecnologia en el Pacto Andino. Instituto de estudios Peruanos, 1973.

PG/PB
25.05.83

at SADCC level	at national level	sectoral actions	donor functions	intern.org.functions
J. Investment fund and Development Bank for resource allocation in the SADCC context. Negotiations with donors.	Resource allocations at national level. Negotiations of allocations, terms and conditions at SADCC level.	Elaboration of proposals.	Financial assistance Coordination of donor relations with SADCC.	A.D.B., IBRD, UNIDO Commonwealth Secretariat. Financial assistance from IBRD, EIB, ADB etc.
K. Compensatory arrangements for Lesotho, Swaziland, Botswana for transitional costs of diminishing trade with South Africa.	Evaluation of basis for compensation proposals.		Assistance with compensation fund.	
L. Registration and monitoring of barter arrangements inside and outside SADCC and of other inter-governmental agreements. Creating a SADCC barter exchange.	Reporting and monitoring at the national level. Barter proposals to central exchange.	Report and review.	Propose barter deals to SADCC.	Inform and advise SADCC on free market quotations for non-barter supplies. UNIDO - UNCTAD - ITC

at SADCC level	at national level	sectoral actions	donor functions	intern.org.functions
M. Preparation of framework industrial plan for SADCC as a whole as a basis for harmonization and reconciliation of national plan objectives. Also: Preparation of input/output matrix for SADCC region, aggregations of national matrixes ...	Interactive with SADCC. Data supply, formatting.	Interactive with government. Data supply. " "	Bilateral technical assistance. " "	Various UN agencies: Assistance with data collection and processing for planning purposes at SADCC level.
N. Review of donor packages and negotiations to introduce SADCC inputs in donor projects anywhere in SADCC area. Establish preference margins for SADCC inputs.	Reporting on donor packages in own country, reviewing information on packages in other member states, suggesting own inputs in others' packages.	Reporting supply interests in donor packages, terms and conditions for SADCC supplies, etc.	Establish coherent donor policy on untying of packages. Preference margins for SADCC inputs. Finance of SADCC inputs.	Assistance in reviewing donor packages, establish code of conduct, etc. UNIDO, UNCTAD, ITC, IBRD, IMF.

ACTION PLAN

Proposal A

Definition and interpretation of criteria for SADCC projects for: industries, projects and products with regard to rehabilitation, expansion and new enterprises.

A.1 Justification of proposal

The present definition of a SADCC project is based on double constraints namely:

(i) that a project located in one SADCC country is designed to sell part of its output in another SADCC country.

(ii) that it is also designed to use inputs originating in another SADCC country.

A.2 In the first round of project selection (discussions) it is indeed possible to identify a certain number of projects which satisfy these 2 criteria simultaneously. However, in the long run, a dynamic SADCC structure is bound to come upon certain projects which are desirable per se but which fail to satisfy one or both of these criteria. Some projects could be economically desirable and require a SADCC market for viability, but may not necessarily need any SADCC inputs for viable operations.

A.3 For other projects the question may arise whether a very small percentage of inputs from another SADCC country will be enough to satisfy present rules, or whether there should be a requirement for a specific minimum percentage of SADCC inputs. The question will also arise whether such a percentage should be related to the value of total intermediate inputs or to gross putput.

A.4 Equally, it is likely that projects of benefit to SADCC members may be designed to sell the bulk of their output in non-SADCC markets. Or that the present SADCC market is insignificant and likely to remain so for sometime, until some SADCC users have emerged. This situation may particularly arise in the context of SADCC projects designed to produce intermediate inputs for other industries. Again, it may be necessary to establish ground rules for the required SADCC market in relation to total gross output or in relation to design capacity or in relation to a timetable. Conflicts of interest can be reduced if an impartial SADCC body exists to determine such question, and they may be further reduced if the approach to resolve such questions has been agreed before they arise.

A.5 SADCC industries, projects and products

Questions of definition are also likely to arise with respect to SADCC projects which, at one end of the scale, may embrace a whole industry and at the other end of the scale only cover a single product. In the case of a SADCC industry producing a complex range of products, it is possible that only some such products will qualify under present definitions of what constitutes a SADCC project. Some products may not require any SADCC inputs, others may not be directed to any SADCC market.

A.6 At the other end of the scale, an existing enterprise might economically expand or change its production structure so as to integrate with SADCC markets whether as a buyer of inputs or as a supplier of outputs. But the bulk of its production may remain without any substantial SADCC linkages. Such integration might be economically desirable, but could fall outside present concepts of SADCC projects.

A.7 Rehabilitation and expansion of existing enterprises

It is a fact that many SADCC countries at present cannot embark on major new industrial developments. Many are for several years ahead constrained to concentrate their industrial investment on rehabilitation of existing enterprises which have been suffering from a process of ageing without adequate maintenance, supply of spare parts or replacement of old equipment.

A.8 SADCC countries are now also likely to channel more of their industrial resource allocation into expansion of existing enterprises, rather than into creation of entirely new entities. Rehabilitation and expansion of existing enterprises is indeed likely to be a dominant feature of the development process in most SADCC countries, for the rest of the 1980s. It may then be difficult to give consent to the SADCC concept unless special consideration is given to the need for criteria for SADCC products rather than SADCC projects.

A.9 It is therefore, proposed that a technical committee be established within SADCC to consider a functional extension of present definitions so as to bring products within the SADCC inputs, giving particular consideration to multiproduct enterprises.

Establishing ground rules for implementation is by necessity an interactive process. It is suggested that the industrial sector and the investors in the member countries should be brought into this process as soon as possible and thereafter be consulted whenever any changes are contemplated. Such consultation has not been a feature in the development of SADCC so far, but is necessary for a better understanding of SADCC's objectives among the enterprises. A number of international agencies possess expertise in regional co-operation and it is suggested that UNIDO, UNCTAD, ITC, GATT and the Commonwealth Secretariat might be of assistance.

Proposal B

Allocations of industries on sub-regional basis. Criteria for: implementation time-table, industrial licensing at SADCC level, registration, monitoring of implementation.

B.1 Justification of the proposal

It is a fact that the SADCC countries today find themselves at very different and uneven levels of industrialization. The momentum of industrial development is also very different among members.

Some countries will require the rest of this decade to rehabilitate or renovate their existing run-down industrial structures. Only after then can they devote large resources to expand into major new projects. Other countries might be able to complete the necessary industrial rehabilitation process in a much shorter time. Therefore, once the members have identified certain SADCC projects and agreed on a geographic allocation, questions of timing of implementation become important.

B.2 Pre-emption risks

If a project or a product has been allocated to a member state which suffers from resource scarcity because it is mobilizing all its fund for rehabilitation, other members might become impatient and inclined to pre-empt the issue by launching alternative versions of their own. Such pre-emption is likely to take place in market-oriented economies, where entrepreneurs will seize opportunities to branch into profitable lines of production. It could very easily happen when existing firms are able to take over the agreed SADCC project by adding a new wing or a new production line to their existing one, while the designated country might have to start from scratch with a new factory.

B.3 The above possibilities are not hypothetical; during field missions, there was at least one example of exactly this nature, where an existing factory was preparing to expand into a product line rival to a major SADCC project in another country. Pre-emption of a SADCC market can also take the form of market penetration by non-SADCC members, especially via the South African Customs Union or via the Preferential Trade Area.

B.4 Industrial licensing

It is therefore, suggested that a system of industrial licensing should be introduced which would enable members to give effect to their previous decisions. When SADCC members have agreed that a certain industry or product line should be allocated to one of them, it becomes necessary to ensure that the SADCC market for that project will not be pre-empted by other rival SADCC enterprises. The first of these objectives could be met by industrial licensing which should not be more restrictive than absolutely necessary for functional reasons. It is emphasized that agreements on protection of allocated industries against external competition and preferential access of the products of allocated industries to the markets of all member countries have to be part and parcel of agreements of allocation of industries and should be linked with the proposals under "D" below.

B.5 Member states would have to ensure that, in that particular project or product line, no rival production is set up without due consideration of its necessity and of its impact on the agreed SADCC project. A consultative process will be necessary to resolve potential conflicts of interns. At the national level, such consultation will be necessary with industry and with users. Proposals for licensing of projects and products will have to be public so that all interested parties are informed before the event. In particular, entrepreneurs have to know exactly where they stand with respect to intended production. At the same time, it is essential that the licence requirement is as narrow as possible, so that encrepreneurial initiative is not stifled by unnecessary licensing requirements, bureaucracy or ambiguities.

B.6 Competing products and near substitutes

Very different commodities can become substitutes for each other (like aluminium for copper or synthetics for natural fibres). Questions of licensing might, therefore, have to include consideration of near substitutes, if the purpose is to be functional rather than formalistic.

The necessity for a public licensing process arises from the likelihood that SADCC members will sooner or later, agree to allocate a project to a member, when something similar already exists in one or more of the other member states. Industrial statistics do not have perfect coverage, and statistical classifications are not very effective as a means of identifying industrial products.

B.7 The requirements of users

In an integrated industrial complex, which SADCC will eventually become, it is not only rival producers who present problems in the context of industrial licensing. There are also the interests of users who might have to change inputs, qualities, standards, etc. if a new SADCC project will result in the scheduling out of existing supply. In particular, it can be expected that enterprises which are using imported inputs will be worried at the prospects of having to use (perhaps exclusively) a new SADCC project/product differing from what they are accustomed to. Almost by definition, new SADCC products will enjoy certain restrictions in competition. The licensing arrangements will have to provide against abuse of the licence.

B.8 Terms and conditions of an industrial licence

It might be necessary to include terms and conditions for a licence, such as to ensure that supplies shall not be disrupted or other needs of users be set aside. The licence might specify that production shall commence within a certain time. The licencee might have to undertake to maintain certain standards of output and quality or price, etc.

B.9 A licensing body

Any exclusivity in project allocation will most likely call for the establishment of a licensing body. Such a licensing body will require expert advice of an impartial nature regarding definitions of products and projects. The body will also need to conduct hearings with all interested parties, both with those who request a licence as an incentive to promote a project and with those who object against a licence because it will interfere with their existing activity.

Industrial licensing on a regional basis often cuts across previous arrangements along national lines. For example, patents, knowhow, copyright agreements, etc. are often entered into on the basis of exclusive rights in a particular country. Such arrangements will have to be re-negotiated, often with enterprises in donor countries. Donor governments should be brought into this process since they could exercise influence in favour of SADCC.

Proposal C

Standardized SADCC framework for joint ventures, ownership arrangements, registration of commitments to finance projects. Registration of terms and conditions of guarantees to supply inputs to SADCC projects or to purchase outputs. Monitoring of implementation.

C.1 Justification of proposal

The fundamental economics of a SADCC project may be perfectly sound but investors or governments may nevertheless hesitate to go in for such a venture.

Uncertainties regarding the course of action likely to be taken by SADCC partners may become an obstacle to implementation. The future success of industrial co-operation within SADCC hinges to a large degree on the organization's ability to remove such uncertainties and create a climate of confidence for entrepreneurs and investors.

C.2 Joint ventures, commitments to finance projects or commitments to supply inputs or to purcahse products are all means of establishing a framework of confidence. This will make it possible for members to exploit the economies of scale that their combined markets offer.

C.3 The terms and conditions for such arrangements are obviously matters for negotiation from case to case. It is suggested, however, that SADCC could increase the confidence level by providing a framework for joint ventures and other guarantees, particularly when more than two member countries are involved, as is likely to be the case in future.

C.4 When it comes to commitments to supply inputs or to purchase outputs, such commitments are often contingent on a number of conditions to be fulfilled whether by the enterprises concerned or by the governments themselves. It is

therefore suggested that all such undertakings be registered with SADCC. Registration and monitoring of compliance with undertakings are both means to increase confidence, particularly when investors or entrepreneurs otherwise might find themselves in a difficult situation vis-avis a government in another country. SADCC should also be able to provide a meeting ground for resolving conflicts of interpretation or conflicts of interest.

C.5 Past experience elsewhere indicates that such conflicts are particularly likely to arise when one country has undertaken to provide free or privileged access to its markets for a SADCC product originating in another member country. Governments may find that trade agreements or donor projects with other countries may conflict with SADCC undertakings. Unless there is a forum for resolving such conflicts, it is likely that conflidence in SADCC commitments will break down.

C.6 At the national level governments will have to review all fresh undertakings and commitments against the existing body of SADCC commitments and also monitor implementation at home and within SADCC. Any proposed commitments should also be discussed with enterpirses and third parties before becoming irrevocable, so as to safeguard the interests of all concerned.

C.7 Donor functions

Bilateral technical assistance may be needed to draft pro forma agreements for joint ventures, supplies of inputs or for free or privileged access to markets. All such proposed agreements may also have to be viewed against previous commitments entered into the context of PTA, EEC, GATT or SACU. (See also Proposal N below).

C.8 International organizations such as UNIDO, the World Bank (IFC) and GATT may be able to play a role in providing standard agreements.

Proposal D

Registration and monitoring of agreements on preferential treatment of SADCC scheduled products

D.1 Justification of proposal

In order to encourage entrepreneurs and investors within SADCC to embark on projects which require markets in other member countries it may be necessary to provide for preferential treatment of such projects. The effectiveness of such preferential treatment will not only depend upon the nature of the preference, but also on the confidence that the investor has in the continuation of the preference.

D.2 Preference can range over a spectrum of measures from customs tariffs and import licensing protection against competing imports, to guarantee that foreign exchange (and import lincences) will be made avialble for the necessary raw materials. Access to finance, to bank overdrafts, or to single channel marketing, are other instruments which may encourage an investor, as long as such instruments exist and are used.

D.3 However, in many cases the use of such instruments runs into conflict with other undertakings of a contractual or treaty nature. In order to increase the confidence in such measures it is proposed that all undertakings of a preferntial nature should be registered and moniroted by SADCC. This becomes particularly important in the context of "grey areas", such as competing goods produced in the same or another member country.

D.4 Also, preferential treatment undertakings would have to be cleared in relation to, for example, the PTA, GATT, EEC, SACU and other international groupings.

D.5 At the national level, governments and manufacturers will also have to survey the implementation of agreements in other member states and consult regarding possible infringments.

D.6 It is proposed that the Secretariat should play the central monitoring role at SADCC level, with assistance from international organizations such as UNCTAD and GATT.

Proposal E

A Clearing House for Intra-SADCC Payments

E.1 Justification of proposal

SADCC embraces nine countries which could not conceivably exploit their mutual and combined potential advantages to the full only by bilateral trade arrangements, if such arrangements would require settlement of balances wholly or partly in convertible currencies. Any attempt to bring bilateral trade into balance will be limited by the "least common denominator", i.e. by the ability of one country to meet the needs of the other within a particular range of commodities. The limit will either be set by the pair member which has the smallest capacity for export of such commodities or by the smallness of the market for such commodities in the other country.

E.2 When three countries are linked in such pairs, these limitations will apply to each pairing whatever the size of the grouping. The generally accepted theory of international trade is that the aggregate trade volumes will be larger when countries are prepared to accept imbalances in the individual pairings (while still striving for overall balances in their total trade). Such increases in trade volumes will enable greater use of each country's comparative advantage in particular lines of production.

E.3 This also applies to the SADCC grouping, which will by necessity become constrained if each country merely aims at bilateral balances with each partner. Bilateral barter arrangements can, of course, reach greater volumes if a country can pass on a commodity which it receives from its neighbour to another member of SADCC; such switching has been developed to a fine art within the framework of barter trade and can approach the advantages of a truly multinational system.

E.4 A need for multilateral payments arrangements

Bilateral balances within each trading pair, combined with onward barter of surplus commodities in third countries will involve considerable marketing and "matching" problems of SADCC members. The full advantages of the diversity of the SADCC markets and production structures can only be reaped if the group aims at a multilateral trading system which avoids the necessity of striking a more or less exact balance in the trade between each member pair. Such a system implies by necessity a multilateral payments system.

E.5 The need for overall balance in trade

The principles of such a multilateral payments system is comparatively simple; members do not have to worry unduly about their trade balance with each individual partner, as long as they are able to maintain overall balance in their trade with the system as a whole. If every country were able to maintain such overall balance with the system it should also be possible to manage the settlements between each country and the aggregate of the SADCC grouping without having to use internationally convertible foreign exchange.

E.6 Monitoring debit and credit balances

Within the SADCC system there would be a need for continuous monitoring of each country's aggregate balance status vis-a-vis the system as whole so as to prevent disruption of the system; any individual member which tended to run into aggregate surplus against the system as a whole (as distinct from a surplus against individual trading partners) would have to accept to take measures which would reduce its surplus.

Equally, any individual member which tended to run into a persistent deficit position vis-a-vis the system as a whole would have to take measures to reduce its imports from the partners, unless it were in a position to settle the deficit by payments in international convertible currencies.

E.7 It is proposed that SADCC, as a first step towards creating a multilateral trading area, sets up a clearing house for all payments between

members. Such a clearing house work on the principle that each country which delivers a commodity or a service to a partner directs its claim to the partner via the clearing house. In principle, all such claims and counterclaims will match and even out except when a country is in a deficit situation vis-a-vis the grouping as a whole.

E.8 The corollary is that another country must then be in a surplus situation vis-a-vis the grouping. Periodically, each country in overall deficit will have to settle the deficit in cash with the clearing house, which then also settles in cash with the surplus country (or countries).

E.9 An advantage of the central clearing house concept is that it reduces the need for each member state to use cash for all its transactions or for settlement of its balances with each bilateral trading partner. Instead cash will only be needed for the settlement of the aggregate balances vis-a-vis the clearing house.

Thus, the overall need for foreign exchange reserves in member countries will be somewhat reduced. Reserves thus liberated can be devoted mainly to settle balances with the rest of the world. However, the need of maintaining overall balance in the trade between each member and the collectivity will remain, unless deficit countries can settle in acceptable cash.

Proposal F

A System of Settlement of Balance in Intra-SADCC Payments

F.1 Justification of proposal

The previous proposal (E) dealt with the need to establish a clearing house for intra-SADCC payment. This would reduce cash settlements to the balances between each member and the clearing house, instead of cash settlements between each trading pair. Thus, members would economize on foreign exchange. The present proposal deals with systems of settlement between each country and the clearing house.

F.2 SADCC deficits vis-a-vis the rest of the world

A problem common to all SADCC countries at present is a tendency to run current-account deficits in their balances of payments with the rest of the world, individually and collectively. To the extent that such deficits are covered by long-term capital imports (loans or grants) they do not necessarily constitute payments problems. But the characteristics of the present situation are that individual countries find it extremely difficult to cover these deficits by negotiated long-term capital imports; hence, most SADCC members are in a balance of payments crisis vis-a-vis the rest of the world.

F.3 Methods of dealing with this crisis differ, but there has been a tendency to reduce the current account deficits by quantitative restrictions on imports rather than by exchange rate adjustment. It is a fact that some currencies of member states are more overvalued than those of others. In consequence, their relative competitiveness is uneven, and if trade were free from quantitative restrictions between SADCC members, it is likely that some would emerge as persistent creditors or surplus countries vis-a-vis

their partners. Some member countries, which are in deficit in their balance of payments versus the world in general, could certainly not allow free trade with their SADCC partners without running into grave deficits with them. Thus, the balance of payments problems of member states vis-a-vis the rest of the world are likely to spill over into the SADCC system.

F.4 It is unlikely that those SADCC members which are in surplus vis-a-vis the collectivity could accept settlement of their credit balances in non-convertible national currencies of the deficit members, unless the surpluses or deficits were purely temporary. In order to increase the acceptability of temporary deficits (or surplus), it is proposed that SADCC should evolve a unit of account for settlement of balances. This would reduce the risk of holding member currencies which might devalue before they can be used.

F.5 The SADCC system could in such circumstances work on the basis of "SADCC-UNITS-OF-ACCOUNT" which, for the sake of simplicity and of international acceptability, could be kept at par with the international units of account used for Special Drawing Rights of the IMF, or with some other international units of account. The fragility of the SADCC economies is considerable and the SADCC units of account should therefore have a connotation of stability which would be more acceptable than an individual member's currency. Each country should be prepared to accept that it momentarily (for example seasonally) might build up credits against members of SADCC because of a seasonal export surplus, which it could use later in the year without having to worry unduly about foreign exchange rate fluctuations which could affect any individual member.

At any moment of time, each member state would have an official rate of exchange between its own currency and the SADCC unit of account and each transaction would be translated into the corresponding amount of units whether in credit or in debit.

Proposal G

A Systme of Swingfund and Short-term Credits

G.1 Justification of the proposal

The need for an internal SADCC swingfund

SADCC member countries have at present foreing exchange reserves which are far too low for comfort; some member have effectively no foreign exchange reserves at all because of their acute balance of payments difficulties with the rest of the world. They are therefore unable to accord each other even the short-term credits which are necessary for the smooth funccioning of a multilateral barter or payments system. SADCC would be unlikely to thrive or to stimulate mutual industrialization in member countries merely by bartering occasional surpluses of commodities which are unsaleable in thrid countries. Matching surpluses would be unlikely occurences on a regular basis.

G.2 Few member countries could today afford to sell on credit to each other industrial commodities, which could earn hard cash in thrid countries and which would most certainly require third-country inputs which have to be paid for in hard cash. Thus, the nee' for hard cash in convertible currencies is a limiting factor in SADCC's growth prospects. To get the mutual industrialization process started within SADCC it will therefore be necessary to establish a common internal balance of payments fund consisting of convertible currencies which can be used in the rest of the world.

G.3 Such a fund should enable some SADCC members to run temporary deficits against the SADCC grouping as a whole while still enabling other SADCC members to get paid in convertible foreign exchange. Thus, the surplus members would have less of a compulsion to restrict their sales to the deficit members. Because of the purpose of such a fund - to settle temporary imbalances - it is refered to as a swingfund.

G.4 The concept of a swingfund

Temporary swingfund facilities, which can be likened to overdraft facilities within a domestic banking system, require an initial injection of foreign exchange, without which the system would only be able to operate if it were in balance or equilibrium. Since member states cannot provide the necessary swingfund, it would be appropriate for SADCC to seek international assistance for the purposes of creating such a swingfund. Bilateral and multilateral donors who have a genuine interest in helping SADCC to gain greater economic independence from South Africa and from the rest of the world should be approached for the establishment of such a fund, without which SADCC is likely to remain less effective for many years.

G.5 Operations of a SADCC swingfund

Temporary swingfund facilities cannot function to the benefit of an economic grouping such as SADCC unless deficit balances are liquidated within a comparatively short time, say, one year at most. Otherwise, the fund would either have to be very large, or the system would run dry. Hence, any multilateral swingfund system would require continuous monitoring and a high degree of self imposed discipline among member states.

G.6 A member country which, for some reason or other, runs into a deficit vis-a-vis the SADCC system at the beginning of a swingfund period and cannot manage to export enough to member states to liquidate the deficit before the end of the period, would therefore have to use hard currency reserves to settle the balance at the end of the period. Likewise, a surplus member would have some obligation to increase imports from the system towards the end of the period in order to help restore general equilibrium.

G.7 Required size of a SADCC swingfund

A swingfund which should serve its purpose of smoothing out individual member deficits and surpluses during the course of a year should, in theory, not have to be larger, at word, 20 per cent of the aggregate annual exports of members towards each other, depending upon the degree of seasonality and other fluctuations characterizing intra-SADCC trade patterns. As intra-SADCC trade would be expected to grow over time, the swingfund would need to be increased year by year to enable continued smooth operations.

G.8 The present proposal is that SADCC should attempts to establish a swingfund of approximately $10 millions, to be operated in conjunction with the proposed clearing house for intra-SADCC payments (E). The allocation of swingfund facilities would have to be monitored and deficit and surplus members would have to take corrective action to maintain long run equilibrium of the system. Donor assistance with funding will be required.

Proposal H

Harmonization of foreign exchange rates and monetary policies within SADCC and vis-a-vis the rest of the world.

H.1 Justification of proposal

The purpose of SADCC is to reduce the grouping's dependence on the world in general and on South Africa in particular. To achieve this purpose, the organization will have to practice some form of protectionism vis-a-vis rest of the world and/or realistic exchange rates, and at the same time prevent certain members from building up "too large surpluses" or "too large deficits" within the SADCC community. This will require monitory arrangements, as suggested above, but it will also require the creation of some kind of regulatory system which can keep SADCC in internal balance while still furthering the objective of industrial cooperation and coordination so as to reduce the dependence on the rest of the world and on South Africa.

H.2 Given the fundamental foreign exchange shortages of member countries, intra-SADCC trade will continue to suffer until members are prepared to apply realistic exchange rates vis-a-vis major international currencies. The present situation is that some members are very far removed from equilibrium exchange rates, while others are closer to such rates. This unevenness tends to obscure the relative competitiveness of producers in different SADCC countries.

H.3 Enterprises in countries which maintain very much overvalued currencies cannot profitably export unless they receive subsidies from their Government. This applies irrespective of whether these enterprises are parastatal or belong to the private sector. Likewise, enterprises in these countries would rather buy imports than local inputs, if they had a free choice at present exchange rates. They are restricted from such import purchases by restrictions on currency allocations and import licensing.

H.4 The disequilibrium in general trade relations, caused by overvalued domestic currencies, tends to spill over into intra-SADCC relations. Manufacturers in member states with market related foreign exchange rates are frustrated in selling their products in other member states, because of foreign exchange and import licensing restrictions. It is not reasonable to expect that member states which maintain quantitative restrictions in their trade with the rest of the world should be able to let in imports from SADCC without hindrance.

A realignment of foreign exchange rates is therefore a prerequisite for free trade within SADCC. Such a realignment will also require a realignment of monetary policies and increased use of the market mechanism rather than reliance on credit rationing, so as to create a basis for judging the relative competitiveness of producers in different SADCC countries.

Proposal I

Establishment of an Export Credit Fund for SADCC. System for Allocating Credits. Negotiation Machinery for Dealing with Donors

I.1 Justification of proposal

The need for an export credit fund

While the swingfund concept (proposal G) is strictly short-term, there is a clear need for the establishment of an export credit fund to enable SADCC members to compete with thrid countries in each other's markets. This is particularly so in the case of SADCC production of capital goods where SADCC exports to member countries have to compete with suppliers' credits offered by manufacturers from all over the world. In addition to suppliers' credits, which may run for as long as five to seven years, SADCC producers of capital goods have to compete with ordinary export credits of a duration of six months to a year in most cases.

I.2 Manufacturers in SADCC countries have indicated that, even when it is possible to deliver goods of quality and specifications which on a cash basis would be competitive with South African or overseas suppliers in a member country, the virtual absence of export credit facilities within SADCC member countries result in repeated losses of business. (This situation is particularly acute in Zimbabwe, where a number of capital goods manufacturers are unable to compete with South African and overseas credit terms when attemtping to capture markets in other SADCC countries).

I.3 SADCC members should be given an opportunity to compete within their won region with ordinary commercial suppliers' credits and export credits. This could be achieved if bilateral and multilateral donors were prepared to direct a percentage of the tied project aid to the creation of an export credit fund for SADCC.

I.4 On the one hand, members with an import need would look to other member states for supplies which could be received under export credit terms as attractive as those offered by overseas or South African suppliers; on the other hand, SADCC manufacturers would have an incentive to tender for supply contracts in member states and in situations which previously have been out of their reach.

I.5 Safeguards and guarantees

There is little doubt that the existence of such facilities within SADCC would be beneficial to buyers, who now would have a wider range of choice of supplies, as well as to producers. In order to maintain the dynamism of such a system it would, however, be necessary to establish a credit control and recovery mechanism which would be at least as effective as that which applies to suppliers' credits and export credits generally. The quality and creditworthiness of suppliers and of buyers, the nature of supply contracts, bank guarantees and central bank approvals, and institutional arrangements for credit insurance, would have to be developed for the SADCC system, as in the case of national arrangements elsewhere.

I.6 The fund and commercial banks

An export credit fund would have to be institutionalized at the SADCC level, possibly under the same umbrella as the organization for swingfund and short-term credits, in association with the intra-SADCC payments clearing house. (Shared facilities would reduce the operational costs). At the national level, the export credits could be channelled through the national commercial banking system which would also have to act as a risk buffer between the fund and the borrowers.

I.7 Fund allocations

The proposed export credit fund would be of interest to every member of SADCC since it could be used to enhance the volume of short-term export credits available to manufacturers or buyers. Considering the very strongly felt needs for such facilities in every member country it would be necessary

to work out some system of quotas for access to the fund which would be equitable, acceptable and productive. Otherwise it could easily happen that the resources of the fund would be exhausted - for a time at least - by the manufacturers of a single country.

I.8 One way of preventing pre-emption of fund resources would be to allocate the credits to the buyers in SADCC countries who would be able to use the funds only for purchases from SADCC members. Such an arrangement would enable the buyers to enjoy the credit facilities otherwise only offered by overseas or South African suppliers.

I.9 Alternatively, Export Credit Fund allocations could be directed to exporters in each country on the basis of its percentage share in total SADCC imports from member countries. Thus, the more a country imports from other SADCC countries, the more export credits would it be able to provide for its own exporters to other SADCC markets. Based on this principle, the existence of a SADCC export credit fund would tend to restore equilibrium by trade expansion. However, one can also envisage other allocation principles which might be linked to a country's percentage share in SADCC's total intra-trade, taking exports and imports averages as a basis for allocation.

I.10 Average life of outstanding balances

An export credit with a long average life will immobilize export credit funds considerably more than will short credits. The access formula will therefore have to take into account not only how much of the funds that a country can use to enhance its SADCC exports, but also for how long.

I.11 Other criteria

SADCC is not only concerned with the creation of new industries for the regional market (or for regional inputs) but also with the expansion of existing enterprises. However, if members feel that it is the new SADCC enterprises that require particular help and protection during their early years, the allocation formulas for access to the SADCC export credit fund might be conveived in such a manner as to give preferential access to the new SADCC enterprises.

I.12 The proposal will be unworkable without financial assistance from donors. SADCC countries would have to negotiate for funds for this purpose, which would presumably have to be guaranteed by member countries pro rata to their exporters' use of the fund.

Proposal J

Investment Fund and Development Bank for Resource Allocation in the SADCC Context

J.1 Unless special funds are set aside for SADCC projects, it is unlikely that the industrialization process will be much more SADCC directed in future than it has been in the past. Obviously, SADCC projects will have to be economically and financially justified in order to claim any share in the resource availability of member countries. But the fact that some of the benefits of such projects will accrue in other countries may not make them particularly attractive to investors, compared to more nationally oriented projects. In the dynamic context it must also be recognized that SADCC projects may take time before they reach a stage of profitable integration with projects in other SADCC countries.

J.2 To the extent that governments are intent to stimulate and foster a SADCC oriented industrialization it would make sense to set aside in each country an annual contribution to a SADCC investment fund at the national level. The resources of such national funds could also be pooled at SADCC level on the lines of, for example, the East African Development Bank. The existence of this Development Bank has also attracted a certain amount of donor funds for specific resource allocation in the East African countries.

J.3 The proposal can be seen as a two-stage operations: On the one hand the establishment of a SADCC Investment Fund, which initially could work and disburse loans for specific SADCC projects through national development finance institutions of member countries. At a future stage, when the transaction volume would justify the overhead costs of such operations, SADCC could contemplate setting up its own Development Bank.

J.4 The fund or bank should play an active part in the promotion of industrial projects. To this end, it should undertake studies, research and other activities for the identification, formulation, evaluation and promotion of specific industrial projects, as well as establish links or channels with potential investors.

J.5 Operations of the Fund would require financial assistance and co-ordination of donor relations with SADCC, particularly for industrial projects. International institutions such as ADB, IBRD, UNIDO and the Commonwealth Secretariat could provide expert assistance. Financial participation should be contemplated from IBRD, EIB, ADB, and from bilateral financial institutions.

Proposal K

Compensatory arrangements for Lesotho, Swaziland and Botswana for transitional costs of diminishing trade with South Africa.

K.1 Justification of proposal

Lesotho, Swaziland and Botswana depend on South Africa to a much higher degree than do other SADCC members, both for industrial inputs, consumer goods and capital goods as well as for exports. They are also comparatively removed from most of the other SADCC countries.

K.2 Any substantive and accelerated reduction in their dependence on South Africa will entail immediate costs to them while the eventual benefits will take a long time to become noticeable. Getting their exports to markets in other SADCC countries will often by comparatively expensive. This additional cost will have to be absorbed by their own exporters. Buying inputs or finished industrial products from SADCC members will also often be more expensive than buying in the South African market at least during the early years.

K.3 Special measures will therefore have to be contemplated to encourage their more rapid integration with SADCC and a more rapid disengagement from South Africa.

Such measures can take many forms, but their costs are difficult to gauge. A simple approach may consist of establishing a special Compensation Fund, the resources of which could be used to subsidize transport or related costs in direct trade with SADCC countries.

Proposal L

Registration and Mornitoring of Barter Agreements Creating a SADCC Barter Exchange

L.1 Justification of proposal

To the extent that member states engage in barter agreements, other members have an interest in exploring possibilities of extending the arrangements to cover more than two countries. The possibilities of extending the traded volumes then become considerably larger. It is therefore proposed that SADCC should set up a central barter exchange which would be notified by each member as to commodities offered (and denied). The exchange should be set up so as to organize switch deals or barter claims which could involve several commodities and countries.

L.2 Barter deals should be registered and monitored so that all participants have maximum market information. In this manner the barter arrangements could approach the sophistication of a monetary market, without the use of foreign exchange.

The SADCC barter exchange could also cover barter deals between members and non-member countries; the existence of a large, multi-product exchange could in such a case also increase the trade range and trade volume with third countries.

Proposal M

Preparation of framework industrial plan for SADCC as a whole as a basis for harmonization and reconciliation of national plan objectives.

Also:

Preparation of input/output matrix for SADCC region.

M.1 Justification of proposal

At present, there has been little or no coordination of industrial development plans in the SADCC region. The proposal is that SADCC should, to start with, present aggregations of the national plans and identify potential overlaps or duplications. The next step would be to investigate whether any such overlaps or duplications might provide alternative scope for industrial cooperation between member countries by a selection of consolidated projects. This process will, obviously, require some mutual reconciliation of plan objectives in member countries.

M.2 A further step in the direction of increased cooperation would lie in the construction of an industrial input/output matrix for the region as a whole, or at least, of an aggregation of national input/output matrixes. Such aggregation could indicate more clearly than industrial development plans where there is scope for regional cooperation in the production of intermediate inputs.

Proposal N

Review of donor packages and negotiations to introduce SADCC inputs in donor projects anywhere in SADCC area.

N.1 Justification of proposal

The need to "unpack" donor packages

Present and future manufacturers of capital goods in the SADCC region have to compete with foreign donor packages. Even though SADCC producers cannot supply the total complex package of a donor financed project such as power stations, transport and communications installations or industrial projects, there are today numerous manufacturers within the SADCC region who could supply elements of such projects at qualities, specifications and sometimes also prices which would per se be competitive.

N.2 But the nature of donor financing of project packages is often as such that it makes it impossible for existing or potential SADCC manufacturers to participate in the supply arrangements. At best, local firms will be engaged in erection work and supply of local services, but seldom in the supply of hardware.

N.3 Donor assistance to the SADCC region does not produce mixmum benefits when it (more or less deliberately) excludes supplies from other SADCC members as components in the donor package. Many bilateral (and some multilateral) donors are only willing to sponsor certain development projects if the procurement can be linked to their own export supplies. However, it should be possible for SADCC as a group to negotiate some kind of financial compensation for this particular rigidity in the donor-recipient system.

One such compensation would consist in donor contributions to the proposed SADCC export credit fund (proposal I) pro rata to their tied project loans to SADCC countries. Another, more direct approach would lie in a general agreement that a certain percentage of donor packages should be open to tendering by SADCC suppliers (also in other SADCC countries). Such tenders should have a preferential margin for local suppliers similar to that offered by the World Bank. For the system to work in favour of SADCC producers it is essential that each member informs the Secretariat of all donor packages in its own country, and that the Secretariat relays such information to all members, so that their own manufacturers can react.

Appendix A

MINERALS AND ENERGY

The subregion is, as a whole, an area rich in minerals, with large deposits of minerals such as chrome, bauxite, tungsten, nickel, cobalt and uranium. Also in terms of energy the region is well equipped and many of the countries have enough electricity to be self-supporting.

There has been a large inflow of South African capital into minerals and electricity projects in the SADCC region. There is for instance South African interest in diamonds, nickel and copper projects in Botswana, in the development of iron ore and coal in Swaziland, in copper and cobalt mining in Swaziland, in the gold, diamonds, iron and oil industries in Angola, in the Cabera Bassa project in Mozambique and in the Cuene project in Angola.

The Tables on production, export and import of basic minerals show self-sufficiency of the area as a whole for the following minerals used in industrial production: Mica, crude petroleum, phosphate rock, salt, sulphur and pyrites, tin, zinc, asbestos, coal, cobalt, copper, gypsum, lead.

Country	Mineral production	Mineral exports
Angola	Diamonds/Gold/Gypsum/Iron ore/Salt/Oil/Hematite/Cement/ Phosphate	Manganese ore/Cassiterite/Nickel/ Diamonds/Iron ore*
Botswana	Coal/Cobalt/Copper/Diamonds/Nickel/Silver* Smelter copper/Smelter nickel/Kimberlite*	Copper ores + concentrates/ Diamonds
Lesotho	Diamonds/Kimberlite/Gold/Coal	Diamonds
Malawi*	Sedimentary rock/Oil/Coal/Marble/Glass sands/Vermiculite/ Strontianite and monazite concentrates/Uranium/Lime?/ Carbonite/Cement	
Mozambique	Bauxite/Asbestos/Bentonite/Coal bituminous/Copper/Feldspar/ Lithium lepidolite, spodumene/Mica/Salt/Tantalite, Microlite/ Columbo tantalite/Phosphates/Natural gas*/Oil*/Fluor*/Ammonia + urea*	Bentonite/Coal/Copper ore/Scrap iron + steel/Lithium/Mica unmanufactured/Salt/Columbite + tantalite
Swaziland	Asbestos chrysotile/Barium/Coal bituminous/Iron ore/Tin*/Gold*/ Base metals*/Anthracite*/Industrial minerals - Gold/ Gold/Base minerals/ Under exploration	Asbestos/Barium'Coal/Iron ore/ Kaolin
Tanzania	Gold/Iron ore/Coal/Phosphate/Diamonds/Gypsum/Salt/Kaolin/Limestone/ Precious stones/Coal bituminous/Mica sheet/Iron and steel/Tin iron ore/Oil and gas (under exploration)/Gold/Precious stones	Diamonds/Copper (75 per cent of copper produced in copperbelt is exported through Tanzania)/ Gypsum/Lead scrap/Mica unmanufactured/Salt/Tin concentrates
Zambia	Cadmium/Coal bituminous/Cobalt/Cobalt metal/Copper, smelter copper/Feldspar/Gold/Gypsum/Lead/Refined lead/Silver/Pyrites/ Zinc, slab zinc/Zinc unwrought/Selenium	Cobalt/Copper unwrought unrefined unwrought refined/Lead unwrought
Zimbabwe	Columbite-tantalite/Antimony/White arsenic/Asbestos chrysotile/ Beryl/Barium/Chromium ores/Coal bituminous/Cobalt/Copper, smelter copper/Feldspar/Fluorspar/Gold:Graphite/Iron ore/Pig iron/Smelter tin/Tungsten/Steel ignits + castings/Ferro-chrome, ferro-silicon-chrome, ferro-manganese/Kaolin/Lithium/Magnesite/Mica/Nickel/ Phosphate rock/Silver/Pyrites/Talc/Tin	Bentonite/Coal/Copper ore/Scrap iron + steel/Lithium/Mica unmanufactured/Salt/Columbite + tantalite/Asbestos/Chromium ore/Coal/ Copper unwrought/Pig iron, ferro-chrome, ferro-silicon-chrome, blooms + billets, scrap iron + steel/Magnesite/Mica ground/ Pyrites

Source: World Mineral Statistics, 1976-1980.

Production of Bauxite
(in thousands of tons)

Country	1976	1977	1978	1979	1980
Mozambique	5	2	-	-	-

Import of Bauxite, alumina, aluminium
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania unwrought (a)	3,427	-	4,734	...	...

Note: "unwrought" aluminium corresponds to item 684.1 of the standard international trade classification (Revision 2) and comprises ingots, blocks, unwrought bars, etc.

(a) including alloys.

Production of antimony
(in tons, metal content)

Country	1976	1977	1978	1979	1980
Zimbabwe	279	551	121	158	150

Production of white arsenic
(in tons)

Country	1976	1977	1978	1979	1980
Namibia (c)	5,122	2,615	2,401	2,221	2,000
Zimbabwe	139	201	129	-	79

Note: Output of Tsumeb Corp. only, trioxide equivalent of reported black arseni

Exports of unmanufactured asbestos
(in tons)

Country	1976	1977	1978	1979	1980
Swaziland	41,847	34,853	38,083	37,065	31,435
Zimbabwe	...	...	212,437	285,021	274,258

Imports of unmanufactured asbestos
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	2,570	...	...	...	...
Zambia	3,788	1,234	...	...	...

Production of barium minerals
(in tons)

Country	1976	1977	1978	1979	1980
Swaziland	368	-	-	-	-
Zimbabwe	1,480	2,798	878	449	195

Exports of barium minerals
(in tons)

Country	1976	1977	1978	1979	1980
Swaziland	369	-	...	...	...

Production of bentonite and fullers earth
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique bentonite	2,298	2,744	3,000	1,656	1,500

Exports of bentonite and fullers earth
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique (c)	1,760	2,474	...	...	...

(c) May include other clays.

Imports of bentonite and fullers earth
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	...	...	...	988	...

Imports of bromine
(in kilograms)

Country	1976	1977	1978	1979	1980
Zambia	-	158	...	...	...

Production of cadmium
(in tons)

Country	1976	1977	1978	1979	1980
Zambia	7	4	-	-	-

Production of chromium ores and concentrates
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	863,868	677,322	477,765	541,742	552,475

Exports of chromium
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe ore	...	...	...	11,463	...

Production of coal
(in tons)

Country	1976	1977	1978	1979	1980
Botswana	224,099	294,039	314,486	355,115	371,395
Mozambique bituminous	553,000	310,000	118,000	320,000	408,000
Swaziland bituminous	126,140	128,990	165,874	168,409	175,984
Tanzania bituminous	824	2,096	6,541	5,572	4,250
Zambia bituminous	772,513	708,077	615,145	598,507	568,799
Zimbabwe bituminous	3,678,776	3,029,477	3,065,804	3,186,433	3,133,036

Exports of coal
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	204,843	156,138	...	...	...
Swaziland	109,819	76,913	105,342	165.170	139,558
Zimbabwe	...	...	216,614	195,952	229,498

Imports of coal
(in tons)

Country	1976	1977	1978	1979	1980
Malawi	62,471	56,529	55,307	...	...
Mozambique	151,415	161,381	...	...	...
Zimbabwe	...	...	...	22,951	

Mine production of cobalt
(in tons, metal content)

Country	1976	1977	1978	1979	1980
Botswana	198	165	261	294	226
Zambia	2,175	1,704	2,063	3,176	3,310
Zimbabwe	-	-	17	204	115

Production of cobalt metal
(in tons)

Country	1976	1977	1978	1979	1980
Zambia	2,175	1,704	2,063	3,176	3,310

Exports of cobalt
(in tons)

Country	1976	1977	1978	1979	1980
Zambia	2,312	1,682	2,000	3,000	2,000

Mine production of copper
(in tons, metal content)

Country	1976	1977	1978	1979	1980
Botswana	12,473	11,788	14,615	14,563	15,554
Mozambique	2,000	3,000	300	200	-
Zambia	711,681	658,788	654,012	586,046	609,935
Zimbabwe	48,186	34,767	33,848	29,724	26,901

Smelter production of copper
(in tons)

Country	1976	1977	1978	1979	1980
Zambia (b)	705,900	658,500	653,900	595,100	601,348
Zimbabwe	23,500	28,000	34,200	31,400	26,700

Note: (b) Including leach cathods.

Exports of copper
(in tons)

Country	1976	1977	1978	1979	1980
Botswana					
ores + concentrates (b)	12,300	12,500	15,600	10,800	20,000
Zambia					
unwrought					
unrefined	21,105	8,128	25,604	20,911	3,173
refined	712,346	647,086	549,887	625,781	614,208
Zimbabwe					
unwrought	...	...	35,856	26,772	22,700

Note: (b) Cu content.

Production of Diamond
(in carats)

Country	1976	1977	1978	1979	1980
Angola	340,000	353,000	700,000	750,000	1,500,000
Botswana	2,361,000	2,691,000	2,799,000	4,394,000	5,146,000
Lesotho[a/]	7,051	22,688	48,977	52,421	53,714
Tanzania	431,601	507,294	295,117	341,912	269,876

Source: World Mineral Statistics 1976-1980

Note: a/ Exports

Imports of Diatomite
(in tons)

Country	1976	1977	1978	1979	1980
Zambia	472	1,022	570	321	...

Production of Feldspar
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	850	900	900	-	-
Zambia	517	832	789	91	475
Zimbabwe	3,029	896	726	1,085	1,263

Production of Fluorspar
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	690	522	312	-	-

Production of Gold
(in kilograms)

Country	1976	1977	1978	1979	1980
Angola	31	31	31	...	...
Zambia	341	207	259	247	257
Zimbabwe	12,086	12,506	12,414	12,063	11,493

Production of Graphite
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	8,064	8,017	5,655	5,737	7,365

Production of Gypsum
(in tons)

Country	1976	1977	1978	1979	1980
Angola	20,000	25,000	25,000	25,000	25,000
Tanzania	57,149	1,159	23,300	9,952	8,119
Zambia	4,650	4,634	1,734	1,180	-

Exports of Gypsum
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania	-	4,000	...	...	...

Imports of Gypsum
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
crude	6,952	3,994	...	...	...
calcined	14	19	...	...	...
Zambia	43	30	...	...	...
Zimbabwe	...	...	...	3,364	...

Production of Iron Ore
(in thousand tons)

Country	1976	1977	1978	1979	1980
Angola	5,500	5,500	...	...	...
Swaziland	1,936	1,441	1,266[a/]	494[a/]	-
Zimbabwe	1,352	1,176	1,123	1,201	1,622

Note: a/ Production from stockpile

Exports of Iron Ore
(in tons)

Country	1976	1977	1978	1979	1980
Swaziland	1,744,464	1,384,315	1,046,383	956,726	553,494

Imports of Iron Ore
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania	1,050	2,336	817	...	...

Production of Pig Iron and Blast Furnace Ferro-Alloys
(in thousand tons)

Country	1976	1977	1978	1979	1980
Zimbabwe					
Pig Iron	181	21	16	24	93

Production of Steel Ingots and Castings
(in thousand tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	733	734	778	740	800

Production of Ferro-Alloys
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe					
Ferro-chrome	182,303	149,786	139,046	175,306	194,630
Ferro-silico-chrome	29,943	17,044	-	25,116	25,116
Ferro-maganese	2,364	2,211	2,211	2,164	2,164

Exports of Iron, Steel and Ferro-Alloys
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
Scrap	8,487	...	...	...	...
Zimbabwe					
Pig Iron	...	...	...	7,594	...
Ferro-chrome	...	...	101,548	143,861	257,306
Ferro-silicon-chrome	...	...	101,548	27,088	257,306
Blooms and Billets	...	...	324,466	237,891	305,545
Scrap	...	...	...	4,685	...

Imports of Iron, Steel and Ferro-Alloys
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania					
Pig iron and Ferro-alloys	1,187	2,936	882	...	...
Ingots and Blooms	11,857	5,719	12,198	...	...
Zambia					
Pig iron	171	231	...	...	...
Ferro-alloys	604	709	...	...	...
Zimbabwe					
Ferro-chrome	...	...	...	1,234	...
Ferro-maganese	...	...	...	3,790	...

Production of Kaolin
(in tons)

Country	1976	1977	1978	1979	1980
Swaziland	989	-	-	-	-
Tanzania	2,385	77	7,345	12,468	7,434
Zimbabwe	4,346	4,543	1,017	2.686	4,450

Exports of Kaolin
(in tons)

Country	1976	1977	1978	1979	1980
Swaziland	989	-	-	-	-

Mine Production of Lead
(in tons, metal content)

Country	1976	1977	1978	1979	1980
Zambia	15,606	13,533	15,803	17,554	14,131

Production of Refined Lead
(in tons)

Country	1976	1977	1978	1979	1980
Zambia	13,493	13,400	12,701	12,758	10,047

Exports of Lead
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania					
Scrap	145	...	145	...	...
Zambia					
Unwrought	15,000	11,400	10,000	10,000	8,900

Imports of Lead
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
Unwrought	478	465	...	...	...

Production of Lithium Minerals
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
Lepidolite	730	-	-	-	-
Spodumene	25	-	-	-	-
Zimbabwe	40,722	8,050	16,688	13,197	21,030

Exports of Lithium
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
Lithium minerals[a/]	-	1,000	...	...	...

Note: IGS estimates, based on known imports into certain countries

Production of Magnesite
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	95,051	54,204	65,756	84,495	78,217

Exports of Maganese
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	...	...	...	57,055	...

Imports of Maganese
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania	...	...	165	...	...

Exports of Maganese
(in tons)

Country	1976	1977	1978	1979	1980
Angola Ore	32,000	...	...	...	...

Imports of Maganese
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe Ore	...	...	...	5,850	...

Production of Mica
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	900	800	900	250	200
Tanzania					
Sheet	10	4	15	9	3
Zimbabwe	1,832	3,670	2,764	1,275	1,022

Exports of Mica
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
unmanufactured	515	200	...	...	...
Tanzania					
unmanufactured	7	7	6	2	-
Zimbabwe					
ground	...	...	...	1,203	...

Imports of Mica
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania					
unmnaufactured	18	16	16	...	...

Mine Production of Nickle
(in tons, metal content)

Country	1976	1977	1978	1979	1980
Botswana	12,581	12,099	16,049	16,173	15,442
Zimbabwe	13,616	16,671	15,701	14,591	15,075

Imports of Nickel
(in metric tons)

Country	1977	1978
Malawi		
Nickel metal including alloys: Matte	...	20,216

Source: Minerals Yearbook 1982, Volume III, Area Reports

Production of Crude Petroleum
(in thousand tons)

Country	1976	1977	1978	1979	1980
Angola	5,093	8,920	7,060	7,270	7,610

Production of Natural Gas
(in million cubic metres)

Country	1976	1977	1978	1979	1980
Angola	2,000	2,500	2,500	2,500	...

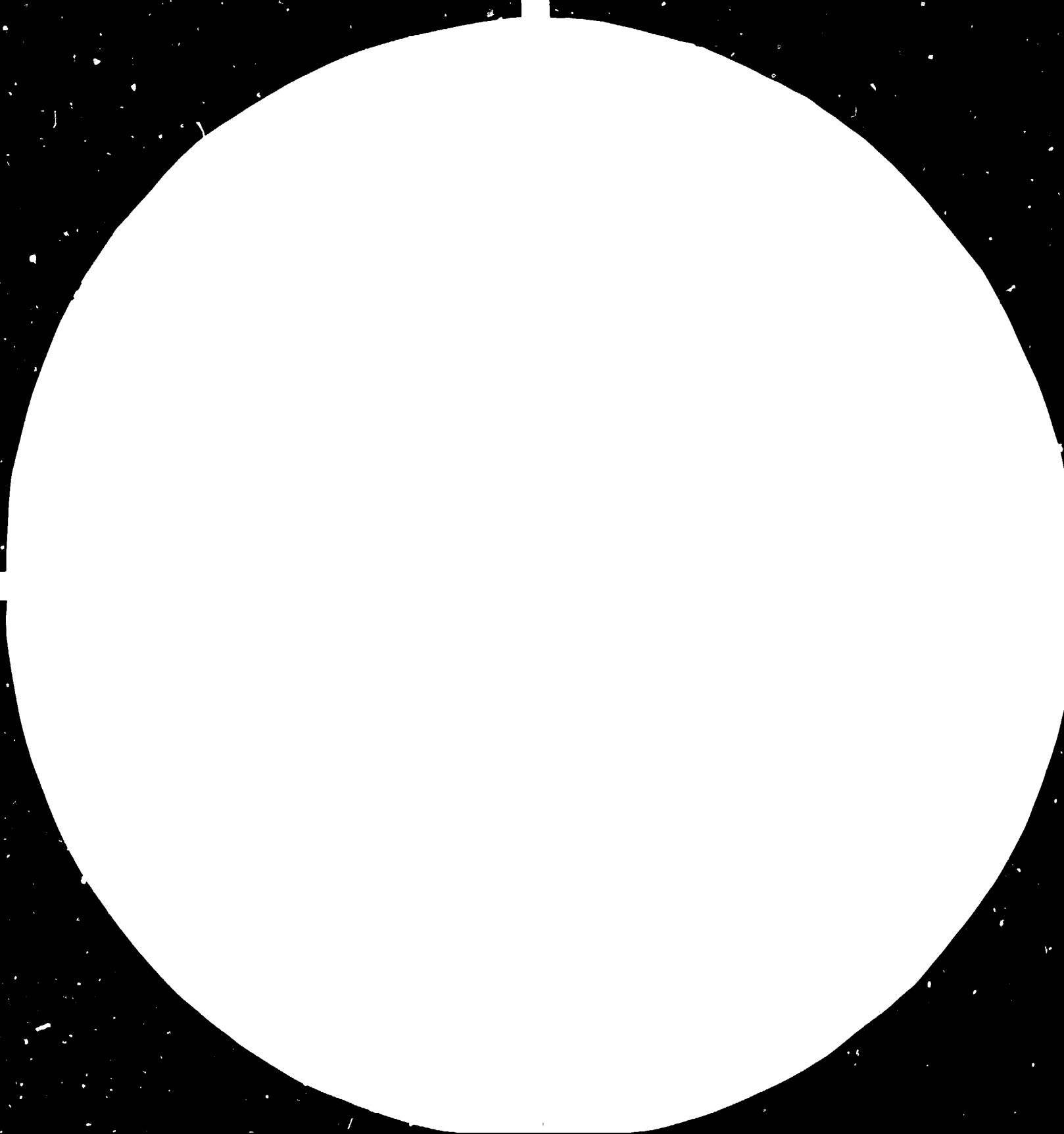
Exports of Crude Petroleum
(in tons)

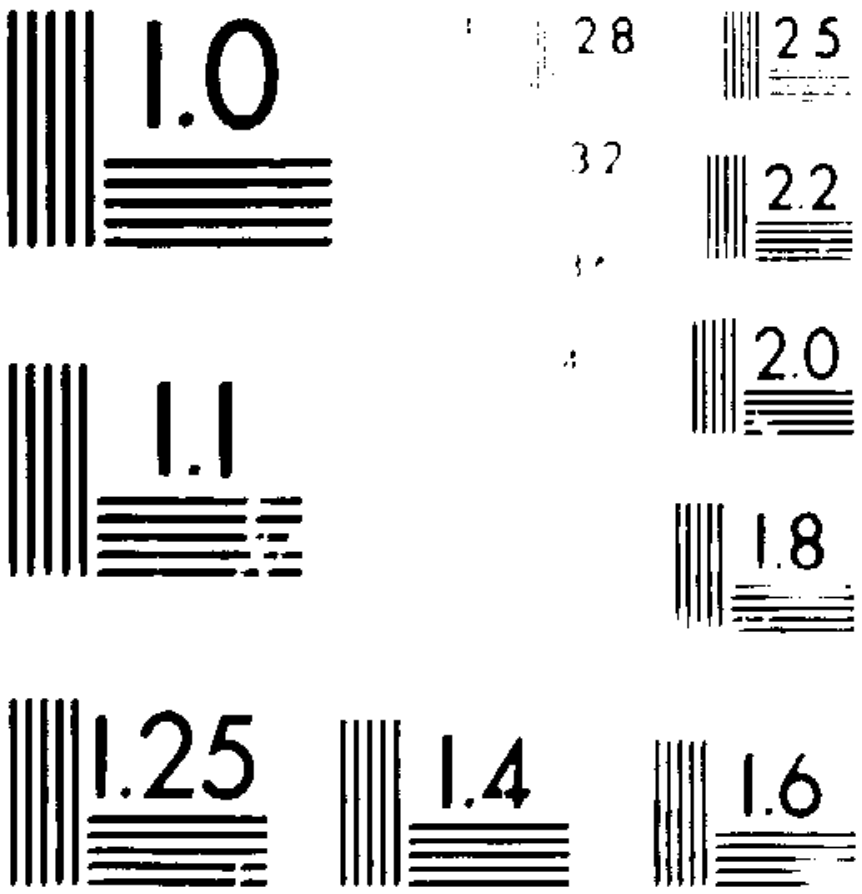
Country	1976	1977	1978	1979	1980
Angola	579,378	7,574,900	7,220,000	...	...

Imports of Crude Petroleum
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	360,760	327,317	...	...	...
Tanzania	957,211	710,000	1,106,452	...	...
Zambia	994,070	863,416	900,000	...	...


6.01.10
AD.87.04





Production of Phosphate Rock
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	110,554	104,800	106,639	136,238	130,337

Imports of Phosphate Rock
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	2,000	3,000	3,000	3,000	...
Tanzania	49,387	27,102	20,588	20,000	...

Imports of Platinum Group Metals
(in kilograms)

Country	1976	1977	1978	1979	1980
Zambia platinum	17	51	...	...	...

Imports of Potash
(in tons)

Country	1976	1977	1978	1979	1980
Angola					
sulphate[a/]	...	1,500	500	...	...
chloride[a/]	...	1,200	600	...	...
Malawi					
potassic fertilizers	140	-	1,568	...	...
Mozambique					
potassic fertilizers	2,514	3,291	...	...	...
Tanzania					
potassic fertilizers	5,695	11,718	...	...	...
Zimbabwe					
sulphate	...	...	...	21,815	...
chloride	...	...	...	28,644	...

Note: a/ K_2O contents

Production of Salt
(in tons)

Country	1976	1977	1978	1979	1980
Angola	50,000	50,000	50,000	50,000	50,000
Mozambique	28,000	28,000	28,000	28,000	28,000
Tanzania	46,441	39,118	33,993	34,352	36,734

Exports of Salt
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	1,921	558	...	...	...
Tanzania	9,141	6,825	6,816	15,554	17,111

Imports of Salt
(in tons)

Country	1976	1977	1978	1979	1980
Malawi	10,369	11,930	3,434	...	...
Mozambique	271	...	...	...	...
Tanzania	2,240	...	...	...	...
Zambia	13,091	38,316	...	...	...
Zimbabwe	...	...	...	47,603	...

Production of Silver
(in kilograms, metal content)

Country	1976	1977	1978	1979	1980
Zambia[b/]	33,100	24,903	33,261	28,417	23,752
Zimbabwe	6,228	6,442	34,505	30,418	29,681

Note: b/ Recovered as a byproduct of base metal refining

Imports of Silver
(in kilograms)

Country	1976	1977	1978	1979	1980
Zambia					
metal	46	82	...	...	...

Production of Sulphur and Pyrites
(in thousand tons, sulphur content)

Country	1976	1977	1978	1979	1980
Zambia					
pyrites (42%)	9	9	1	1	1
recovered	91	87	109	74	100
Zimbabwe					
pyrites (47%)	21	22	23	28	29

Exports of Sulphur and Pyrites
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe					
pyrites	...	...	...	5,776	...

Imports of Sulphur and Pyrites
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
sulphur	5,236	349	...	...	...
Tanzania					
sulphur	27,679	12,610	10,677	...	...
Zambia - sulphur					
crude	67	68	...	...	...
refined	16	-	...	...	...
preciditated	18	2,132	...	...	...
Zimbabwe					
sulphur	...	...	...	18,440	...

Production of Tall
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	1,909	1,415	758	1,170	456

Imports of Talc
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	140	217	...	...	...

Production of Tantalum and Nidoium (Columbium) Minerals
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique					
Tantalite (14%, 42%)	30	39	39	34	...
Microlite (4%, 55%)	56	40	40	32	...
Zimbabwe					
Columbite-Tantalite (11%, 28%)	19	30	31	30	41

Exports of Tantalum and Niobium
(in tons)

Country	1976	1977	1978	1979	1980
Mozambique	92	45	...	...	...

Production of Tin
(in tons, metal content)

Country	1976	1977	1978	1979	1980
Zimbabwe	914	920	945	969	934

Smelter of Tin
(in tons)

Country	1976	1977	1978	1979	1980
Zimbabwe	800	880	912	949	918

Exports of Tin
(in tons)

Country	1976	1977	1978	1979	1980
Tanzania concentrated	22	18	24	17	9

Imports of Tin
(in tons)

Country	1976	1977	1978	1979	1980
Zambia unwrought	53	14	...	...	...

Production of Tungsten
(in tons, WU_3 tst.)

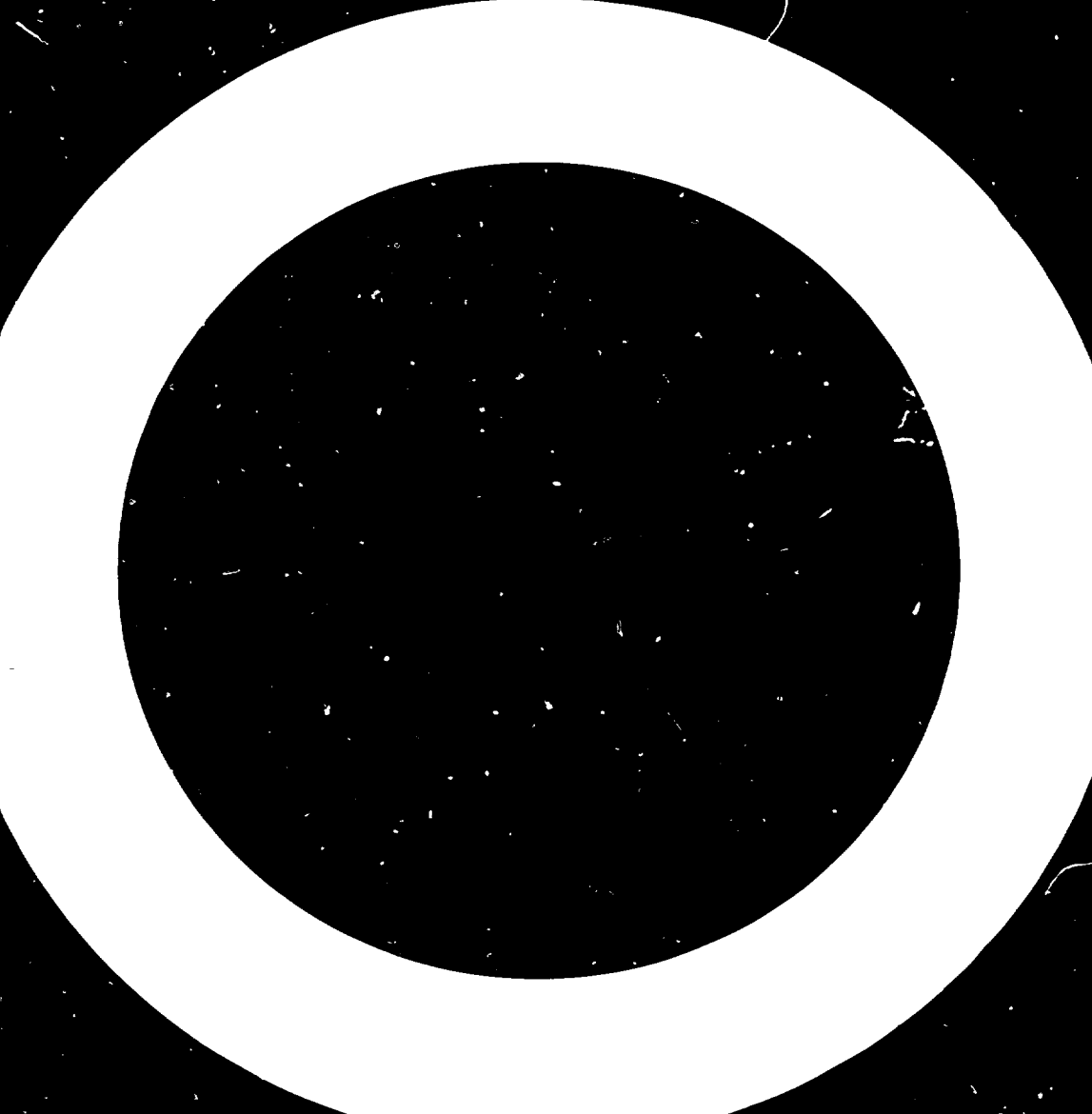
Country	1976	1977	1978	1979	1980
Zimbabwe	32	75	75	139	130

Mine Production of Zinc
(in tons, metal content)

Country	1976	1977	1978	1979	1980
Zambia	48,801	45,112	50,409	46,492	37,076

Production of Slab Zinc
(in tons)

Country	1976	1977	1978	1979	1980
Zambia	37,052	40,114	42,493	38,163	33,970



Angola

Angola's political problems are overshadowed only by its booming petroleum industry.

Despite its open market orientation and policital ties with Moscow and Havana, the national economy is wedded to the West. The reason is oil. With output running at about 150,000 bbl/d in 1980 and 1981, Angola is poised to eclipse Gabon as the second leading sub-saharan producer of crude. Anticipated 1982 liftings are 200,000 bbl/d, and oil Minister Jorge Morais nas predicted that production will reach 300,000 bbl/d by 1985. Judging from promising recent offshore discoveries, the Government thinks that output will approach 500 bbl/d before the end of the decade.

With little doubt, Angola intends to join OPEC, and has already applied for membership. Angola's links with the African members of OPEC are fairly strong: Gabon, Nigeria and Angola recently formed the largely symbolic West African Oil Producers Association, and Senegal is modeled after Sonatrach of Algeria, which has helped Angola negctiate petroleum agreements and provided technical assistance.

The seven operating Labinda oil fields, which account for some two-thirds of current output, are operated by Gulf, Teyalo and Petrangol, a joint operation between Petrofina of Belgium and the State-owned Sociedade Nacional de Combustiveis (SONANGOL).

The country's petroleum future, however, appears to be offshore Angola (as opposed to offshore Cabinda, a geographical enclave separated from the rest of the country by a strip of Zaire). All of the seven leases offered since 1979 have been taken by western oil companies. In 1981, the Elf Aquitaine-led consortium, which has a production sharing agreement with Sonangol, reported a major find. Cities Service and Marathon (both U.S. firms) signed a three-year production sharing agreement with Sonangol, in 1981. Three other concessions, the terms of which are not available, also were awarded in 1981 involving consortiums headed by Agid, Cities Service and Getty.

Except petroleum, the country's economy is bolstered by diamond mining. Together, crude and diamond exports account for more than 90 per cent of Angola's exports. Not surprisingly, the Government treats the diamond industry as its second economic priority. Production in 1981 had been estimated at 1.6 m carats, up 7 per cent from 1980 and almost

twice the output of 1979. The Government is pushing diamond production, (77 per cent of the equity is owned by the State), to reach 2 m carats by 1983. The remaining 23 per cent of diamond production is spread among western interests. Although the state-owned national diamond enterprise (ENDIMA) has the exclusive right to prospecting, exploring and trading in Angolan diamonds, the diamond trading company (owned by Anglo-American and De Beers of South Africa) provides essential managerial, technical and marketing services (and owns a 2 per cent share).

With the assistance of Austromineral of Austria, the Government intends to reopen the Kassinga iron ore mines before the end of 1983. Austromineral has the exclusive contract to produce 1.1 mx/y. In advance of new production, the Government sold 150,000 tons of ore (of pre-1975 stocks) to Voest-Alpine, the parent company to Austromineral, in 1981. The Austrian mineral firm also is executing a feasibility study for developing recently discovered high-grade hematite deposits in the central part of the country. The country exported 6 mtof iron ore in 1974 but the mines have been closed since 1975.

Angola's new phosate mine was scheduled to come on stream in 1982 as well. The phosphate Extraction Co. of Angola (FOSFANG) is a joint venture with Bulgareomina, the Bulgarian firm that operates the mine.

With the assistance of DANIDA (Denmark), the state-controlled CIMONGOLA plans to increase cement production to 650,000 tons in 1982 and more than 1 mx in 1983. CIMONGOLA is 53 per cent state-owned and 47 per cent owned by DANIDA.

Botswana

Botswana has achieved the most impressive growth record in black Africa since it became independent in 1966. This growth has mainly resulted from developments in the country's mining sector, where a number of large investments have had a disproportionate effect upon Botswana's relatively small economy. Mining now accounts for about one-third of GNP and accounted for nearly 42 per cent of GNP growth in 1980-1981.

Diamonds dominate the mining sector, accounting for about 60 per cent of exports and a large proportion of Government revenue. The other major mining products are copper and nickel from the Selebi-Pikwe mine and coal from the Moropule colliery.

Speaking in November, President Quet Masire said that Botswana had anticipated selling some P240 million of diamonds in 1981, but in the event it would be fortunate to sell P140 million. No diamonds were exported in the final two months of 1981, and for the first time on record, diamonds (worth about P120 million) were stockpiled in the country. During the year DeBeers imported quotas on its main producing countries in order to slow purchases in the face of depressed markets. This obviously had a severe impact on Botswana's export earnings. This situation has persisted, and it would appear that only about 50 per cent of the country's current diamond production is being sold.

The country's coal sector offers enormous scope for expansion since total reserves have been estimated at 20,000 - 30,000 Mt. At present, however, proposals for expansion are strapped by transport constraints, and although keen to develop a trans-Kalahari railway to the Namibian coast, plans remain in something of a limbo pending a solution to that country's political problems.

The project would require the laying of some 850 km of track to link with the Gobabis-Walvis Bay line in Namibia, at an estimated cost in excess of $800 million. The Government has carried out pre-feasibility studies on such a project which shown that coal exports of 10 mH/y would

make the railway link a viable proposition.

Meanwhile, the Government has formed a partnership with Shell Coal International to develop a new coal mine near Serowe in the Moropule area by the mid-1980s.

Although the Selebi-Pikwe operation of BCL appears to have solved its technical difficulties, the financial problems remain and low base metal prices during 1981 did nothing to improve the burden on Botswana RST, the 85 per cent owner of BCL. The mine/mill/smelter is now operating well and is reported to be proving a very low-cost producer of both copper and nickel.

Amax, which has a 30 per cent stake in Botswana RST, is contracted to take the whole of BCL's annual production of nickel-copper matte for processing at its port nickel refinery in Louisiana. However, because of prevailing weak demand for nickel and rising metal stocks, Amax asked BCL in mid-1981 to agree to a 25 per cent reduction in matte sales to Amax to an annual rate of about 30,000 t for the next 27 months. This was sought in order to mitigate the cost to Amax of maintaining large and costly nickel inventories in the current climate of high interest rates. Amax also sought a revision of the nickel pricing formula under which the matte was sold.

At this juncture it would appear that Amax and the Botswana Government are still negotiating a revised price formula for the matte sold to Amax. More ominously, Amax is reported to have consulted with the Anglo-American Corporation of South Africa (which has a 30 per cent stake in Botswana RST) over the possible closure of the Selebi-Pikwe mine if negotiations with the Government are unsuccessful. Anglo would be extremely reluctant to agree to such a move in view of the serious implication it could have for the diamond mining agreement between De Beers and the Botswana Government. The Selebi-Pikwe mine is disproportionately important in the mining sector in that it provides nearly 5,000 jobs, far more than the diamond operations. However, some progress appears to have been achieved when a bill naming the Botswana Government as guarantor of Selebi-Pikwe was passed in the National Assembly in April 1982.

Exploration work within the Pikwe, Selebi and Selebi North mining areas continued in 1981 with 80 per cent of the holes drilled intersecting ore grade mineralisation. A proportion of the surface diamond drilling programme is now being directed towards infill holes with the aim of proving additional reserves. At Selebi North emphasis has switched towards under-ground exploration in order to provide more detailed knowledge of the complex structure of the ore body in that area and also to provide a bulk ore sample for metallurgical testing. Falcondbridge minerals, a subsidiary of the Canadian Nickel Concern., is reported to have discovered silver mineralisation near Francistown. However, no details have been revealed.

Lesotho

The mining industry is limited to the exploration of a number of diamond bearing kimberlite pipes high up in the Maluti Mountains, while many Lesotho nationals are employed on the gold and coal mines of South Africa, particularly those in the Orange Free State and Natal. The remittance of the salaries of these workers is an important factor in the Lesotho economy as a whole.

Diamonds represent the main export of Lesotho, and in view of the poor market conditions that have prevailed during the past 18 months or so, it is not surprising that customs revenue should have shown a sharp decline in 1981. The country's diamond mining industry is centred upon the Letseng-La-Terai property which is operated by De Beers Lesotho Mining Co., 25 per cent of whose equity is owned by the Lesotho Government.

During 1981, the tonnage of kimberlite material milled fell slightly to 1.89 mt. This decline was attributed to two prolonged interruptions to the power supply serving the mine caused by severe icing and the consequent failure of the transmission line. In addition, there was a marginal fall in recovery grade to 2.80 ct/100t (2.82 ct/100 t in 1980) although the grade improved in the final quarter of the year to 3.04 ct/100t. Diamond production amounted to 52,921 ct, 793 ct less than in 1980, with diamonds larger than 10 ct representing 12 per cent of total production as compared with 13 per cent in 1980.

In May 1982, De Beers announced that the mine had been running at a loss for some time because of the weak demand for the particular type of stone recovered at Lesteng. Accordingly, the mine would be closed down in the near future.

Malawi

Enactment of a new mines and minerals act in March 1981 ushered in an era, which the Government hopes will increase the tempo of mineral exploration and exploitation. There are three categories of licences in the Act geared to low, medium and high cost operations. Mineral permits cover "grass roots" hand digging of building materials, while non-exclusive prospecting licences and mining claims are designed for small prospectors and miners.

Large-scale exploration and mining activities fall under the third category - mineral rights. These comprise reconnaissance, exclusive prospecting and mining licences and are granted and renewed by the minister. A reconnaissance licence is valid for one year, is renewable and can cover an area of up to 100,00 k^2. An exclusive prospecting licence is issued for three years with a right to two successive periods of renewal each of two years. An exclusive prospecting licence also carries a right for the holder to be granted a mining licence, if he is successful in proving a viable deposit. A mining licence is valid for a period of up to 25 years and carries a right of renewal for an additional 15 years under certain specified conditions.

An agreement has been signed with a major oil company to enable it to carry out airborne geophysical work over parts of the rift system. The results of shipborne seismic work on Lake Malawi have indicated that surprisingly thick sequences of sedimentary rocks are developed under wide areas of the lake bed raising its status as an oil-exploration target.

Coal drilling in the Kapembe Hills, Ngana coalfield, was completed and initial estimates of drill indicated reserves are 9 mt. over 60,000 t of coal are indicated at the small Lufira coalfield. It is now speculated that the 700 km Karonga Plain in Northern Malawi in which the Cufira field is located, and adjacent areas of Lake Malawi, may be underlain by additional coal resources.

The geological survey started evaluating a large marble deposit at Chankumbi, near the railway town of Balaka, in response to increasing enquiries from traditional lime makers for suitable areas to expand their operations. The lime makers' interest was spurred by the knowledge that over Mwk 0.5 million worth of lime was imported in 1980 for the refining of sugar.

Lonkho (Malawi) Ltd. reported a break through in its research to reduce iron impurity in strontianite and monozite concentrates below required customer's specifications. There was, consequently, some optimism that exploitation of the large Kangankunde carbonatite deposits would finally go ahead.

British Gypsum Ltd. registered a local subsidiary company known as BPB (Malawi) Ltd. to mine vermiculite at Kaphirikamodzi, about 30 km west-north-west of Blantyre. A production plant has been erected. The mining rates will, however, be at a low level until the transport routes for exporting the vermiculite to Europe have been fully tested.

Mozambique

Mozambique remains economically dependent on trade and commercial links with the south. The Government hopes to attract capital and aid. The country's situation is complicated by the activities of the Mozambique resistance movement (MRM). It has been effective in disrupting trade and transportation links around the country's leading ports, Maputo and Beira. These ports and connecting routes are the life-line of the country and a key to economic development in the nation and region.

The country's mineral sector remains a frontier of hopes but unproven performance. The only mineral produced on a significant scale is coal. Drawing upon its rich Moatize coal field, the country is a net coal exporter. Mine production for 1981 has been estimated in excess of 500,00 t, up more than 25 per cent from 1980. Proven reserves are approximately 400 mt.

The German Democratic Republic plays an important role in the financing and operating of the Moatize deposits. In 1981, Carbomoc, the state coal company, entered into an agreement with Brazil to boost the African country's coal output. With the help of OPEC capital, the plan calls for upping Mozambique's annual coal production to 6 mt and eventually to 12 mt. For a number of years, at least, this will remain more a distant ambition than a reality.

The Direccao Nacional de Geologia hopes that minerals prospecting/surveying will yield promising results. In the north-western part of the country Czechoslovakia has agreed to prospect for iron, tin, gold, feldspar and wolfram. A Yugoslavian firm has contracted for general prospecting in six provinces. BRGM, ENI, and Hunting Geology and Geophysics Ltd. are also investigating Mozambique's suspected minerals potential, as is the Soviet Union.

Mozambique is a minor producer of gold, copper and colombo-tantalite and cement. Other mineral reserves include bauxite, asbestos, phosphates and mica.

The 1980 Ten-Year Plan has not been available so far. There have been reports that the Government hopes to develop a steel and aluminium industry using domestic ores and energy. The country is striving to cultivate petroleum and natural gas exploration and production. The Pande gas field, the rights to which are owned by Amoco, has reserves estimated at 2 trillion ft. Pande gas could be used to fuel the proposed steel works. In addition luor has received a contract to conduct a feasibility study on the construction of an ammonia/urea fertilizer plant using gas from Pande.

Offshore oil exploration, which dates back to 1967, is being conducted by GECO of Norway and Western Geophysical Co. of the U.S. Following close collaboration with Algerian oil experts from Somatrach, Mozambique recently enacted new oil legislation. Exploration and production licences are the exclusive domain of Empresa Nacional de Hydrocarbonetos de Mozambique. Foreign firms can participate in oil development via production sharing, joint ventures, or service agreements. In all instances, exploration risks are to be borne by the foreign firm, to be recovered from future production at cost.

Swaziland

Since production of iron ore stopped in 1979, Swaziland's major mining products have been asbestos and coal, together with a variety of industrial minerals.

Asbestos remains the main foreign exchange earner followed by coal. However, the remaining reserves at the Havelock Asbestos Mine are limited and the property will probably close down in a few years.

Coal offers the best potential in the longer term, with reserves currently estimated at about 1,000 mt of which about 200 mt are of good quality. However, production is rather limited, amounting to about 150,000 t in 1981, of which about 50,000 t is exported annually, mostly to Kenya with lesser quantities going to Mozambique. Transport links are a limiting factor in this respect, particularly the existing link to the Mozambique port of Maputo and the operation of that port itself. More recently, Swazi Railways is reported to have announced plans to build a new rail link from the Mpaka mine to Conwect with Komatipoort.

The major coal mine is the Anglo-American controlled Mpaka Colliery, which produced 148,904 t in 1981.

It currently exports about 24,000 t annually to Mozambique and there is scope for further expansion of this market as well exploiting a potential export market to Israel.

Shell Swaziland is reported to have discovered deposits of anthracite in the Malume region. Though at relatively shallow depth, the geological structure and the fact that the locality is an important sugar growing region, will require that any mining operation be from underground and not by opencast. Any project based on these deposits remains at the infant stage, but an 500,000 t/y project is a possibility. Amongst other targets for mineral exploration by the Geological Survey and Mines Department are gold and base metals, whilst the evaluation of residual tin deposits is believed to be continuing.

Tanzania

In an effort to boost the economy, the newly formed Ministry of Mines announced in September 1981 that it was embarking on short, medium and long-term mineral developments. Thus, in the Mwanza region the Geita (Buck Reef) Gold Mine was scheduled for reopening at Lupa (Chunya) and is already producing. Between them both mines could eventually yield 400 kg/y.

Although not itself a copper producer, Tanzania handles about 75 per cent of the copper produced on the Zambian copperbelt (1981: 564,000 t), most of which is transported by the Tazara Railway to the port of Dar-es-Salaam. Potentially an important source of earnings for Tanzania, the Tazara Railway was once more faced by a shortage of engines and rolling stock during 1981 and this, combined with severe bottlenecks at the port, led to a substantial build-up of stocks at the Zambian mines and a consequent reduction in the allocation of copper routed through Tanzania. In mid-year, plans were announced to increase the number of railway engines by 50 per cent.

There are no mineral production or export figures yet available for 1981, but according to Government figures, the value of mineral exports in 1981 (principally diamonds) fell by 17 per cent to Tsh 284.4 m (Tsh 19.5 = £1.00), whereas diamond exports rose by 16 per cent to more than 270,000 ct. Production of coal and gypsum showed little change at 5,417 t and 9,354 t respectively.

There was a slight rise in salt output to 36,796 t, but tin concentrate production fell from 18.7 t to 10.6 t and there was also a sharp fall in gold production to 1.3 (8.95) kg and production of precious stones - down from 1,011 kg to 80 kg. Among the industrial minerals, production of both kaolin and limestone fell sharply.

Zambia

President Kenneth Kaunda of Zambia announced at a press conference on 15 May 1981 that the two state-controlled mining companies, Nchanga consolidated copper mines and Roan consolidated mines would be merged into a single company, Zambia Consolidated Copper Mines Ltd. This took effect on 1 April 1982.

It was the last stage in a process which began in August 1969 when the government announced its intention of taking a 51 per cent share-holding in each of the two companies then controlling the copperbelt mines. It was followed in August 1973 by negotiations to terminate the management agreements with the Anglo-American Corporation and Amax Inc. which had resulted from the 1969 take-over, and in 1974 and 1975 the first Zambian managing directors of the companies were appointed.

The new company inherits the ore reserves of RCM (MUFULIRA, LUANSHYA, CHIBULUMA and KABWE mines). The wholly and partially developed reserves of RCM are 35.9 mt at 2.84 per cent Cu, including 4.9 mt at 0.16 per cent CO . Indicated and potential ore reserves would last 25 years at current rates of extraction. The wholly and partially developed reserves of NCCM are 57.7 mt of ore containing an average of 3.83 per cent cu, including 23.5 mt with an average cobalt content of 0.17 per cent. Indicated and potential copper/cobalt reserves should last 40 years at current extraction rates.

Kabwe, Zambia's oldest operating mine (1960) has reserves of 1.2 mt at 11.1 Pb and 23.1 per cent Zw. The Government has undertaken to provide a non-taxable subsidy of about £3 million in any year in which it makes a loss.

Zambia is landlocked and thus almost entirely dependent on neighbouring countries for the transport of its export-import trade. During the financial year which ended on 31 March 1981, exports of copper were satisfactory with little disruption of traffic. Capacity on the rail and road routes through Tanzania to Dar-es-Salaam improved and this permitted a reduction in the use of the more costly southern route through South Africa which accounted for only a third of the total copper shipped

compared with more than half in the previous year.

There was an industry-wide strike on the copperbelt in January 1981 with a loss of about 1.3 m man-hours and some production.

The 1979 agreement with the mine-workers union of Zambia was revised to provide salary increases up to 11 per cent and better leave entitlements. The companies also agreed in principle to establish a pension scheme for union represented employees whose previous scheme was ended in 1966 with the establishment of the Government's National Provident Fund. It is intended that the new pension scheme will also cover expatriate and senior Zambian employees.

Early in 1982, the Zambian Industrial and Mining Corporation (ZIMCO), announced the discovery of large phosphate deposits at Kaluwe, 220 km east of Lusaka where carbonatites contain an estimated 200 mt of relatively low grade reserves. At Chilembwe, in Petauke district, east province, 2.0 mt of very high grade apatite ore reserves have been discovered with the P_2O_5 content ranging as high as 15 per cent to 25 per cent. ZIMCO is expected to make an early start on the exploitation of one or both of these projects.

At present the whole of Zambia's phosphate requirement (around 50,000 t/y) is imported at a cost of some $20 million.

In the energy sector, a Canadian consortium is due to start an oil search in the Zambezi River basin area of western province and in the Luangwa River Valley. These programmes are expected to cost $20 to $30 million. A team from the World Bank has also visited Zambia with a view to setting up K8.0 million oil exploration programme over a three-year period beginning in 1982. According to the prescribed minerals and materials commission, K8.0 million was spent on uranium exploration in 1981 by AGIP of Italy, COGEMA of France, SAARGERG INTERPLAN of West Germany and Power Reactor Nuclear Fuel Development of Japan.

Zimbabwe

Official figures of the value of mineral production in Zimbabwe in 1981 indicate a 5 per cent fall when compared with the previous year's value of $Z 415 million which was, in its turn, a record for the 17th successive year. Asbestos production represented $Z 91 million, an increase of $ Z20 million, and tin $ Z11 million, an increase of $ Z3 million. The value of most other major metals fell including gold which was worth $ Z117 million. The statistics do not include ferrochrome or iron and steel which are regarded as part of industrial production.

There seems to be no doubt that some of the producers did not sell their entire production in 1981 so that the total revenue available to the industry was probably between 10 and 15 per cent lower in Zimbabwe dollar terms than the previous year.

This has serious repercussions for mining in Zimbabwe because costs have been rising fast. In particular, for example, legislated minimum wage increases since 1980 and other consequential wage and salary adjustments have cost and industry over $ Z100 million more in 1982 than they did in 1980. In addition, interest rates were increased during 1981 and with the larger stockpiles and heavier borrowing in the industry, the debt service charge is a cause for concern.

On the legislative front, 1981 was a year for concern for the industry. The budget sought to remove the depletion allowance and reduce the 100 per cent capital investment allowance. After representations by the industry, these proposals were deferred for a year and a provision has now been made whereby new mines may be described as growth points in which event they will rank for the full investment allowance. The effect of these incentives on the cash flow of mining companies can make the difference between deciding to invest or not to.

The most contentious issue of 1982 has been the decision to set up a Government Minerals Marketing Authority which will in due course take over the marketing of all the country's minerals. The industry has been most critical of these proposals but the bill has now been through Parliament,

and it is expected that the Authority will start its work in April 1982. The act gives the Authority very wide powers but the Minister of Mines and his colleagues have indicated recently that they appreciate the complexities of metal marketing and will not rush to take over. They have also asked the mining companies to co-operate, which they are obliged to do because the Authority has legal powers, but also they obviously would wish to do so, so that they and the country get the best value for their products.

The Government has also confirmed its intention of setting up the Zimbabwe Mining Development Corporation in July 1982 with the aim of opening new mines and taking a share of existing mining ventures. However, since funding will be a prime consideration, and the Government finances are already limited, the mining industry is not expecting any immediate reaction in this regard.

ZIMBABWE

Mineral production

Commodity	Unit	Volume	Value (in thousands of Zimbabwe dollars)	Volume	Value (in thousands of Zimbabwe dollars)
Asbestos	Tons	250,900	70,201	247,600	91,279
Gold	Ozens	367,000	144,875	371,000	117,380
Chrome ore	Tons	553,500	16,447	536,100	20,405
Coal	Thousands of tons	3,134	28,001	2,867	29,469
Copper	Tons	27,000	35,370	24,600	27,900
Nickel	Tons	15,074	55,571	13,018	51,733
Iron ore	Thousands of tons	1,622	14,815	1,006	14,841
Silver	Ozens	949,000	13,003	857,000	5,998
Cobalt	Tons	115	2,725	94	1,415
Tin metal	Tons	934	9,870	1,157	11,279
Other[a/]		-	21,862	-	21,827
Total			414,759		393,526

Source: Mining Annual Review, 1982.

a/ Mainly precious stones, tantalite, magnesite, limestone and lithium.

Appendix B

BRIEF NOTES ON AGRICULTURE IN THE SADCC REGION

Introduction:

All the SADCC countries are dependent on agriculture for their social and economic development in varying degress. But by and large, in all the countries, a large part of the population (more than 70 per cent) still get their means of livelihood from the land. Industrial development in all the countries will partly involve processing of agricultural resources or production of inputs - machinery and intermediate goods for agricultural development.

Agriculture is therefore the "foundation" without which industrial development cannot be sustained. This applies even for the mineral rich countries.

For all the SADCC countries therefore, land redistribution and agrarian reform are necessary prerequisites for the creation of larger markets for manufactured goods (both intermediate and consumer goods). In the rural areas where the majority of the population in the SADCC region are still living, agro-industrial development, spanning the two sectors and often with good prospects for export need to be given greater emphasis. Already in the current development plans of all the SADCC countries the rural sector is given significant emphasis if this is measured in terms of resource allocation.

In the SADCC region, without an increase in agricultural productivity, it seems doubtful that the momentum of production can be maintained in industry in the larger run. The decline of agricultural production in recent years in the SADCC region therefore is increasingly threatening

the very survival of industry, which partly due to this decline is presently starved of foreign currency to import the required inputs and parts that are crucial for its effective operation. As a result of this, already there is a lot of excess capacity in industry.

In Tanzania, for example, there is even a danger of industries, particularly textiles, running short of raw materials and other inputs if all other factors of production are efficiently organized because of the sharp decline in the production of cotton in recent years. There is already idle capacity in the cashew processing industries explained by the sharp decline in production.

Efforts are being made in all the countries to revive agriculture. In Lesotho, for example, agriculture is subsidized with the primary purpose of creating the foundation for industrialization. In this way it is envisaged that the productivity of agriculture, presently very low as a result of overpopulation and extensive labour exports to South African mines, will be significantly raised.

The notes below show the principal crops grown in the different countries in the region as well as the livestock and livestock products. Then details of exports from each of the countries is indicated showing the agricultural component of the exports. The notes could be used as a basis of indicating the extent to which co-operation in agro-based industrializing in the SADCC region could be envisaged

Angola:

Principal crops: Include Coffee, maize, sugar, palm oil and palm kernels. Other products - cotton, wheat, tobacco, cocoa, sisal and wax.

Livestock: (1976) 3m cattle, 200,000 sheep, 900,000 goats, 400,000 pigs.

The data presented for Angola is not by any means comprehensive. It is largely spot data based on available statistics. The production statistics are largely FAO or unofficial estimates mostly covering the period from 1976, the year of independence, to 1978.

In recent years, production performance has been disrupted by the war of liberation and the subsequent civil war that followed independence.

Table 1 summarizes the production of principal crops for the years 1976 - 1978. Table 2 shows FAO estimates of principal livestock products for the years 1976 - 1978.

Table 1 : PRINCIPAL CROPS

	AREA HARVESTED ('000 hectares)			PRODUCTION ('000 metric tons)			YIELD (100 kg per hectare)		
	1976	1977	1978	1976	1977	1978	1976	1977	1978
Wheat	13‡	13‡	13‡	13*	10*	10*	10.0‡	7.7‡	7.7‡
Rice (Paddy)	20‡	20‡	20*	25*	25*	20*	12.5*	12.5*	10.0*
Maize	600‡	600‡	600‡	450‡	350‡	400‡	7.5*	5.8*	6.7*
Millet and sorghum	93‡	80‡	80‡	80‡	50‡	50‡	8.6*	6.3*	6.3*
Potatoes	5*	6*	6*	35*	40*	35*	64.8*	72.7*	63.6*
Sweet potatoes, yams	18*	18*	18*	165*	170*	170*	91.7*	94.4*	94.4*
Cassava (Manioc)	120*	120*	120*	1,740*	1,760*	1,700*	145.0*	146.7*	141.6*
Dry Beans	120*	120*	120*	70*	72*	65*	5.8*	6.0*	5.4*
Groundnuts (in shell)	40*	40*	40*	20*	25*	20*	5.0*	6.3*	5.0*
Sunflower seed	13*	15*	15*	10*	13*	10*	7.7*	8.7*	6.7*
Seed Cotton				39*	36*	39*	6.4*	5.9*	6.4*
Cottonseed	61*	61*	61*	26‡	24‡	26‡	4.3*	4.3*	4.3*
Cotton (lint)				13‡	12‡	13‡	2.1*	2.1*	2.1*
Palm Kernels	n.a.	n.a.	n.a.	12*	13*	12*	n.a.	n.a.	n.a.
Palm Oil	n.a.	n.a.	n.a.	40*	42*	40*	n.a.	n.a.	n.a.
Vegetables	n.a.	n.a.	n.a.	206*	212*	219*	n.a.	n.a.	n.a.
Citrus fruit	n.a.	n.a.	n.a.	80*	85*	80*	n.a.	n.a.	n.a.
Pineapples	n.a.	n.a.	n.a.	25*	25*	20*	n.a.	n.a.	n.a.
Bananas	n.a.	n.a.	n.a.	300*	320*	300*	n.a.	n.a.	n.a.
Sugar cane	15*	16*	17*	530*	700*	720*	353.3*	437.5*	423.5*
Coffee (green)	200*	200*	200*	72‡	72‡	54‡	3.6*	3.6*	2.7*
Tobacco	6‡	6‡	6*	7‡	3‡	3‡	11.4*	5.0*	5.0*
Sisal	30*	30*	30*	25‡	20‡	20‡	8.3*	6.7*	6.7*

* FAO estimate ‡ Unofficial estimate

Source: FAO, Production Yearbook

Table 2: LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	48	49	50
Goats' meat	3	3	3
Pig meat	12	12	12
Poultry meat	7	7	7
Other meat	5	7	6
Cows' milk	140	143	144
Butter	0.7	0.7	0.8
Cheese	2.0	2.3	2.3
Hen eggs	3.5	3.5	3.6
Cattle hides	6.6	6.7	6.8

In the principal commodities traded in 1978, coffee came second to crude oil in 1978. Between 1971 and 1973, coffee was the highest export earner. Other significant agricultural exported included raw cotton, sisal, maize, palm oil, tobacco and tobacco products, bananas, and dried beans. In 1973 these products accounted for 37 per cent of the export earnings. Table 3 shows the value of principal exports in 1971-1973.

Table 3: PRINCIPAL EXPORT COMMODITIES

EXPORTS	1971	1972	1973
Coffee	4,026,355	3,834,941	5,090,130
Crude Petroleum	2,157,393	3,535,396	5,755,586
Diamonds	1,523,239	1,583,059	1,999,551
Iron Ore	1,187,495	1,011,666	1,210,823
Raw Cotton	649,201	284,210	619,602
Sisal	221,537	338,937	467,928
Fish Meal	211,639	530,663	740,120
Wood	169,181	174,961	266,988
Maize	181,809	142,760	249,969
Fuel Oil	155,465	93,146	129,279
Dried Fish	125,912	138,844	74,575
Wood Pulp	114,636	111,309	123,787
Palm Oil	62,849	44,643	15,922
Tobacco and Products	62,666	61,245	246,081
Fresh Fish	114,979	227,998	348,972
Bananas	174,806	264,082	313,132
Dried Beans	77,944	76,426	118,945
Excavating Machinery	35,258	430,385	n.a.
Motor Spirit (Petrol)	291	70,460	70,776
Cement	29,208	47,215	101,083
Fish Oil	n.a.	63,079	85,937
TOTAL (incl. others)	12,147,051	13,923,273	19,158,291

Source: Africa: South of the Sahara 1980-1981

Tables 4 and 5 show the details of the principal exports and imports of Angola. The import list includes a significant amount of processed food showing a significant low development of food processing industries.

Table 4: DETAILS OF EXPORTS

Commodity Description	
Fresh fish, frozen or chilled	Tubes and other materials of cementile fabrics
Fish salted	Ceramic setts
Horns, hooves, nails not cut to shape	Sinks, wash basins, bidets and other sanitary fixtures
Coffee	Table wares and other articles of porcelain
Oil seeds	Iron tubes for concretes
Fish oil n.e.s.	Salt (refined and unrefined)
Glasses	Quartz
Alcoholic beverages n.e.s.	Marble
Flours of fish	Granite
Bran, sharps derived from milling or working cereals and leguminous vegetables	Cement
Bagasse of groundnuts	Crude Petroleum oil
Hides (dried) of bovine animals	Varnishes, paints
Hides and skins unspecified	Artificial and manufactured wax without solvents
Plastic articles	Prepared glues n.e.s.
Wood in the rough	Polymerization cellulose products (PVC)
Wood transformed	Rubber tyres for motor vehicles
Sisal, raw	
Sisal cordages	
Sacks of synthetic rafia	

Table 5: DETAILS OF IMPORTS

Commodity Description	
Meat of bovine animals	Antisera and microbial vaccines
Condensed milk	Medicaments
Butter	Soap
Cheese	Articles of unhardened vulcanized rubber n.e.s.
Haricot	Exercise books
Tea	Cotton fabrics not bleached
Maize	Cotton bleached or dyed
Rice	Outer garments - mens, women's, girl's and boy's etc.
Wheat flour	Footwear
Palm oil	Shoes of all types (leather, rubber, plastic)
Groundnut oil	Bottles
Soyabean oil	Copper wire, bars, rods, profiles, etc.
Cotton seed oil	
Sunflower oil	
Other prepared or preserved or meat offals	
Sugar unrefined and other products of beet and cane sugar	

The Potential for growth in Agro-based Industries

Angola has a great potential in augmenting agricultural production both in food and other crops. There is enormous potential for further development of food processing industries and further processing of the export crops - sisal, cotton, sugar, bananas, palm oil, palm kernes, cocoanuts, beans, tobacco, millet, sorghum, tropical and temperate fruits, cocoa and groundmils.

Botswana:

Botswana is essentially a mineral rich country. With semi-arid conditions in large parts of the country, it produces very limited agricultural crops. The principal crops are maize, millet, sorghum, roots and tubes, pulses and groundnuts. The production of the above crops in recent years, 1977, 1978 and 1981 is summarized in table 6 below.

Table 6 . PRINCIPAL CROPS

	Production ('000 metric tons)		
	1977	1978	1981
Maize	35	45*	19.8
Millet	5*	5*	1.8
Sorghum	33	55*	31.8
Roots and tubers	7*	7*	-
Pulses	16*	18*	3
Groundnuts (in shell)	7*	7*	2

Source: FAO: Production Yearbook
* FAO Estimates

There was a drastic fall in production of all the crops in 1981. This was a radical departure from the previous record, in particular of maize and sorghum, the principal staple crops. In the years 1974-1977 production of both the crops more than doubled.

Maize:	1974/75	-	28, 677 (metric tons)
	1975/76	-	62, 134
	1976/77	-	64, 300
Sorghum:	1974/75	-	33, 843 (metric tons)
	1975/76	-	55, 540
	1976/77	-	77, 600

Livestock products: The production of livestock products remained more or less constant between 1976 and 1978. Table 7 below shows the production of various products.

Table 7 . LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	44	41	45
Mutton and goat meat	5	5	5
Cows' milk	75	81	84
Hen eggs	0.5	0.5	0.5
Cattle hides	5.3	4.9	5.0

Source: FAO, Production Yearbook

Livestock products, mainly meat and meat products formed 34 per cent of the value of exports in 1975, 27 per cent in 1976, 32 per cent in 1977 and 16.4 per cent in 1978.

The decreasing value of livestock contribution to export earnings, is due to the increasing importance of mineral's contribution (see table 8 below).

Table 8 . MAIN COMMODITIES TRADED

(P mn)	1973	1974	1975	1976	1977	1978
Exports fob	59	82	105	154	152	183
of which:						
meat & meat prods	1	2	36	43	49	30
diamonds	20	30	32	38	47	76
Cu-Ni matte	-	8	22	52	40	53
Imports cif	115	125	159	181	210	260
Balance	-56	-43	-54	-28	-58	-77

Source: Central Statistics Office, Ministry of Finance

Table 9 shows the categories of principal imports and exports for 1976 and 1977. The import content shows large quantities of agricultural items - food, coffee, tea, wheat flour, beet and cane sugar, and cigarettes and other tobacco products. In 1976 and 1977, food beverages and tobacco formed the highest import bill of the principal commodity imported.

In 1976 and 1977, meat and meat products were third in the list of principal exports after copper-nichet matte and diamonds.

Table 9 : PRINCIPAL COMMODITIES TRADED

('000 pula)

IMPORTS	1976	1977	EXPORTS	1976	1977
Food, beverages & tobacco	35,534	47,504	Meat & meat products	43,001	42,559
Fuel	19,184	25,327	Diamonds	37,487	48,364
Chemicals and rubber ..	14,044	18,775	Copper-nicket matte	51,768	41,162
Wood and paper	6,440	8,136	Other commodities	20,916	24,508
Textiles and footwear ..	21,038	25,571			
Metal and metal products	13,125	22,844			
Machinery and electrical goods	20,775	31,324			
Vehicles and transport equipment	21,198	24,183			
Other goods	30,047	35,941			

Table 10 shows the details of livestock exports for 1979.

Table 10: DETAILS OF EXPORTS

Commodity Description	1979		
		Quantity	Unit
Boneless beef (chilled and frozen)		31 800	Tons
Carcass beef	(est)	5 400	Tons
Beef offal	(est)	4 500	Tons
Tallow		4 500	Tons
Corned beef		2 136	Tons
Blood meal	(est)	600	Tons
Carcass meal	(est)	4 500	Tons
Candles (ordinary household)	(est)	600 000	Numbers
Hides (wet blue and wet salted)		4 500	Tons

The largest manufacturing concern is the Lobatse meat cannery. The second largest cannery was opened in 1977 and produces corned beef.

Among the agro-based industrial opportunities which could be further developed:

- Dairy products
- shoe production
- soap production
- sunflower and groundnut oil
- goat and sheep skin processing
- horn products
- Karakul knitwear?

Lesotho

Lesotho has an area of 30,340 sq. km. and a population of 1.25 km. Only 13 per centof the land is arable for crop cultivation.

Due to population pressure and overgrazing there has been serious soil erosion in the lowlands, with the result that the rest of the land can only be used for grazing . So agricultural expansion has been hindered. Table 11 shows the production of the principal crops from 1976 - 1978.

Table 11: PRINCIPAL CROPS

('000 metric tons)

	1976	1977	1978*
Wheat	61	50	50
Maize	126	70	100
Sorghum	62	50	50
Dry Peas	7	7	7

* FAO estimates

Source: FAO, Production Yearbook

Livestock products include cows milk, beef and veal, mutton and lamb, goats meat, pigs meat and wool. Table 12 shows the FAO estimates of these products for the years 1976 - 1978.

Table 12: LIVESTOCK PRODUCTS

(FAO estimates, metric tons)

	1976	1977	1978
Cows' milk	17,000	18,000	19,000
Beef and veal	10,000	10,000	11,000
Mutton and lamb	4,000	4,000	4,000
Goats' meat	2,000	2,000	2,000
Pig meat	3,000	3,000	3,000
Wool: Greasy	2,100	2,400	2,500
Clean	1,050	1,200	1,300

Source: FAO, Production Yearbook

Exports consist mainly of agricultural and livestock products. Table 13 shows the value of the main exports for the years 1973 - 1977. In 1976, wool, mohair, live animals and foodstuffs formed 39.5 per cent of the value of all exports.

Table 13. MAIN EXPORTS (million Maloti)

	1973	1974	1975	1976	1977*
Wool	3.2	3.5	1.5	1.7	2.6
Mohair	1.5	1.6	2.3	2.0	1.9
Diamonds	0.3	0.9	0.5	0.5	1.3
Live animals	2.0	1.6	0.4	0.3	0.2
Foodstuff	0.3	0.1	1.1	1.8	0.7
Others (mainly miscellaneous manufactured goods)	1.5	2.1	3.5	8.4	5.4
TOTAL	8.8	9.8	9.3	14.7	12.1

*provisional

Agriculture does not provide for all the requirements of food in the country. There is a significant amount of imports of foodstuffs and livestock in the country as table 14 indicates. The food products imported include, wheat and Meslin, unmilled maize, wheat and maize flour, and sugar.

Table 14: MAIN EXPORTS

	1973	1974	1975	1976
Foodstuff & livestock	16.0	17.0	21.9	37.9
Mineral fuels & lubricants	2.8	5.4	7.1	11.7
Chemicals	2.8	4.2	6.3	9.5
Manufactured goods (classified by materials),	11.3	17.7	26.5	41.8
Machinery & transport equipment	6.9	8.4	12.8	22.7
Miscellaneous manufactured goods	17.6	24.3	35.6	45.1
Total	57.4	77.0	110.2	168.7

The exports includes a lot of agricultural commodities, mainly processed food stuffs, semi-processed livestock products, and livestock manufactured products. These include Hanicat beans-whole, black eyed-peas - whole, canned beans in tomato sauce - preserved, canned asparagus in air-tight metal containers, ludes and sluns including sheep skin - raw in the wool, sheepskin articles of apparel, sheepskin car seat covers, wool and mohair - sheep's or lamb's, Handprinted garments and other garments, footwear and sheepskin slippers footwear.

The current agri-based industrial development plans include further expansion of a battoir and food processing. Emphasis on future industrial development include fibre processing and textile manufacturing.

Agriculture has a very high priority in resource allocation for development. The second Plan - 1975/76 - 1979/80 aimed at average annual growth in the earning of 5% and 38% overall growth in agricultural output. Agriculture and Rural Development funds formed the largest proportion of the Development budget, 33 per cent of the total.

Malawi

Malawi is predominantly an agricultural country with no minerals worth commercial exploitation yet discovered. In 1976, agriculture accounted for 46.1 per cent of the GDP and agricultural products contributed

over 79 per cent of the value of total exports. In 1980 it accounted for 85 per cent ofthe value of total exports.

Maize is the main subsistence crop and it is grown by over 95 per cent of small-holder farmers. Almost all the surplus crop produced by small-holders are sold to the Agricultural Development and Marketing Corporation. In 1980 the Corporation purchased:

- tobacco - K. 4.79 m.
- groundnuts - K. 9.69 m.
- Maize - K. 6.08 m.
- Cotton - K. 6.08 m.
- Rice - K. 1.77 m.
- Pulses - K. 1.28 m.

Table 15 shows the production of the principal crops for 1976 - 1978.

Table 15.: PRINCIPAL CROPS

(production in '000 metric tons)

	1976	1977	1978
Rice (paddy)	42!	38!	43!
Maize	1,100!	1,200!	1,400!
Sorghum*	105	105	110
Potatoes*	88	89	89
Dry beans	11	5	5*
Groundnuts (in shell)	165!	100*	100*
Seed cotton	22	27	31!
Cottonseed	15	18	21!
Cotton (lint)	6	7	8!
Vegetables*	184	186	189
Fruit*	209	209	213
Sugar cane*	950	980	980
Tea (made)	28	31	32!
Tobacco (leaves)	37	52	56!

* FAO estimate ! Unofficial estimate

Source: FAO, Production Yearbook

Livestock

In 1976 these were: 728,500 heads of cattle, 850,000 sheep and goats and 190,000 pigs. Table 16 shows estimates of production of livestock products for the period 1976-1978.

Table 16: LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	10	10	11
Goats' meat	3	3	3
Pig meat	8	11	11
Poultry meat	7	8	8
Cows' milk	31	35	36
Hen eggs	9.6	9.9	10.2

Source: FAO, Production Yearbook

In 1980 agriculture accounted for 85 per cent of the value of exports. The principal agricultural exports include tobacco, tea, sugar, groundnuts and raw cotton.

Table 17 shows the value of exports for the years 1978-1980.

Table 17: VALUE OF EXPORTS, 1978-1980

EXPORTS (K'000)	1978	1979	1980
Tobacco	86,146	98,638	105,070
Tea	29,098	30,590	29,825
Sugar	12,207	16,118	36,291
Groundnuts	4,673	8,866	15,938
Raw cotton	697	1,840	4,547
TOTAL (incl. others)	148,784	176,305	225,753

Apart from import-substitution industries, most industries are based on the processing of agricultural products, for example: cotton ginneries, and tobacco factories. Export industries include those engaged in agricultural processing, namely tea and tobacco manufacture, sugar processing/manufacturing, fruit and vegetable canning. The current five years Development Plan, 1981/82 - 1985/86 emphasizes the development of export-oriented agro-based industries during the 1980s.

Mozambique

Mozambique has a wide ranging number of agricultural crops. They include cashewnuts, sugar, tea, cotton, copra, sisal, tobacco, sunflower, rice, maize, manioc and sorghum. Of these, the first seven are partly for export. In recent years, new crops have been introduced on a trial basis. They are: wheat, soya, coffee and fruits from temperate climates. Table 18 below shows the production of the principal crops in 1976-1978.

Table 18: PRINCIPAL CROPS

('000 metric tons)

	1976	1977	1978
Maize	450*	350*	400*
Copra	83*	80[x]	75[x]
Sugar cane[x]	2,500	2,100	1,700
Bananas[x]	36	36	36
Cashew nuts	95*	180*	150[x]
Cotton lint	18*	22*	26*
Tea*	13	14	18
Sisal*	19	18	18
Rice (paddy)*	45	35	35

* Unofficial figures [x] FAO estimates

Source: FAO, Production Yearbook

The principal livestock products for the years 1976-1978 are indicated in Table 19 below:

Table 19: LIVESTOCK PRODUCTS

('000 metric tons)

	1976	1977	1978
Beef and veal	35	36	37
Goats' meat	1	1	1
Pigs' meat	7	7	7
Poultry meat	17	18	18
Cows' milk	60	60	60
Goats' milk	7	7	7
Hen eggs	8.8	9.2	9.6
Cattle hides	5.9	6.0	6.1

Source: FAO, Production Yearbook

Table 20 summarizes information on the main commodities traded in the years 1973, 1977, 1978 and 1979. The contribution of agriculture to the total exports has constantly been high. In 1979, live animals and animal products, vegetable products, fats products, food industry products, drinks and tobacco products), formed 68 per cent of total value. Mozambique imports substantial agricultural products, mainly food items - powder milk, condensed milk, butter, cheese, wheat, maize, rice oil fats and olive oil.

Agricultural products future primently in the Mozambique export list (see Table).

Table 20: MAIN COMMODITIES TRADED

ITEM	1973		1977		1978		1979	
	I	E	I	E	I	E	I	E
TOTAL	11 415	5 541	10 568	4 833	17 199	5 344	18 575	8 311
Live Animal and Animal Products	237	172	356	383	819	548	459	793
Vegetable Products	530	943	634	843	1 985	879	2 183	1 865
Fats Products	96	285	140	176	129	223	172	384
Food Industry Products, Drinks Tobacco	490	1 854	298	1 871	426	1 755	203	2 583
Mineral Products	837	343	1 866	694	3 847	1 068	4 641	1 718
Chemical Industry Products	863	45	1 050	11	1 597	6	1 693	2
Plastic and Rubber Materials	438	2	497	1	515	—	543	1
Leather Goods	27	18	22	4	6	—	3	—
Wood and Wood Products	35	283	12	158	13	153	20	210
Pulp and Paper	309	1	303	3	286	3	313	5
Textiles	1 073	1 408	1 397	433	1 847	696	2 074	1 029
Shoes	61	—	12	—	19	—	11	—
Construction Materials	183	10	104	30	106	11	108	29
Precious and Semi Precious Stones	7	14	1	5	2	1	1	3
Metals	1 379	81	937	11	1 437	14	726	18
Machines and Electrical Equipment	3 119	23	1 748	4	2 172	6	3 180	4
Transport Equipment	1 530	57	1 046	202	2 631	74	2 096	45
Optic and Surgical Apparatus	127	—	87	2	93	3	127	—
Munitions and Arms	12	—	—	—	—	—	—	—
Other products	50	1	59	2	69	3	62	5

I = Imports
E = Exports

Source: "INFORMACAU ESTATICA NO. 1"
May, 1980 - MAPUTO

There is a substantial agro-based industry in Mozambique, mainly engaged in the processing of the main export crops, (cashew nuts, sisal, cotton, sugar, and tea). The 1980-1990 industrial development objectives aim at radically altering the existing industrial structure through utilization of natural resources: - energy, minerals, agriculture and fishing.

The 1980-1990 plan aims among others at "developing the production of agriculture and fishing raw materials and their industrial transformation in order to improve the supply to the people and so contributing to the elimination of scarcities in food clothing and medicine."

Swaziland

The principal crops include rice, sugar, maize, potatoes, seed cotton, citrus fruits. Maize is the staple crop and production is not enough therefore substantial importation is made. Other crops include sorghum, tobacco and pineapples. Sugar was first grown in 1958 and together with wood, pulp and other forest products are the two main agricultural exports. Table 21 shows the production of the principle crops for 1976-1978.

Table 21: PRINCIPAL CROPS

('000 metric tons)

	1976	1977	1978
Rice	5	5*	5*
Maize	97	85	90
Potatoes	9	6*	6*
Sweet potatoes	10	9*	9*
Seed cotton	18*	18*	18*
Cottonseed	12*	12*	12*
Citrus fruit	74	85*	80*
Other fruit	19	19*	21*
Sugar cane	1,929	1,992*	2,240*
Cotton lint	6*	6*	6*

* FAO estimates

Source: FAO, Production Yearbook

Table 22 shows among the livestock in the years 1976-1978. Meat and meat products form part of Swaziland's processed livestock exports apart from the significant amount of live animal exports.

Table 22: LIVESTOCK

('000 numbers)

	1976	1977	1978*
Cattle	634	634	640
Goats	237	258	260
Sheep	31	31	32
Horses	2	2	2
Donkeys	14	13	13
Poultry	522	514	550
Pigs	19	20	21

* FAO estimates

Source: FAO, Production Yearbook

Exports

Among the main commodities exported, sugar and citrus fruits and cani . fruits are theprincipal agricultural products. In Table 23 the main commodities exported in 1975-1977 are shown.

Table 23: MAIN COMMODITIES EXPORTED 1975-1977

('000 emalangeni)

Exports (excluding re-exports)	1975	1976	1977
Sugar	80,040	54,507	53,247
Citrus fruit	4,464	4,851	7,585
Iron Ore	11,944	12,147	9,055
Wood pulp	12,445	29,904	21,467
Asbestoes	9,269	13,831	14,931
Canned fruit	3,585	4,976	5,722
Meat and Meat products	1,649	4,486	4,005
Others	20,290	32,310	27,102
TOTAL	143,686	157,012	143,114

Source: Africa: South of the Sahara, 1980-81.

The Swazi industrial strategy aims at development of the processing industries. The government is currently concentrating upon agricultural industries so as to further the use of endowed agricultural resources. Among industrial projects under way now are a tractor project, a cotton seed oil expelling and a ginning plant (to produce high quality table ware), and a granulated fertilizer plant.

The 1981 export figures further indicate the enormous significance of agriculture in the Swazi economy. Sugar, canned fruit and citrus fruit accounted for 45 per cent of the value of exports as table 24 below shows:

Table 24: 1981 EXPORT EARNINGS

Exports - 1981	Millions of US Dollars
Sugar	126
Wood and Pulp	46
Fertilizer	3
Asbestoes	18
Wood and Wood products	16
Canned fruits	13
Citrus fruit	9
Coal	3
TOTAL	US$ 331

Source: Economic Review, Prime Ministers Office, Feb. 1983, (See Mission Report on Swaziland).

The Agricultural Sector was given priority in the third Five-Years Plan and will continue in the Fourth Plan. Development of forward linkage industires to the agricultural sector will continue with developmentof tanning industries, vegetable processing, vegetable oil production and further processing of sugar by products.

Tanzania

More than 90 per cent of the population is dependent on agriculture for livelihood. With divergent climatic conditions and a number of rivers Tanzania has a great potential for agricultural production. There is a wide ranging number of crops grown. Production for literally all types of crops however have fallen in recent years. Being esentially dependent on primary agricultural commodities to earn foreign currency, the fall in agricultural output have had far reaching effects in the performance of other sectors, particularly industries which needs foreign exchange for importation of inputs. Table 25 shows agricultural production of a number of crops from 1977/78 - 1980/81.

Table 25: AGRICULTURAL PRODUCTION 77/78 to 80/81

CROP	1977/78	1978/79	1979/80	1980/81
Cashewnuts (tons)	68,478	57,128	41,519	60,948
Coffee	52,489	49,633	47,802	67,340
Seed Cotton ('000' M/T)	168.1	166.5	180.4	174.9
Pyrethrum (M/T)	2,546	1,641	1,624	
Sisal M/T	105,018	91,873	81,384	85,978
Tea (M/T)	18,451.6	17,512.5	17,307.5	16,387.8
Tobacco (M/T)	18,353	17,137	17,235	18,479
Millet & Sorghum	731.3	864.5	856.9	
Cassava Dry	1,147.8	1,373.5	1,391.3	
Paddy	349.9	350.5	300.3	
Bananas & Plantations	930	788.2	1,228.9	
Wheat	85.4	70.5	86.3	
Mixed Beans	197.3	218.4	368.5	
Maize	1,610.6	1,853.8	2,152.3	
Sugar (tons)	104,672	122,950	119,218	114,480
Groundnuts (Tons)	1,450	2,619	6,676	1,728
Sunflower (Tons)	7,167	12,081	19,325	7,519
Castor seed (Tons)	2,227	1,659	1,262	12,442
Soya beans (Tons)	606	1,059	838	628
Cardamon (Tons)	332	278	639	899
Copra (Tons)	3,133	1,044	1,036	2,832

Due to fall in agricultural output, there has been a fall in most of the agricultural export crops. Table 26 below shows export performance figures for some of the agricultural export crops for the years 1977/78 - 1980/81.

Table 26: EXPORTS: AGRICULTURAL PRODUCTS

CROP		1977/78	1978/79	1979/80	1980/81
Tea (Tons)		11,986	14,913	15,022	13,290
Sisal (Tons)		68,012	79,241	78,375	48,109
Cotton Lint (Tons)		40,421	46,636	31,438	31,435
Pyrethrum (tons)	(Extract	96	67	30	28
	(Flowers & Powder	456	289	66	13
	(Marc	1,638	1,805	590	780
Coffee (Tons)		46,705	50,796	45,428	42,282
Tobacco (Tons)		11,737.1	10,960.2	7,039	8,334

Apart from the export crops from mainland Tanzania, the Islands of Zanziber and Pemba have a significant export performance in some agricultural commodities, particularly cloves and coconut products. The Islands provide a greater part of the world's supply of cloves. There are about 40,000 hectares, of cloves with 1.5 million trees. Five sixth of the clove output is produced in Pemba. In recent years, clove diseases have reduced production significantly. Annual average production decreased 12,000 tons to 4,000 in 1974 and improved 10,000 in 1976. Clove and clove oil (distilled from the stems) form more than half of Zanzibar's exports. The coconut industry ranks next in importance in the Isles economy. There are about 5.5 million bearing trees in both Islands. Other crops include chillies, cocoa, limes, tropical fruits and tobacco. The main food crops are rice, bananas, cassava, pulses, maize and sorghum.

Tanzania, like Botswana is rich in livestock, particularly cattle. There are about 10 million cattle, 3 million sheep, 4.5 million goats, and 2.2 million poultry. Table 27 shows the production of livestock products from 1976-1978.

Table 27: LIVESTOCK PRODUCTS

('000 metric tons)

	1976	1977	1978
Beef and veal	121	126	131
Mutton and lamb	11	12	12
Goats' meat	19	19	19
Poultry meat	24	24	25
Other meat	7	7	7
Cows' milk	683	700	728
Goats' milk	48	50	50
Butter	2.7	2.9	3.0
Hen eggs	20.9	21.1	21.4
Other poultry eggs	2.5	2.5	2.6
Cattle hides	27.7	28.7	29.7
Sheep skins	2.3	2.3	2.3
Goat skins	3.1	3.1	3.1

Honey (unofficial estimates, '000 metric tons): 7.5 in 1976, 8.0 in 1977, 8.5 in 1978.

Source: FAO, Production Yearbook

The oldest larger manufacturing enterprises were in the agricultural processing sector - cigarettes, meat, canning, breweing, pyrethrum processing and cashewnut shelling. Textile and sugar refining capacity has also expanded rapidly in recent years.

The third Five Year development Plan, 1976- 1981, had put emphasis in development of the manufacturing sector. The principal objectives in the sector were to process all agricultural commodities among others.

Targets for the long-term plan include among others:
To develop industries to process agricultural produce for export to increase foreign exchange earnings.

Zambia

About 70 per cent of the population is dependent on agriculture. The principal agricultural products include maize, tobacco, groundnuts, cotton and sugar. Table 28 shows the production of principal crops for theyears 1976-1978.

Table 28: PRINCIPAL CROPS ('000 metric tons)

	1976	1977	1978
Maize*	1,070	980	850
Millet*	90	86	80
Sorghum*	54	51	50
Sugar cane	860	780	820
Potatoes*	3	3	3
Sweet potatoes	18	18	18
Casava (Manioc)*	168	170	173
Onions*	18	18	18
Tomatoes*	24	24	24
Sunflower seed	13	11	12*
Pulses*	14	14	12
Bananas	1	1*	1*
Groundnuts (in shell)	30	31	31
Cottonseed x	30	31	30
Cotton (lint) x	1	3	3
Tobacco	10	7	6

* FAO estimate x Unofficial estimate

Source: FAO, Production Yearbook

The number of livestock (in 1976) was 2.3 m. cattle, 100,000 pigs, 50,000 sheep, 300,000 goats, 13.3 m. poultry. Table 29 shows the FAO estimates of production of livestock products for 1976-1978.

Table 29: LIVESTOCK PRODUCTS

(FAO estimates - metric tons)

	1976	1977	1978
Cows' milk	51,000	50,000	48,000
Beef and veal	29,000	28,000	28,000
Pig meat	9,000	10,000	11,000
Poultry meat	14,000	12,000	12,000
Other meat	20,000	20,000	21,000
Hen eggs	19,200	18,876	19,404
Cattle hides	3,633	3,675	3,738

Source: FAO, Production Yearbook

Most of the Zambia export earnings are from minerals with copper accounting for more than 90 per cent. The only agricultural export commodities of significance are tobacco and maize. Zambia imports significant amounts of agricultural products, particularly food. Table 30 shows the main commodities traded for the years 1975-1977. From the figures in the table, tobacco and maize accounted for slightly more than 1.3 per cent of the value of exports in 1977.

Table 30: MAIN COMMODITIES TRADED

('000 kwachas)

IMPORTS	1975	1976*	1977*	EXPORTS	1975	1976*	1977*
Food	35,747	24,469	28,671	Copper ..	472,000	688,600	644,800
Beverages and Tobacco	1,018	884	879	Zinc	20,346	26,552	17,920
Crude Materials, inedible	9,892	10,684	9,108	Lead	5,665	4,421	5,705
Mineral Fuels, Lubricants and Electricity	81,115	72,616	81,005	Cobalt ..	7,066	15,939	16,226
Animal and Vegetable Oils and Fats ..	9,087	10,684	9,108	Tobacco ..	4,969	5,095	5,783
Chemicals	77,293	68,321	58,927	Maize	1,434	513	3,517
Basic Manufacture ..	140,211	96,796	117,477				
Machinery & Transport	211,300	167,926	204,924				
Miscellaneous Manufactured Articles	26,698	18,996	19,262				
Others	3,250	783	345				
TOTAL	597,611	468,589	529,405	TOTAL (inc. others)	521,049	751,908	708,028

* Provisional

Zambia's agricultural imports particularly the processed and semi-processed food stuffs, provides a scope for expansion of trade within the SADCC food processing industries - e.g., coffee, tea, rice, mixed vegetable oils, cotton seed oil, etc. The current strategy in industrial development is to promote import-substitution and export-oriented industries based on maximum use of local agricultural and mineral raw materials. Emphasis is also placed at development of agro-based industries and food processing at small-scale levels.

Zimbabwe

Zimbabwe's agriculture is the most developed of all the countries in the SADCC region. The gross value of agricultural output in 1979 was Z$ 443 million with Z$ 80 million came from the Tribal Trust Lands where all AFrican farming takes place. Sales to marketing authorities from Tribal Trust Lands amounted to only Z$ 15.4 million in 1979. The amount of Z$ 363 million came from white farmers who occupy the best land and had access to capital and technological skills.

Tobacco has been the main crop. Other crops grown include: cotton, sugar, soya beans, wheat and sorghum. Many of these crops are grown for export by internatior l companies like Lonrho and Liesbigs; Maize is the main staple crop. Hybrids have enabled very high yields to be realized. In recent years Zimbabwe has been the source of import of maize staple food for Zambia and Tanzania. Table 31 shows the estimated production of the principal crops for the years 1976-1978.

Table 31: PRINCIPAL CROPS

(FAO estimated, '000 metric tons)

	1976	1977	1978	1979
Wheat	85	85	90	158
Maize	1,400	1,300	1,400	1,162
Millet	220	220	220	-
Sorghum	50	50	50	50
Sugar cane	2,300	2,500	2,300	(310,000) sugar
Potatoes	25	26	26	-
Dry beans	25	25	25	-
Oranges	25	27	27	-
Groundnuts (in shell)	120	120	120	29
Seed cotton	117	99	99	166
Cottonseed	78	66	66	-
Tea	3	3	3	-
Tobacco	103	83	56	114
Cotton (lint)	39	33	33	-

Source: FAO, Production Yearbook.
The 1979 figures are obtained from the Ministry of Agriculture, Zimbabwe. A Guide to Zimbabwe, Agricultural Marketing Authority, Zimbabwe, December 1980.

Livestock includes: cattle, goats, pigs, sheep and poultry. Cattle totalled about 5.6 million in 1979. The war of liberation caused substantial destruction of dip tanks and brought about general dislocation. As a result of this, tick borne desease killed about 1 million of the 3.4 million heads of cattle previously held in Tribal Trust Lands. The cattle owned by commercial farms in 1979 totalled 2.8 million Table 32 shows the estimated livestock products for 1976-1978.

Table 32: LIVESTOCK PRODUCTS

(FAO estimates, '000 metric tons)

	1976	1977	1978
Beef and veal	155	167	150
Mutton and lamb	2	2	2
Goats' meat	7	7	7
Pig meat	11	12	11
Poultry meat	8	8	9
Other meat	13	14	14
Cows' milk	255	260	250
Butter	3.2	3.3	3.2
Cheese	4.6	4.7	4.5
Hen eggs	9.5	10.2	10.8
Cattle hides	23.1	25.0	22.5

Source: FAO, Production Yearbook

- Details of exports of commodities, indicates a high degress of agriculture's contribution to the exports - both as semi-processed and manufactured products. Food and live animals for example accounted for 16 per cent and tobacco and tobacco products 12 per cent of export earnings. Table 33 shows the volume of exports of principal commodities, 1974-1979.

Table 33: MAIN COMMODITIES TRADED

Exports of Principal Commodities 1974 - 79
(000 tons)

	1974	1975	1976	1977	1978	1979
Sugar	178.5	156.6	151.1	151.9	136.1	244.6
Maize	541.6	845.5	345.1	392.3	507.4	218.6
Tea	4.8	4.9	4.2	4.5	7.6	1.8
Beef	49.2	40.8	48.1	58.7	55.1	43.4
Tobacco (unmanufactured)	71.9	56.6	76.0	65.9	75.9	60.5
Asbestos	261.3	277.8	279.5	250.0	212.4	285.0
Chrome Ore	266.8	283.7	135.3	87.6	20.0	11.5
Cotton Lint	48.4	35.0	45.1	39.7	46.6	49.3
Cattle Hides	10.7	8.8	11.3	62.4	12.1	11.2
Coke	0.1	0.1	0.1	0.1	0.1	0.1
Copper Metal	40.7	41.9	34.3	32.9	35.8	26.6
Nickel Metal	11.4	8.6	13.3	15.6	16.5	13.9
Tin Metal	0.9	0.9	0.8	0.8	0.7	0.9
Ferro Chrome	156.9	186.7	245.0	106.9	101.5	170.9

Source: Treasury