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**REPORT ON THE ESTABLISHMENT OF AN AGRICULTURAL COMMODITY
EXCHANGE FOR EASTERN AND SOUTHERN AFRICA**

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I. Background

1. It will be recalled that, at its 5th meeting held at Rabat, the ECA Conference of Ministers decided to include studies and related activities concerning the establishment of agricultural commodity exchange for Eastern and Southern African States in the work programme of the Lusaka MULPOC for 1980-1981. Thereafter, the Lusaka MULPOC Council of Ministers, at its 3rd meeting held at Gaborone, Botswana, formally incorporated that project in its work programme for 1980.
2. It will also be recalled that at the 4th meeting of the Lusaka MULPOC Committee of Officials held in Maseru, Lesotho from 12 to 15 January 1981, a progress report on the feasibility study on the establishment of agricultural commodity exchange for Eastern and Southern African States was presented for the consideration of the meeting of the Officials. It was reported at that meeting that the feasibility study concerning this project will be made available to member States of the Lusaka MULPOC by end of 1981.
3. In accordance with the above resolution, and in line with what was agreed in Maseru, this report presents the study on the establishment of an agricultural commodity exchange for the Eastern and Southern African States.
4. As the subject of establishing a subregional agricultural commodity exchange is a wide ranging one and with various implications, attention has been drawn to the economic and technical feasibility of establishing the proposed exchange and to some of the major problems related to the marketing of agricultural commodities at the subregional level. At the same time, an attempt has been made to identify some of the major functions which can be performed by the exchange, namely price determination, financing, grading and information collection and dissemination of information.
5. Since it is impossible to quantitatively measure a priori the performance of the marketing functions, some judgement needs to be made as regards what could be expected in practice.
6. In assessing the practical need for such an exchange, interviews and discussions were held with some potential users of the exchange in the subregion. Similarly, interviews and discussions were also held with some government officials of member countries of the subregion to assess their views and attitudes towards using the proposed exchange. Within this context, extensive discussions were also held with executives of existing auction markets which are operating at present in the subregion. These include the Coffee Board of Kenya, the East African Tea Exporters Ltd, Africa Tea Brokers Ltd and Tea Brokers of East Africa Ltd.

7. A clear notion of the functions of marketing and the nature of commodity exchange is essential to any judgement of the need for feasibility of a commodity exchange. A brief review of the economic situation of Eastern and Southern African States is also essential for suggesting the appropriate objectives and functions of the proposed commodity exchange. Thus, the first two parts of this report provide a review of production and trade in agricultural commodities in the subregion. This is followed by a synopsis of the important elements and advantages of a commodity exchange at the same time developing the theoretical basis and the justifications for the establishment of the proposed commodity exchange? What are the objectives and functions of the proposed exchange? What are the prerequisites and problems that are likely to be encountered while establishing commodity exchange at a subregional level? The remaining parts of the report outline the organizational management aspects and the financial viability of the proposed exchange. The final part of the report presents the broad conclusions and recommendations for the establishment of a commodity exchange for the Eastern and Southern African States.

II. Economic Situation of Eastern and Southern African States

A. General Economic Features

8. The economies of the eighteen independent African countries of the Eastern and Southern African subregion are predominantly agricultural. The subregion occupies an area of about 8.2 mn. sq. kilometres with a total population of about 125 mn people. The population grows at a rather fast rate of about 2.7 per cent per annum. The main source of livelihood is derived from subsistence agriculture, animal raising and fishing.

9. In these economies, agriculture contributes nearly 40 per cent of the GDP of each country and provides livelihood for over 90 per cent of the population. In addition, most of the agricultural exports of these countries are destined for overseas markets and only a very small proportion is traded within the PTA countries.

10. The agriculture sector in almost all the countries of the subregion has two subsectors: the subsistence subsector and the commercial subsector. The subsistence subsector on which the majority of the population depend produces staple food crops such as maize, cassava, millet, sorghum, meat and fish products. The productivity of this subsector is very low due mainly to traditional production techniques, widespread droughts, lack of fertilizers, pests and low levels of investment. The growth rate achieved in this subsector since political independence lags behind the rates of population growth. Hence a large proportion of foreign exchange earnings is spent on imports of food and foodstuffs.

11. The commercialized subsector is mainly for export crops. Most countries of the subregion have paid greater attention to this sector in terms of providing investments, inputs and research. This was also the case during the colonial era. The subsector produces cash crops such as coffee, cotton, tobacco, sisal, groundnuts, sugar, bananas, wood and wood pulp etc. This concentration of efforts on cash crops has meant that large areas of fertile land as well as modern techniques have been devoted to export crops. This had had the effect of distorting the pattern of production. A large proportion of resources are

12. This distortion in the pattern of agricultural production of the countries of the subregion can be seen by examining the size of their agricultural exports and the relative significance of exports in intra-area trade in agricultural products among the countries concerned. It is clear that intra-area trade is still a very minor portion of the total. According to the main features of the commodity composition of trade in agricultural commodities, indicated in Table 1 and 2 of the Annex only a few commodity groupings account for almost 75 per cent of the exports and 66 per cent of the imports concerned. With the exception of a few commodities like oilseeds, sugar and to a lesser extent tobacco and live animals, the leading commodities produced for export are generally not important import items. Similarly, of the most important items, maize is the only one in which a substantial fraction is provided from within the area. At present, there is still little effort to exploit complementarity in the area.

13. It should also be noted that intra-area trade in agricultural commodities is extremely small. This is partly due to the fact that colonial powers hardly paid any attention to the possibilities of inter-country specialization and exchange and were generally concerned with the production for the metropolitan centres. For instance, there is hardly any trade of significance between Zambia and Angola, despite the fact that for decades Zambia's outlet to the coast has been the railway traversing Angola.

14. In most of the countries of the subregion, the commercialized subsector of agriculture concentrates on one or two commodities that play a preponderant role in the subregion economies. The magnitude of the dependence of exports on one or two cash crops is very high in all the countries of the subregion.

15. Another feature of the countries of the subregion is that the variability of natural conditions affecting agriculture is perhaps as great within as between the countries. Some of the countries are relatively well endowed for the production of temperate agricultural commodities such as wheat which forms the largest single import item in the subregion.

16. If specialization were to take place according to natural advantages, one country would normally be in surplus and another in deficit in a particular crop. Surpluses and deficits which are seasonal and erratic could also be superimposed on the normal pattern of production of agricultural commodities in the subregion. Thus, difference in the seasonal pattern of production in a particular crop could provide a basis for beneficial inter-state trade. For example, in the case of maize, a comparison of Kenya and Tanzania delivery curves shows that the curves are steepest around January and February in Kenya and September and October in Tanzania. This means that the peak harvesting demands for labour, storage, transport, finance and such facilities, occur a clear three months after they have occurred in Tanzania.

17. The above situation can be considered as one of potential economic complementarity in which two countries can exploit their production to their mutual advantage provided there are institutional arrangements to promote trade in agricultural commodities.

B. Production of Agricultural Commodities

18. Though agriculture is the main stay of the economies of the countries of the subregion, the productivity of this sector as a whole is very low. The depressing state of agricultural production, especially food production, and excessive dependence on a limited number of export crops for foreign exchange earnings present a serious challenge to the countries of the subregion.

19. The subregion has the potential to achieve self-sufficiency in cereals production because of the very diverse weather conditions. Although one cannot be precise as to what each country might produce, available data suggests that, for instance, Zambia, Zimbabwe, Kenya, Malawi, Ethiopia, Angola, and Mozambique can become major maize producers and exporters within the subregion. Similarly, Malawi and Swaziland appear best situated for rice production and perhaps Mozambique, Angola and Kenya can become more important suppliers of rice within the subregion.

20. The subregion has also a great potential for livestock production. Similarly oilseeds and their by-products have good prospects in Mozambique, Angola, Tanzania, Ethiopia and Malawi. These are but a few examples to highlight the agricultural potential of the Eastern and Southern African States.

21. In spite of the above huge potential of the subregion, at present inadequate agricultural progress holds back the whole process of economic transformation of the countries of the subregion. Therefore, it appears that in the early stages of the development of some of the countries, their over-all rate of growth will depend primarily on what happens to agriculture and on how agricultural policies are co-ordinated with respect to the marketing of agricultural commodities. The co-ordination of agricultural marketing policies between countries of the subregion is faced with a number of chronic problems associated with their geographical location and their colonial historical background. With a few exceptions, most of the member countries trade in agricultural commodities is still mainly geared to export trade and yet the degree of subregional self-sufficiency in agricultural commodities and in particular in food supply seems to be unsatisfactory.

22. Therefore, the object of agricultural development and trade in agricultural commodities at the subregional level should not only be to increase output for intra-area trade but also to achieve self-sufficiency in food products according to the Lagos Plan of Action and to expand the existing market for agricultural commodities. Otherwise the stagnation of agricultural development in the subregion could become a serious hindrance to the development of other sectors.

III. The Need for an Agricultural Commodity Exchange

A. Introduction

23. The foregoing analysis of the general economic features and trade in agricultural products revealed that there is an obvious need for co-ordinating agricultural production and for developing organized commodity markets among the Eastern and Southern African States. It is also clear that the economies of the countries of the subregion face a number of constraints arising, inter alia from the low level of agricultural productivity, meagre foreign exchange reserves, strong orientation towards external markets for both imports and exports of agricultural commodities. The alleviation of these marketing constraints requires the formulation of appropriate marketing policy measures including the development of organized commodity markets in the subregion. It is in this context that the Treaty for the establishment of a PTA for Eastern and Southern African States calls for the establishment of appropriate instruments and institutions for promoting co-operation in various fields of economic activity. It is envisaged that the institutions proposed will be instruments for facilitating joint action in the identification and implementation of subregional programmes and projects.

24. As noted earlier, one of the immediate constraint to the accelerated economic transformation of the countries of the subregion is the lack of organized commodity markets. If an organized market for agricultural commodities is established in the subregion, it could be possible to promote intra-area trade in basic agricultural goods. Within this context, the establishment of a subregional agricultural commodity exchange would be an appropriate instrument for this purpose. The proposed commodity exchange would be a source of market information for promoting intra-subregional trade in agricultural commodities. It would also provide a useful institutional framework for knowing and disseminating information on surpluses and deficits of agricultural commodities in the subregion.

25. Thus, the justification for the establishment of a subregional agricultural commodity exchange is based on the need for a subregional trading center which would assist in:

- (a) Removing the major obstacles represented by the inadequacy of information on the availability of agricultural commodities in the area.
- (b) Removing information barriers on supply and demand, and prices of specific key agricultural commodities which can be traded within the subregion.
- (c) Assuming that member countries of the subregion obtain the best possible prices for their agricultural commodities.
- (d) Providing basic marketing information for optimizing the level of production of agricultural commodities.
- (e) Encouraging subregional co-operation in matters related to trade in agricultural commodities.
- (f) Improving the existing system of commodity marketing in the subregion.
- (g) Developing banking and foreign exchange facilities related to

- (h) Improving the communication network of the countries of the subregion with respect to commodity trade.
- (i) Influencing positively the price determination of agricultural commodities located outside the subregion.

B. Institutional Gap

(i) Main Features of Intra-area Trade in Agricultural Commodities

26. At present intra-area trade in agricultural commodities occupies a very minor portion of the total. Available statistics confirm the fact that in recent years intra-area trade in agricultural commodities declined sharply. Only a small part of each country's exports goes to its neighbours in the area and only a small part of imports comes from them. In this respect, at present, the possibilities for greater specialization and exchange of agricultural commodities are far from having been fully exploited. For instance, there is minimal development of trade between Madagascar and Mauritius; almost none between Madagascar and any of the countries along the whole of the East African coast to give a few of the obvious examples. As a result trade in agricultural commodities between the countries concerned is relatively small and has received proportionally less attention than trade in manufactured products. Therefore, economic co-operation and trade in agricultural commodities within the countries of the subregion is bound to require a deliberate concerted effort by the countries concerned.

27. With respect to some of the most important agricultural commodities like cereals, it is possible to observe the following patterns of trade:

- (a) The majority of cereals imports in the subregion comes from outside the area. The cereals exported by the countries of the subregion are much smaller and are sold within the area.
- (b) At present, the subregion is a big net importer of cereals particularly of wheat and rice but also increasingly of maize.
- (c) As some of the countries are surplus and others deficit producers, at present the basic food with the greatest potential for intra-area trade is maize.
- (d) As agricultural production in the subregion is rain fed, weather conditions and drought have made cereals production almost unreliable to some of the countries of the subregion.
- (e) Most of the countries of the subregion put high priority on national self-sufficiency in most important staples and ignore the possibilities of intra-area specialization.

28. As far as trade in livestock products is concerned, by far the greater part of the meat consumed in the area is produced in the consuming countries. At present there is little trade in meat products. Exports of meat products are primarily destined to the Middle East or Eastern Europe. The amount of intra-area exports in meat products is small compared to intra-area exports of other commodities.

29. Further, the conventional tropical exports like coffee, tea, cotton and tobacco, account for a very limited percentage of intra-area trade. However importing countries do obtain most of their supplies from the major producers within the area. The majority of the countries in the area are coffee producers and a few of them are sizable exporters of tea. Some of the countries like Kenya can provide an important market for export production of cotton and tobacco from United Republic of Tanzania, Malawi, Zambia and Uganda. As indicated in Tables 1 and 2 of the Annex it appears, therefore, that there are at the moment considerable opportunities for much further development of intra-area trade in some of the traditional export of agricultural commodities.

(ii) Problems of Intra-area Trade in Agricultural Commodities

30. Within the Eastern and Southern Africa subregion, intra-area trade in agricultural commodities is constrained in certain cases by specific barriers and in others by the existence of similar ecological conditions in the countries concerned.

31. Though there are some significant ecological differences in the area, most of the important agricultural commodities are produced in practically all the countries. Maize, beans and peas, tobacco, coffee, tea, cotton, several oilseeds, beef, mutton, dairy products and hides and skins are produced in almost all the countries of the subregion. Of the export products, so far the primary markets for coffee, tea, cotton, tobacco and meat are in other regions. Thus, apart from dairy products, tobacco, cotton and to a small degree meat, so far there has been little impetus to focus on the opportunities for trade within the area.

32. It is possible that two countries may very well exchange to their mutual advantage commodities which they both can produce, given cost differences variations in product kinds and qualities and supply constraints. For instance, Zimbabwe may well be able to export surplus maize to the United Republic of Tanzania even though maize is the most important staple food produced in the United Republic of Tanzania. Trade based on such an exchange has not developed as far as it presumably could to the advantages of all the countries concerned, because of an almost total lack of co-ordination of agricultural development planning and lack of a marketing institution that promotes the exchange of agricultural commodities among the countries of the subregion.

33. Lack of such co-ordination may be an outcome of two main factors. Primarily, the fundamental agro-economic knowledge of comparative advantage is not sufficiently known. Concerted co-operative research will be needed before the countries of the subregion can base their production plans of agricultural commodities on firmly established knowledge indicating which neighbouring countries can be relied on for supplementary supplies or as markets for planned surplus production of basic agricultural commodities.

34. In the absence of such marketing information and exchange of agricultural commodities, almost all the countries of the subregion seek national self-sufficiency in most agricultural commodities. This is particularly the case for staple cereals, sugar, meat and dairy products. Therefore, provided that there is a subregional institution that promotes the exchange of agricultural commodities and that there is the commitment to co-operate in trade in agricultural commodities, it is very likely that joint opportunities for exchange of agricultural commodities within the subregion can exist at all levels.

35. Another factor inhibiting the fast development of significant trade in agricultural commodities is the fact that a substantial part of subsistence is provided by high-bulk and low value crops which will not bear much transport cost. This includes products like sorghum, millet, cassava and so on.

36. In addition to the above factors, at present, the most important inhibiting factor is the fact that productivity and production of agricultural commodities are often still much too low. Consequently, the production of intra-area trade in agricultural commodities is apparently not viewed by planners and policy-makers as a problem much less urgent than that of raising production and productivity.

37. It is against the background of the above inhibiting factors that the question of trade promotion in agricultural commodities must be assessed. At present little specific information exists on the most promising commodities for expanded trade within the subregion. Recent discussions with officials of commodity marketing agencies revealed very little planning oriented specifically to agricultural trade with neighbours within the subregion. In actual fact, in most countries at both the highest political levels and at the operational levels, trade in agricultural commodities does not seem yet to have of high priority. It is not surprising, then, that documentation and data specifically relevant to intra-area trade in agricultural commodities are not easily available.

C. The Potential use of an Agricultural Commodity Exchange

38. As can be seen from the foregoing analysis, at present the potential levels of intra-area trade in agricultural commodities cannot be indicated with absolute certainty. However, as already mentioned, the reasons for the poor performance of trade in agricultural commodities can to a substantial extent be attributed to the inadequacy of the existing transport and communications networks, lack of co-ordination in agricultural development planning and to the total lack of attention to the expansion of exchange of agricultural commodities through organized commodity markets.

39. A more significant increase in intra-area trade in agricultural commodities can be expected only if more systematic and concerted attempts are made to determine what specific gains could result from the establishment of a commodity market which promotes intra-area trade expansion particularly in agricultural commodities. In this respect, there is little reason to doubt that increased economic specialization and exchange in basic agricultural commodities in the area would lead to greater efficiency, productivity and economic growth. In addition, it is obvious that self-sufficiency in staple cereals production on a subregional basis would provide greater security of basic food supplies.

40. If the countries of the subregion would agree, in principle, not only to the establishment of a subregional agricultural commodity exchange, but also to seek imports of agricultural commodities from neighbouring countries and to gear their production to meet the market demand in neighbouring countries when feasible, a much more appropriate climate for intra-area trade expansion in agricultural commodities would be created.

41. At present, there is no subregional agricultural commodity exchange which is serving all the countries of the subregion. Within this context, the establishment of a subregional commodity exchange constitutes an undertaking of prime importance and urgency. In this respect, therefore a first step would be an attempt to establish a subregional agricultural commodity exchange which would explore the specific opportunities and benefits of greater inter-dependence in the exchange of basic agricultural commodities like cereals, livestock products, oil-seeds and their by-products. As an information center, the proposed agricultural commodity exchange could monitor systematically prospective crops developments in the subregion and identify beforehand likely crop shortfalls in some of the countries of the subregion. In this way, the proposed exchange can be used as a focal point of information to disseminate possible marketing opportunities concerning surplus and deficits of neighbouring countries. Through the exchange it would also be possible to review producers price policies for agricultural commodities with a view to their co-ordination.

42. Therefore, to a large extent, the potential use of the proposed agricultural commodity exchange could assist in filling a gap by providing a specialized marketing center for agricultural commodities whereby important marketing information such as production, prices, delivery and payment arrangements will be disseminated to all the members of the proposed commodity exchange. And the need for such an institution should become even more obvious when the PTA arrangements become operational.

IV. Objectives and Functions of the Proposed Commodity Exchange

43. Commodity exchanges are specialized organized markets which provide a place where their members buy and sell commodities or contracts for future delivery under established rules and regulations. Thus, the primary service of a commodity exchange is to provide a market place where the members meet at definite times and transact certain types of business under the rules laid down by the organization. In the second place, its function is to regulate business dealings of its members. In the third place, the exchange provides a method for settling trade disputes, specifies grades for the commodities dealt in, and gathers and distributes market information. The exchange as such has no dealings in the commodities handled by its members. The distinguishing feature of a commodity exchange is that it furnishes an open market, managed under standardized practices for one or more commodities.

44. Below based on the previous analysis of the economic and trade problems of the countries of the subregion and of the need for a commodity exchange in the subregion are the suggested objectives and functions of the proposed exchange:

A. Objective

- (i) provide a convenient place for the members to meet for the purpose of trading and of exchanging views;
- (ii) collect and disseminate market information throughout the subregion;
- (iii) establish and enforce rules and regulations and set up mechanisms designed to facilitate trade in agricultural commodities in the subregion;

- (iv) establish and maintain grades for agricultural commodities originating from the subregion;
- (i) provide an adequate machinery for arbitration of trade disputes concerning agricultural commodities;
- (vi) aid in crystallizing market values for commodities that will be traded at the exchange;
- (vii) establish an appropriate mechanisms for the settlement of transactions.

B. Functions

45. Broadly speaking, to achieve the above objectives, the proposed exchange is expected to perform inter alia, the following general and specific functions:

(a) General Functions:

- (i) Act as a marketing and information centre for the exchange of agricultural commodities;
- (ii) Act as a policy development with regard to marketing institutions for agricultural commodities;
- (iii) Serve as a mechanism for forwarding information on whether or not and, to what extent, local producers of agricultural commodities in the subregion should expand the production of particular commodities at any given time to meet export possibilities within the subregion.

(b) Specific Functions:

- (i) In accordance with the current supply and demand of agricultural commodities, to help to determine the prices of the commodities that are likely to be traded in the exchange;
- (ii) To serve as a clearing house by providing financial transactions facilitating mechanisms, which aim in particular at guaranteeing contract performance in accordance with the rules of the exchange;
- (iii) To supervise trading activities, adopt and enforce such rules and regulations as will prevent trade malpractice among the members of the exchange and facilitate the speedy settlement of business disputes.

(c) Other Functions:

There are other activities that logically flow from the establishment of the proposed exchange. These activities should be regarded as an integral part of the exchange activities. These include:

- (i) The promotion of the establishment of various commodity market associations;
- (ii) The development of uniform grades for agricultural products;
- (iii) The development of a system for facilitating the transfer of funds;
- (iv) A variety of other lesser services for the member countries of the subregion.

V. Characteristics and Advantages of Commodity Exchange

A. Major Characteristics of Commodity Trading

(i) Types of Transactions

46. As is well known, trading in a commodity exchange generally relates to two classes of transactions namely spot or cash and futures. A spot or cash transaction is purchase or sale of a commodity or some specific grade of it by paying cash on the spot or within a short period as prescribed by the exchange and the delivery is taken also on the day of purchase or usually within a maximum period of eight days. Further, after a spot transaction is made, it cannot be cancelled for the purpose of taking away the margin if the price rises, as in forward transactions. This means that the purchaser has to take delivery, the seller has to deliver, and money has to be exchanged between the parties. The other kind of transaction, called futures trading or dealing in futures is similarly on agreement between parties as to the purchase or sale of a particular commodity or grade thereof, on the understanding that the delivery may be taken on a future date agreed upon. Whereas a spot or cash transaction may be entered into on the basis of sample, a futures transaction must necessarily have reference to a standardized grade.

(ii) Commodity Trading Conditions

47. In this respect, certain conditions must be met before a specific commodity can be traded on an organized market.

The main conditions needed for rendering any class of products suitable for trading on an exchange are that:

- (1) the commodity should be homogeneous.
- (2) the commodity should be capable of being graded.
- (3) the commodity should be durable enough to last for the period of the contract.
- (4) the trading in this commodity should be in sufficiently large volume.
- (5) the commodity should be one whose supply is not subject to rapid changes in the rate of production.

In the light of the above, the commodities most suitable for trading on the proposed commodity exchange are: cereals, sugar, cotton, vegetable oils, tea, meat and livestock. See tables 3 - 8 of the Annex.

48. Within the above broad framework of types of transactions, and commodities the trading of commodities at the proposed exchange should have the following distinct characteristics:

- (1) Primarily trading at the exchange should be conducted in an organized way with a common set of rules governing all the transactions.
- (2) The most important rules governing trading should specify that:
 - (a) only members of the exchange will be eligible for trading contracts at the exchange;
 - (b) trading must occur at one place (in the trading pit or ring) by open outcry, within specified hours. In this way, all bids and offers should be known to all participants and all transactions should be public knowledge;
 - (c) various anti-competitive practices should also be forbidden; for instance, members of the exchange should not fill or match their order to buy or sell without first offering it openly in the trading pit.
- (3) All contracts traded in the pits should be for a standard deliverable grade and quantity with a uniform delivery location and procedures; when actual trading takes place at the exchange, only the price of the commodity should be negotiated in the trading pit. This means that nothing other than the deliverable grade and quantity under standardized dates and rules of delivery and payment can be traded. In an ordinary forward dealings any peripheral terms and conditions can be negotiated.
- (4) When future tradings are being handled, the exchange clearing house should become a party to every contract that is negotiated in the pit. This means that, in actual practice, buyer and seller should do the negotiating but, once the deal is struck, each one should have reciprocal obligations with the clearing house and not with one another.
- (5) In this respect, the exchange clearing house should also act as a common guarantor of all the contracts that will be traded at the exchange. Therefore, all members of the clearing house must maintain a minimum amount of working capital and they must deposit funds to "margin" their outstanding trades. Exchange members who are not clearing members must affiliate with clearing members, for purposes of having all their contract verified and guaranteed. No credit should be extended in this process. It should also be noted that the margin deposit should be considered as a performance bond and not as a down payment.
- (5) When delivery occurs in satisfaction of a contract, full payment should be required of a trading partner as the title of ownership is automatically transferred from the seller to the buyer. Prior to delivery, no title should be expected to be transferred and no credit should be extended.

49. It can be seen from the above description of types of transactions that, in most cases, future trading refers to a special type of contract bought and sold under the rules of an organized exchange. In most cases, it is considered as a legally binding contract to buy or to sell a stipulated amount of a particular grade of product during an agreed future period, subject to the rules and regulations of the exchange, where the contract is made and the price determined by public auction on the floor of the exchange. As future trading often involves more of speculation and hedging and less of actual delivery, it may not be as attractive as cash trading during the initial stages of the proposed exchange.

B. Advantages of the Commodity Exchange

50. In trying to fulfill the foregoing objectives and functions, the exchange will render the following advantages to its members:

- (i) One of the primary advantage of the proposed commodity exchange is that it will supply producers, distributors, financiers and consumers of the subregion with a continuous market. At present, as there is no exchange with organized facilities, it is practically impossible to find a purchaser or seller of commodities at any time one desires. If an organized market of this nature is established in the subregion there would always be opportunities to sell or buy at some price at very short notice. This means that producers in the subregion need not stock commodities for a longer period than what is required. This will substantially reduce cost of storage of agricultural products.
- (ii) Because of the existence of such a continuous market in the subregion, the commodities that will be traded at the exchange will be highly "liquid" to the extent that commodities can be converted into cash at a moment's notice, or vice versa.
- (iii) The advantages of establishing the proposed commodity exchange will not be confined only to those who directly use it. In fact, based on the level of commodity prices prevailing at the commodity exchange, farmers of the subregion could decide which crops they should grow for the next season. They can also exercise caution in disposing of their products at harvest time by keeping themselves in touch with the information disseminated by the exchange throughout the subregion. In this respect, the over-all advantage of the establishment of the exchange would be to improve the conditions of production of agricultural commodities throughout the subregion.
- (iv) A further advantage of a subregional commodity will be in the discovery of prices of agricultural commodities at the subregional level. When the exchange is fully operational, news from every corner of the subregion having a direct or indirect effect upon commodity prices will be received by the exchange almost daily. This news will be received and be weighed by traders at the exchange. The traders will also register their opinions of the news by buying and selling contracts. This process will result in the discovery of commodity prices which best represent their weighted opinions of what the prices should be given the daily information. In this way, the proposed exchange will help in discovering the actual price of commodities in the subregion.

- (v) In respect of futures trading, the exchange will also be useful in reducing uncertainties by discounting the events of the future on commodity prices thereby improving the accuracy of expectations. As news or statistical data which aid in forming opinions are known, prices will move correspondingly and the adjustments will also be made accordingly. In this way, the exchange will serve as a guide to future prices. The effect of supply and demand developments will thus spread out over a period of time and both price advances and price declines will be more orderly throughout the subregion. Thus, with the use of the proposed exchange, producers and consumers of agricultural commodities will have better ideas of how events will affect agricultural commodity prices and be able to plan accordingly.
- (vi) A further advantage of the establishment of a subregional commodity exchange is that, to the extent that the prices of commodities reflect the price expectations of producers and consumers in the subregion, they will act as regulators of production and consumption of agricultural commodities in the subregion. This regulation of consumption and production through price movements will tend to rationalize allocation of resources in the subregion. Commodity prices will act as regulators by encouraging consumption in areas where expectations of surpluses exist and by discouraging consumptions in areas where shortages are expected. Thus, the establishment of a subregional commodity exchange will facilitate the movement of agricultural commodities within the subregion.
- (vii) Besides giving estimates of commodity prices at any given time, the proposed commodity exchange will tend to level prices of commodities among different national markets over space, time and form. The focusing through the exchange of all factors influencing prices, with full publicity of all prices, tends to keep the prices of these agricultural commodities in various local markets of the subregion in close alignment with one another. Assuming that barriers to commodity trade will be minimized such action causes the prices in the different markets to return to a differential of only the approximate cost of transfer between the two markets. In this way, the proposed commodity exchange will maintain the price structure of agricultural commodities throughout the subregion.
- (viii) When the exchange becomes fully operational, it will provide equitable opportunities of trading to all member States of the subregion. This opportunity will be provided by the continuous records of prices that will normally be available to all member States. In an organized commodity exchange of this sort, information about market situation should be more easily available to all members and the differences in the bargaining power of all members should be reduced. It should cost all members the same amount to participate in the auction process and each order of a member should be treated identically. This arrangement will ensure that the prices of the commodities that will be traded at the exchange will be representative of supply and demand conditions in the sub-region.

- (ix) The establishment of the proposed agricultural commodity exchange will have a further advantage of stabilizing the prices of agricultural commodities in the subregion. The operation of the exchange when it is fully developed will allow for more orderly price adjustment over time. This will have the advantage of reducing extreme price fluctuations which may be caused by uncertainty of one kind or another.
- (x) The establishment of a subregional commodity exchange will also have the advantage of facilitating the financing of commodity trade throughout the subregion. As explained previously, the proposed exchange is bound to be a source of commodity market information throughout the subregion. By minimizing risk, market information of this sort will make the problems of market financing less difficult to resolve. In this respect, commercial loans in the respective member State of the subregion can be made and credit extended on sales with greater certainty of payment. Thus, the exchange will facilitate the long-term financing of commodity trade in the subregion. This, of course, assumes that there will be co-ordination of commercial banking policies in all the member States of the subregion.
- (xi) Lastly, the proposed exchange will provide an ideal institution for collective action for developing commodity grade and quality standards for all agricultural commodities that will be traded within the subregion. By definition the proposed exchange will be a means of facilitating the price discovery process. As such an efficient pricing of commodities will not be possible without some means of describing and grading the commodities. Hence, the proposed exchange will become an important institution for developing standards and grades for many agricultural commodities that will be traded at the exchange. Grades for commodities like maize, wheat, rice, oilseeds, butter, meat products can be established by the functional divisions of the proposed exchange for purposes of developing commodity trading within the subregion. The proposed exchange will be the ideal institution for developing such commodity grading system.

VI. Prerequisites and Problems of Establishing Commodity Exchange

A. The Development of Commodity Exchanges

51. Although the roots of commodity trading can be traced back to the Medieval fair system, the modern system of organized commodity exchanges began in Japan around the end of the 17th century.

52. Economic historians who have studied the development of commodity exchange have noted that the marketing system for any commodity traded on an exchange needs to pass through five distinct stages namely: gift-giving, barter, cash or spot markets, forward markets, and lastly futures market. Thus, the establishment of a futures market in a given commodity would seem to be the final stage of a natural evolutionary process.

53. In any evolutionary process, changes occur slowly, generally over a fairly long period of time. Historical analysis demonstrates that most organized markets were almost there prior to the ultimate establishment of the unique marketing arrangements that characterize organized trading. While the necessary marketing ingredients that characterize commodity trading may exist for sometime a commodity exchange cannot emerge until the conditions in the financial community are favourable. For instance, in the United States, many efforts were made over a span of nearly fifty years to establish futures trading in livestock. It was not until the mid nineteen sixties when the structure of the livestock and meat packing industry became sufficiently competitive and the financial community of commodity brokers became sufficiently interested in developing a market that it emerged.

B. Prerequisites for Establishing the Proposed Commodity Exchange

54. The experience of the world commodity markets over the last hundred years or so can provide us with a large number of useful insights into the reasons why some markets have thrived and others either have not got off the ground at all or ceased trading after a short period of activity. Many commodity organizations have over time, attempted to establish a wide range of commodity markets differing both in terms of the scope, grade of commodity and the type of contract for which it is traded. Some of these markets have succeeded and are very active today. Others have not generated a response from the trade and have resulted in considerable losses to the commodity organizations concerned.

55. Therefore, in the following part of this study, it is intended to point out the set of conditions which are required for the successful establishment of the proposed commodity exchange in the subregion. There are three broad categories of essential prerequisites for the successful operation of the proposed commodity exchange. These prerequisites are discussed as follows:

(i) Functional necessity

The functional necessity of establishing a commodity exchange is a crucial element in any consideration of the setting up of commodity exchange. By functional necessity it is meant that when the exchange is established it must fulfill a clear set of functions in the subregional pattern of trade in agricultural commodities. This assumes that for the exchange to be successful in all its operations there must be a need for the services that the exchange will provide to its members. This need must be felt equally by all the member countries which are seeking to establish the exchange at a subregional level. At present, not only there is no other institution that looks after the development of commodity trade in the subregion, but it appears also that the need for establishing such an exchange is large and specific enough to justify the investment in the proposed commodity exchange. Part of the obvious demand arises from the existing PTA arrangements which aim at expanding intra-area trade among the member countries of the subregion. When the PTA becomes fully operational, it is anticipated that new activities related with trade in agricultural commodities will be generated at the subregional level.

56. Therefore, for the proposed commodity exchange to be viable and successful, there has to be an active two-way flow of trade in the sense that buyers and sellers of agricultural commodities in the subregion must be interested in using the exchange on a regular and quantitatively significant basis. The exchange must provide all members with a relatively open competitive forum for trading in agricultural commodities without there being any monopolistic or monoposonistic forces interfering in the price formation mechanisms of the proposed exchange. All member States of the PTA interested in trading in agricultural commodities must have reasons for and be interested in using the exchange regularly. This may include not only State Trading Corporations but also producers and manufacturers in the respective member States of the subregion. Once this important functional necessity is assured, it would appear that the proposed exchange would have a fair chance of success in its future dealings. In other words, for the exchange to be successful at the subregional level, it must enlist active trading interest within the subregion. To attract this interest, the exchange needs to generate and develop a market system which will enlist the confidence and support of the member States of the subregion. Such a market system must meet certain operational and administrative requirements before significant traders will be induced to use it as an important subregional trading forum.

(ii) Operational and Administrative Requirements

57. One of the major operational requirements for the success of the proposed agricultural commodity exchange is the availability of an appropriate contract. This contract must reflect the needs of the subregional trade and it should act as a flexible vehicle for the promotion of the above functions of the exchange. An optimal contract is an essential prerequisite for establishing a successful subregional commodity exchange. Once an active two-way trade has been established, then the precise formulation of the contract should become less important. It must be stressed here that a properly drafted and appropriate contract will considerably reduce the risks of the new exchange faltering during its initial years of activity. The contract should also be designed in such a way that the value expressed in the contract corresponds closely to the price of the actual commodity that is being traded physically at the exchange. This requirement of a physical basis to a new exchange contract implies the provision of suitable warehousing, freight and insurance services in a reasonable proximity to the exchange.

58. Two of the major features of commodity contracts are lot size and margin requirements. The lot size is intended as a balance between administrative economy, which obviously tends to favour the larger lot size and the need to attract a wide range of users. As the traders on the proposed exchange are likely to be State Trading Corporations at least for the initial stages, the lot size of the contracts should be reasonably large.

59. Margin requirements are arrived at as a result of another compromise between the need to protect the users of the exchange against any possible default and the ever present desire to attract increasing volume of business to the proposed exchange. This desire to attract increasing volumes of business carries with it the dangers of speculation and the possible consequent price distortion. However, during the initial phase of the proposed exchange, as

quite a few of the members might be State Trading Corporations representing member States, it might be assumed and hoped that there will perhaps not be excess speculation on commodity prices. However, in the event that the proposed exchange gets involved in futures trading, it may be worthwhile to develop a system of clearing the market. This system should achieve the right balance between guaranteeing security on the market and not deterring trading members by the extent of the margins and deposit that they have to place on each of their trade. In this respect, therefore, a recognized clearing system, with well defined margins and deposits and its consequent insurance cover is also a fundamental prerequisite for the success of a new commodity market.

50. Apart from the above operational requirements involved in the contract, there are essential administrative arrangements that need to be made for the actual running of the proposed commodity exchange:

- (1) In the first place, the exchange should be a self-administered, autonomous joint stock corporation of which the operating members should be the sole shareholders.
- (2) A management committee and various officers should be elected from among the membership and some officials should be appointed and employed on a full time basis.
- (3) This managing body or authority should exist from the outset of the proposed commodity exchange.
- (4) A supervisory body which may be a separate entity or part of the management authority should be established when the exchange is still in its embryonic form and this body should be involved in the drafting of the statutes, rules for membership, rules for dealing etc.
- (5) A number of documents need to be drafted consisting inter alia; of:
 - (a) statutes establishing the organization concerned with the exchange;
 - (b) rules for trading including: definitions, methods of trading, details of the contract, trading room regulations, delivery, enforcement of contracts, margins of contracts, commission treatments, settlement and provision for disputes;
- (6) It will also be necessary to draft definition of the terms that will be used and of the institutions themselves to which membership rules will apply.
- (7) Policy decisions need to be taken on the forms of membership and the proportion elected to each membership sub-section i.e. full members, associate members, non-dealing members and individual members if any.
- (8) Government involvement in monitoring the activities of the proposed exchange should also be spelt out clearly. At times it may be possible that the exchange may be over active in terms of price distortion.

This often happens when futures trading is taking place. In such circumstances government involvement may be very crucial. There may also be a need to exercise a certain degree of control over the activities of the exchange. Care should also be taken to ensure that the exchange does not become a gambling casino or a device for transferring foreign exchange from one country to the other. In this respect, the proposed exchange should induce sufficient genuine trading interest among its members. At the same time too many restrictions should not be placed on the repatriation of any earned profits on the exchange.

- (9) It is anticipated that the proposed exchange should also be self-financing after the initial learning costs. If the exchange is made to rely wholly on registration fees, capitation charges on members and on special fees on deals, it would have to impose relatively high costs for a relatively insignificant level of business with a low turnover. The high charges could act as a deterrent to potential members and thereby hinder the development of trade on the exchange to a level which reduces average costs to a minimum. In this respect it is possible that the proposed exchange may earn assets through sensible management of margins and deposit money. Interest thus gained on this could assist in keeping charges imposed on to new members at a low level.
- (10) There are many other important administrative requirements which are necessary for the establishment of the proposed exchange. One of the most important of these arrangements is the need for an accurate, fast and reliable telecommunications system in the entire subregion. There should be up-to-date modern telex facilities connecting the exchange with buyers and sellers of commodities in the subregion. At present the situation in most of the countries of the subregion in this respect is not satisfactory. However, it is hoped that the quality of existing communication facilities in the subregion can be improved on a commercial basis. The two most important aspects of the communications requirement of the proposed exchange will be:
- (a) the direct need of the users of the exchange and of the exchange authority itself in terms of communicating marketing directives by the trading members;
 - (b) the need by the exchange and its members to disseminate marketing information; in this respect, a reliable and rapid telecommunication by telephone and telex to clients and other exchange users is essential for the effectiveness of the proposed commodity exchange as a market center. Therefore, there will definitely be a need for investment in up-to-date telecommunication infrastructure. While it may well seem that the basic infrastructure of the subregion needs to be developed before the actual commencement of the proposed commodity exchange, an increase in the extent of the communications network could be arranged as the need for it arises given especially the existence of commercial organizations which are capable of installing an effective system of communications at a reasonably short notice.

- (11) Apart from the functional requirements of the traders for telecommunication services, the proposed system can also be used to disseminate information throughout the subregion concerning trade activities of the exchange. If a reasonable amount of business is to be attracted to the proposed exchange, potential traders in the subregion must be kept fully informed of its operations. Indeed, unless these activities are constantly reported to members in the subregion the risk exists that the proposed exchange may be ignored and lose business to other exchanges with better information networks located outside the region. This subregional reporting can be arranged by negotiation with existing financial news services. For instance, in some exchanges like the London Metal Exchange, Commodity prices are reported exclusively by Reuters, although exchanges elsewhere in the world normally permit any agency to report on commodity prices. In the United States, for example, freedom of access is guaranteed by law and exchanges see it as being in their interests to have links with as many news agencies as possible. There is no doubt, therefore, that much of the success of the proposed commodity exchange will be contingent upon accurate, fast and reliable telecommunication system in the entire subregion.

(iii) Need for financial services

51. Although the provision of financial services to ensure the successful operation of a subregional commodity exchange could be an extremely complex subject, for purposes of simplicity attention will be called in this study to only four of the prerequisites or areas of concern.

52. First credit facilities for operations on the proposed exchange will be needed by the users both to cover margin money advances and to make settlement payments at short notice. In normal cases this sort of credit should be provided by the commercial banking sector. Whether or not such credit facilities will be made available to traders at the proposed exchange will depend to a large extent on existing commercial banking policies of the member States of the subregion. In this respect it will be absolutely necessary to include some form of flexibility into the statutory provisions of the banks for the extension of credit for the special requirements of the new exchange. Commercial banks in the subregion should be able to provide short-term credit on a reasonably flexible basis. Once the exchange has been established and confidence has been secured throughout the subregion, private traders in the subregion may involve their own assets in the exchange thereby naturally increasing levels of activity and improving the viability of the proposed exchange. Thus, commercial banks in the subregion should be given the appropriate guidelines for the provision of credit facilities to the exchange and the traders as a special case.

53. The second paramount concern to users of the proposed commodity exchange is likely to be of adequate and flexible foreign exchange facilities. One of the main requirements of traders is that they should be able to get their profits out quickly and without resort to extensive bureaucratic constraints. Subregional traders at the exchange may wish to convert any of their trades specified in a local currency into an internationally recognized currency. To fulfill this essential requirement the exchange should have at its disposal a sufficient supply

of the major foreign currencies and the exchange should develop some kind of forward foreign exchange market. The Central Bank of the country where the exchange is to be located should support any existing foreign exchange market or it should promote the development of an appropriate foreign exchange market. It should also ensure that exchange control and other restrictions on users of the proposed exchange are at the minimum level required to promote active trading and at the same time retain some element of control. The existence of such a forward foreign exchange market will be of interest to all traders of commodities at the exchange.

64. A third important areas is that of taxation and customs matters arising out of settlements of physical trade. In this respect, special dispensation should be given to dealings at the exchange so that the transactions will be free from customs tariffs, taxes and exchange control. If, as will be the case, the exchange is to be sited in a country with foreign exchange control, it should be accorded a form of free port status by the government of the country.

65. The fourth area of concern would be the financial viability of the proposed exchange as a separate institution. The functional details of the appropriate type of the exchange would depend on the actual needs of the member States. Whatever the model adopted, the initial capital costs of establishing the proposed exchange should be met by the members. As in other cases of establishing a subregional institution, the active members of the exchange should be asked to buy shares in the exchange corporation. The size of this equity contribution can be decided by the members themselves after taking into consideration the estimates of the amount of capital required for the successful launching of the exchange. The recurrent costs of administering the proposed exchange should be considered as having two distinct elements. Firstly, the costs relating to the commodities that will be dealt in those incurred by the exchange corporation in providing the basic services to the exchange. Most terminal market associations prefer to cover their share of the exchange's costs by means of a subscription fee raised from the different classes of membership of their association. These fees vary in quantity from one exchange to the other. Some market associations raise part of their revenue by means of a small levy on each contract passing through the exchange. Charges can also occasionally be levied for the provision of specific services by the proposed exchange such as the dissemination of price information. Although it is impossible at this stage to assess the exact sum of money that the exchange would be able to collect from such arrangements, there should be little difficulty in ensuring that the proposed exchange will be a viable financial entity.

C. Potential Problems of Establishing the Proposed Commodity Exchange

66. As the proposed commodity exchange will be the first of its kind in the subregion, it is possible to perceive the following potential problems that may be associated with its technical operations:

Banking Facilities and Foreign Exchange

67. After the first few years of its establishment, the proposed commodity exchange will be a financial institution in many respects. Thus, it will be expected to attract a considerable amount of liquid capital. Consequently it will require a close operating liaison with the banking community of the subregion. The banking facilities will become particularly important in the following technical areas of operations:

- (a) facilitating the holding, investment and transfer of the funds collected by the clearing house of the exchange;
- (b) making available to members of the clearing house short term credit facilities;
- (c) making available and facilitating foreign exchange transactions to the users of the exchange.

(i) The Banking Community and the Clearing House Funds

68. If the exchange clearing house is one which would legally become the guarantor of each contract, then it will be necessary that each contract be "bonded" with a certain amount of margin money. Margin money as it is commonly known in most commodity exchanges, is not a down payment. It is simply a security deposit posted by each party to a contract assuring the other party that it intends to fulfill the contractual obligations. Such margin money is normally collected from the parties to each transaction and is used by the clearing house for meeting settlements among members.

69. These clearing house monies, when cash, can be held and can be invested by the clearing house. They can be invested in government investments such as Treasury Bills. When the proposed exchange becomes active, the size of this pool of clearing house funds can be quite large.

70. In this respect, therefore, the banking community of the subregion will thus become an important factor in facilitating the investment of the funds and the settlements between members of the clearing house. Whenever settlements of accounts are done, accounts at various banks need to be debited or credited on a regular basis. Within this context, it would be quite difficult to say a priori whether or not the existing banking system of the countries of the subregion would be capable of providing the above necessary services to assure the proper functioning of an exchange clearing house. The problem of transferring of funds within banks in the subregion need to be tackled by banking experts in the member countries of the subregion.

71. Within this context, there is a need to review the present state of the banking system in the subregion to assess whether or not the existing banking practices in the member countries of the subregion would be capable of handling all the types of business transactions which the establishment of the proposed exchange would entail particularly in areas of remittances, credit guarantees and foreign exchange. With regard to remittance and telegraphic transfers, the crucial question is to what extent will it be possible to remit funds from one bank to the other in settlement of transactions made at the exchange.

(ii) Availability of credit

72. In a commodity exchange where prices of commodities change very often and settlements are made periodically, credit facilities are needed for operations on the exchange. To the extent that funds may not be available so easily, short term borrowings must be used by members to settle their payments. This credit should be provided by the commercial banking sector. Therefore, bankers in the subregion should be ready to extend the necessary credit for financing trade concerning agricultural commodities. But since different commercial banks are operating at present in the countries of the subregion, their credit policies may not be co-ordinated. Some commercial banks in some member countries may like to extend say overdraft facilities for operations at the exchange and others may curtail these facilities due to policy consideration of one sort or another. In this respect, therefore, the banking community in the different member countries of the subregion need also to work out a common line of policy with respect to extending credit facilities to traders at the exchange. This means that officials of banks in the subregion should be able to do whatever would be possible and consistent with their national economic policies to facilitate the availability of credit to assure the smooth functioning of the proposed commodity exchange.

(iii) The problem of Foreign Exchange Control

73. At present several of the countries in the subregion are faced with serious balance of payment problems. As such exchange control measures are used to support other policies designed to achieve equilibrium and stability in the external sectors of their economy. One of the most paramount concerns of likely traders at the proposed exchange would be the need for having an adequate and flexible foreign exchange facilities at the exchange itself.

74. In the light of existing foreign exchange constraints in the area, and to avoid unnecessary outflow of foreign exchange, it may be necessary to set a maximum ceiling for transferring foreign exchange out of the country where the exchange will be located.

75. In other words, for a successful operation of the exchange, exchange control practices would need to be minimized to the extent possible so that commodity traders would have less problems with respect to the transfer of funds within the subregion. If a subregional commodity exchange is to be successful in promoting trade in agricultural commodities, there is a strong need to develop a more extensive and liberalized foreign exchange market so that low cost foreign exchange cover can be obtained. In this respect, there is a need to remove trade barriers and exchange controls too as much as possible.

(iv) The Problems of Transport and Communications

75. As stated earlier, a reliable and rapid transport and communication network is an essential prerequisite for the effectiveness of a commodity exchange as a marketing forum. As far as transport facilities are concerned, some of the countries in the subregion are islands which are largely dependent on foreign shipping lines and to a certain extent on air transport for trade with the other countries. Others are land locked and depend on transportation facilities of neighbouring countries for access to the sea. Only some countries in the subregion have direct access to the sea. But not all these countries have adequate transport and communication facilities to provide for the traffic of the neighbouring landlocked countries.

77. In addition, at present several bottlenecks exist in the transport system of the countries in the subregion. These bottlenecks constitute major impediments to the expansion of commodity trade among the Eastern and Southern African States. Some of these bottlenecks arise mainly as a result of gaps in the existing infrastructure of the countries in the subregion. The inefficiency of the rail transport system in the subregion and the lack of adequate port facilities as well as the inadequacy of the existing road networks could be serious deterrent to the expansion of trade in the subregion. In most of the countries of the subregion, the load that the new exchange would place on existing transport and communications facilities could be quite substantial.

VII. Organization and Management of the proposed technical and operational Commodity Exchange

78. The organization of the exchange is the most important element in assuring its success. If the proposed exchange is properly organized, it will attract a great deal of interest from various business groups and this diversity will make it possible for the exchange to be a market. Proper organization is also important in developing the credibility of the institution.

79. There are undoubtedly a variety of ways in which an exchange could be organized. The usual procedure is to form a Corporation and sell the shares to interested parties. The pool of funds generated will be the seed money for developing, staffing, operating and promoting the exchange. However, it is assumed that the proposed exchange will be a subregional exchange whereby different member States of the subregion will be trading agricultural commodities among themselves. It is also assumed that like most commodity exchanges, the proposed commodity exchange will also be a non-profit membership association. Within the framework of the above assumption, the main features of the exchange should be as follows:

A. The Exchange Corporation

Primarily, it is suggested that the affairs of the proposed exchange should be directed by its own Board of Directors the members of which should be elected from among representatives of the member States of the subregion. The main responsibilities of the Board should be in matters of general policy development of the exchange, approval of membership applications and enforcing discipline. The Board should also be responsible for establishing and amending exchange rules. At times, the Board may act in a judicial capacity in conducting hearings involving members misconduct. In general, it should be the duty of the Board to enforce the rules and regulations of the exchange and to require obedience thereto from all members of the exchange. In addition, the Board of Directors will be expected to:

- (a) decide on any change in the basic policies and tasks of the exchange;
- (b) approve work programme and forecasts;
- (c) appraise the various substantive activities of the exchange and evolve improvements of its operations;
- (d) consider and adopt the report of the Managing Director on the expenditures and the achievements of the exchange.

It is also suggested that, until such time that commodity market associations are well established in the subregion to appoint their own directors, the proposed interim Board of Directors should be responsible for implementing policy guidelines and activities that will be assigned to the exchange. In almost all its dealings, the proposed interim Board of Directors should act in close consultation with the contributing members of the exchange.

80. Initially, therefore, the interim Board of Directors should consist of representatives of founder member States. But as the exchange develops and more and more commodity associations are formed in the subregion, the permanent Board of Directors should include all the chairmen of commodity associations so that the permanent Board of Directors may become an executive one charged with the day-to-day administration of the proposed commodity exchange. In this way, it is anticipated that gradually the composition of the Board of Directors will represent proportionally the interests of commodity associations at the exchange. However, during

the early stages of the establishment of the proposed exchange, as it is assumed that there will not be commodity associations operating at subregional level, it is strongly suggested that the interim Board of Directors should be composed of member States of the subregion.

81. Within the above framework, the daily administration of the proposed exchange should be in the hands of an appointed and salaried Managing Director, employed with the approval of the exchange Board. The Managing Director, as the chief executive officer of the exchange, should be assisted by such other officers and staff as he deems necessary. The main duty of the Managing Director should be to implement the policy directives of the Board of Directors. It is suggested that there should be seven substantive departments under the Managing Director. Each Department will be headed by a manager as indicated in the organizational chart of the proposed exchange. Each of the above managers should have support staff under his supervision. These managers should be appointed by the Managing Director after obtaining approval of the Board of Directors. Thus, during the first few years of the establishment of the exchange, the day to day running of the proposed exchange should be delegated to a Management Committee under the chairmanship of the Managing Director. The Management Committee can in turn appoint other committees to perform various functions including separate market committees to supervise the conduct of each commodity market. In the long run the permanent members of the Market Committee should be elected from the members of Commodity Market Associations.

82. The organizational structure suggested above is common to most exchanges that are constituted as self-governing institutions. It is democratic, simple and economical as it allows the exchange and its markets to be operated with the minimum of expense on staff salaries and office accommodations. As the exchange will be a non-profit membership association in the long-run, it should be a corporation limited by guarantee having no provision for the distribution of profits or surpluses amongst its members. It is not appropriate that the proposed exchange be profit-making because its income will be derived solely from dues paid by its own members. If therefore, the proceeds from contract levies, membership subscription and interest earnings on capital are in excess of the outgoings, the exchange should make reductions in the charges on members so as to lower the cost of trading. Thus, the exchange should be run in such a way that it does not make profit nor makes heavy losses.

B. Membership

(i) Full members

83. In the early stages of the establishment of the exchange, it is assumed that the exchange will start out with few commodities. In most cases, when only one commodity is being traded at the exchange, the principle with respect to membership is to start with small members and keep it exclusive. The nucleus of this first commodity market should consist of a small band of dedicated supporters of the establishment of commodity exchange in the subregion. The main reason for this suggestion is that large trading volumes cannot be expected during the early stages of the life of any new commodity exchange. The number of traders participating in the exchange can also be very small. Another reason for keeping initially the membership small is that the necessary amount of dedication or effort required to create a new exchange may not be forthcoming unless the rewards for such efforts are commensurate. In the early stages of the

establishment, it is an obvious fact that members must be prepared to face the risk of loosing in the common cause of getting a new exchange on its feet.

(ii) Associate members

84. The other category of membership, sometimes known as "associate membership" should be available to those who are interested in commodity trading but are not in a position to commit themselves to full membership. In most commodity exchanges, this type of membership is designed primarily for those involved in trade in a particular type of commodity. Associate membership, since it carries the right to trade through full members at reduced commissions, is often considered reasonably cheap.

(iii) Multi-commodity exchange

85. If however, it is desired to establish a multi-commodity exchange in the Eastern and Southern African subregion, it would be necessary to take the followings into account in designing the basic structure of the exchange.

- (a) In establishing a multi-commodity exchange, as the volume of trading involving the various commodities could be substantial it is necessary to develop a strong clearing and guaranteeing house within the exchange itself.
- (b) In addition to the clearing house, it is also necessary to establish commodity marketing associations within the exchange itself.
- (c) In the case of a subregional multi-commodity exchange, the necessity for the above organizational structure arises from the very marked differences that inevitably exist between the trading terms and rules and regulations applicable to such differing commodities as grains, tea, sugar, cotton, livestock, etc.

86. It would be unnecessarily and undesirably restrictive and complicated to try to include rules and regulations for all of them under the aegis of one exchange. It will be useful to have some exchange of ideas between those concerned with one commodity and another. That is why it was suggested earlier that the chairmen of individual commodity associations should be the members of the Board of Directors of the proposed commodity exchange.

87. However, when setting up a multi-commodity exchange, in most cases differing requirements make it desirable that only those closely involved with each individual commodity should finally determine the terms and conditions for trading in that particular commodity.

88. In addition, it is also suggested that each commodity market association in conjunction with the Clearing House, should be responsible for the orderly conduct and disciplining of the market in that commodity. Encouraging self-regulation in each commodity market will result in a more satisfactory operation of the commodity market.

89. It can be seen from the foregoing analysis that, if it is desired to establish a multi-commodity exchange in the subregion, the proposed exchange should be divided into self-contained units providing facilities for trading in each of the commodities. Each unit should be administered by the appropriate commodity association which should be responsible for payment to the exchange corporation of all costs directly attributable to its market area and for the administration of trading within its own market.

90. In a multi-commodity exchange, the main responsibilities of the various commodity associations should include some of the following basic functions:

- (a) To provide trading, and contract and arbitration rules;
- (b) Supervision of training procedures for newly recruited floor members;
- (c) Supervision of trading practices with respect to each commodity traded at the exchange;
- (d) Provision of Boards of arbitration to deal with disputes, in accordance with the arbitration rules of the associations;
- (e) Control of grading procedures in connexion with rules for tendering;
- (f) Control of discipline in the respective markets;
- (g) Day-to-day administration and resolving of emergency situations;
- (h) Control of the respective associations investments.

These broad responsibilities of commodity market associations can be summarized by saying that their primary function should be a close management of trading and longer term planning.

91. Within the above structural framework, the organization chart of the proposed exchange is shown in table 3 of the Annex. While the proposed organizational structure is designed to fulfil the needs of a subregional commodity exchange at its full scale of operations, the actual placement of the envisaged Department Managers should be resorted to after careful assessment of the need to fill each post and keeping in view of the build up of actual work load, success and acceptance of the work of the Exchange. This assumes that the exchange can start out in the beginning with a very limited number of professional and support staff.

VIII. Exchange viability, Resources and Budget

92. It is assumed that the financial viability of the proposed commodity exchange should initially depend on the willingness of the member States of the subregion to contribute their share at least for the first few years.

93. It is also assumed that the exchange should be funded in the beginning from membership contributions. It is also assumed that the exchange should adequately charge its members for its services with a view towards obtaining complete self-sufficiency after three to four years of operation. As the exchange will be a non-profit organization, it is also assumed that in the course of its operations surpluses derived from its activities will be fully re-invested into up-grading and expanding its activities.

A. Costs/Benefits of the Proposed Agricultural Commodity Exchange

94. A cost/benefit analysis is usually made in terms of input and output data as related to productive projects. However, the establishment of an agricultural commodity exchange does not involve direct productive activities. Within this context, it may be understood that the nature of this project is quite different from that of other investment projects where a cost/benefit analysis can be made in terms of the conventional input-output analysis. The proposed exchange would merely act as a central place where actual trading in agricultural commodities would take place among the members of the exchange. In this regard, therefore, it will not be possible to quantify in concrete terms the benefits of establishing the proposed commodity exchange. However, it may be possible to identify some foreseeable benefits mostly of a qualitative nature, of the exchange itself.

(a) costs

95. The estimated costs of running the proposed exchange during the first three years of its establishment are provided in Table 13. The cost of operating the exchange during the first year will be US\$695,800. This includes costs of personnel, capital and operational expenses required during the first year. However, during the second and third years of its operations, as more and more professional staffs would be required to carry out the normal functions of the exchange, the personnel costs and the operational costs are expected to rise to US\$861,000 in 1984 and US\$1,020,150 in 1985. The total costs of establishing the proposed exchange during the first three years is anticipated to reach US\$2.5 million.

(b) Benefits

96. Though the above costs are expected to rise during the first three years of its operations, it is worthy of note that the long-term benefits of the proposed exchange could be far reaching. Though these long-term benefits cannot be quantified in concrete terms at this early stage, it is anticipated that the establishment of the proposed exchange would have the following major benefits:

Increased Agricultural Production

97. The establishment of the proposed commodity exchange originates from a concern that at present the expansion of trade in agricultural commodities among the countries of the subregion is hampered by the inadequacy of marketing information and other conditions such as prices concerning trade in agricultural commodities among the member countries of the subregion. In this respect, the primary benefit to be derived from the proposed exchange would be an increase in the production of agricultural commodities throughout the subregion. As a result of stepped up demand for the relevant products production of agricultural commodities would be aimed at satisfying not only national market but also the enlarged PTA subregional market. The increase in the size of the subregional PTA market would eventually lead to large scale production of agricultural commodities in the subregion.

98. Related to the increase in production the establishment of the exchange would result in an additional benefit, that is, the standardization of commodities, the grading thereof and the fixing of contracts for the commodities related thereto. Trading at the exchange would also encourage prompt payments at the time of delivery. The prices of commodities would be determined by open outcry of bids and offers. This is expected to ensure free competitive pricing of agricultural commodities at the exchange and at the same time build up confidence in intra-African price determination mechanisms.

Foreign Exchange Savings

99. When trade in agricultural commodities is well developed among the countries of the subregion, it is expected that imports of agricultural commodities that originated previously outside the subregion, would be replaced by imports originating in the countries of the subregion. The benefit derived, in this respect, would be to encourage appropriate import substitution and consequently enable countries in the subregion effect savings in the use of scarce foreign exchange. Though this benefit cannot be quantified in concrete terms, its effect could generally be said to be substantial.

Development of Commodity Market Information

100. At present the inadequacy of up-to-date market information on agricultural commodities constitutes a serious constraint on the development of intra-African trade in such commodities. Therefore, one of the primary benefits to be derived from the proposed exchange would be the development and strengthening of trade information on agricultural commodities. This is because the exchange would be an advertising centre for the availability, pricing, supply and demand of agricultural commodities in the subregion. In this respect, the proposed exchange would be a focal point in providing commodity market information. In course of pursuing its daily activities, the exchange would collect and disseminate information as well as other relevant background information on, *inter alia*, trading policies and practices which would facilitate trade between countries of the subregion.

Improvement in Communications Facilities

101. The promotion of trade in agricultural commodities through the use of the exchange facilities would have a further benefit of developing communications facilities. That is because accurate and fast telecommunications systems are an important feature of the operations of the proposed exchange. In fact, there should be an efficient telex facility which would connect the exchange with commodity buyers and sellers in all the countries of the subregion. This basic requirement of an exchange would have the ultimate benefit of improving the existing communications facilities in the subregion. Telegraphic transfer of funds for clearing and payments arrangements would, therefore, also have the benefit of developing subregional banking co-operation.

102. In the light of the above, it could be clearly seen that the proposed exchange would confer substantial benefits, although the latter could not be quantified precisely due to the nature of the project involved. In relation to these benefits, costs seem to be relatively small.

B. Sources of funds for establishing the exchange

103. It is assumed that, unlike other commodity exchanges, established elsewhere in the world, the proposed exchange will not be financed initially by a private group of promoters. A subregional institution like this is likely to experience its acutest financial problems during its formative stages. Accordingly, in order to ensure that the proposed exchange gets off to a good start, that member States of the subregion should be prepared to provide a launching contribution.

104. It will also be necessary to submit a project request for African Trust Funds for the establishment of the exchange and for its first three years of operation. It is suggested that finance should be made available to the exchange during the first few years of operation.

105. After the initial establishment of the exchange, since it is assumed that the exchange will become operational, sufficient money can be raised from the following sources:

- (i) Membership fees
- (ii) Annual subscriptions and sale of publications
- (iii) Levies on contracts and taxes on the users of the exchange for services offered.

106. The question of the cost of membership and the possibilities of charging subscriptions to cover operating costs cannot be resolved at this stage either. One does not know what the market will bear. Therefore, the member States of the subregion should be the first contributors of funds through their subscriptions and grants, to get the exchange started. The total cost envisaged for the first three years of the establishment of the exchange is about US\$2.5 million.

107. Other various sources of financing can include:

- (i) Grants from other developed countries;
- (ii) Grants from African financial institutions;
- (iii) Contributions from other United Nations agencies.

108. In addition to the above sources, oil-rich African countries can also be approached to extend a helping hand during the early stages of the exchange. It should, however, be stressed that the member States of the subregion should play a leading role in financing the establishment of the proposed exchange in the subregion.

C. Staff Requirements and Annual Budget

109. Under the above assumptions, the following estimates of annual budget are presented for considerations. The number of managers and supporting staff has been deduced from the organizational chart presented in Table 3. The actual number of required professional and supporting staff for the period 1983 to 1985 is also shown in Table 10. Estimates of staff costs and other operational costs are also indicated in Table 11 and 12 respectively. A summary of estimates of total budget required for the first few years of operations is shown in Table 13. According to the above estimates, the annual budget of the proposed exchange will run from US\$695,800 in 1983 to US\$1.02 million in 1985.

IX. Conclusions and Recommendations

A. Conclusions

110. The preceding chapters of this study have dealt with the general economic features of the Eastern and Southern African States with particular reference to the production and marketing of agricultural commodities and, consequently, the need for a subregional agricultural commodity exchange.
111. In the above analysis, it was pointed out that one major obstacle to the expansion of trade in agricultural commodities among Eastern and Southern African States is the lack of information on the availability, pricing and other conditions concerning specific agricultural commodities including foodstuffs, to be traded between member States of the subregion. It was also pointed out that at times particular agricultural commodities could be in surplus in some countries of the subregion while other countries are short of them. The latter countries often buy a good proportion of their requirements of agricultural commodities from outside the subregion. In most cases it has been found out that these countries buy their requirements even from outside the region at great cost to themselves.
112. The main purpose of this study is to consider the feasibility of establishing a subregional commodity exchange which would assist in overcoming the above problems and would, at the same time, strengthen trade relations in agricultural commodities within the subregion.
113. While assessing the need for the establishment of an agricultural commodity exchange it is indicated that such a subregional exchange would in many ways solve the existing marketing information problem within the subregion. It is also pointed out that the establishment of a commodity exchange would eventually supplement the current marketing arrangement within the PTA.
114. The study has demonstrated that the economic and marketing advantages of establishing such an institution are numerous. The proposed exchange will initially constitute a focal point for the dissemination of trade information within the subregion. It would also provide producers and consumers of agricultural commodities with continuous marketing facility. When the exchange is fully developed member States of the subregion would be in a position to trade among themselves so easily that dependence of these countries to external market will be lessened. It is also expected to provide equitable opportunities of trading to all member States of the subregion.

B. Recommendations

115. In the light of the above, the following recommendations are made:
1. that a formal agreement specifying the terms of the establishment of a subregional agricultural commodity exchange should be formulated and agreed by the member States;
 2. that consideration should be given to specific agricultural commodities namely, maize, wheat, rice, meat and livestock, tea, sugar, cotton and vegetable seeds and oils;
-

3. that in this respect, articles of agreement for commodity associations and rules and regulations on trade in the specific agricultural commodities, contract specifications and terms of trade should be formulated and agreed upon by the members of the proposed agricultural commodity associations;
4. that the proposed agricultural commodity exchange should commence operations as an information centre which would disseminate commodity market information to the member States of the subregion;
5. that the exchange should by 1984 start trading in physical goods on the basis of delivery either immediately, that is, "spot" or at specified future dates, provided that trading in futures market be developed gradually;
6. that a working party be set up consisting of experts from member States of the subregion to draw up an agreement for the exchange on the basis of a suitable set of terms of reference and a timetable for implementing this project.

ANNEX

X. Statistical Annexes

Table 1: Eastern and Southern Africa: Agricultural Trade
Total and within the Area
(in \$ US mn.) 1974

Country	Agricultural Exports			Agricultural Imports		
	Total	to other 13	%	Total	From the other 13	%
Angola	220	4	2	50	1.5	3
Botswana	25	1	1	15	0.1	1
Ethiopia	235	3	1	18	0.8	4
Kenya	290	38	13	80	16.0	20
Lesotho	12	-	-	34	1.0	-
Madagascar	185	4	2	38	1.0	3
Malawi	106	8	8	24	12.0	50
Mauritius	281	8	3	98	1.6	2
Mozambique	200	16	8	50	5.0	10
Somalia	65	1	-	30	9.2	-
Swaziland	100	4	4	12	0.5	4
Uganda	280	13	5	20	13.0	65
United Republic of Tanzania	290	16	6	150	17.0	11
Zambia	23	19	80	70	9.0	13
Total	2 312	136	6	690	85	12

Sources: National Trade Statistics

Table 2: Eastern and Southern Africa: Leading Agricultural Trade**Commodity Groups (in \$ US mn.) 1974**

Commodities	Exports of the 14 countries	Imports of the 14 countries	$\frac{\text{Imports}}{\text{Exports}}$, %
Coffee	688	2	0.3
Sugar	393	33	8.4
Sisal	192	0	0
Cotton	127	5	3.9
Tea	118	4	3.4
Vegetable Oil	101	37	36.7
Tobacco	97	16	16.4
Live Cattle, Sheep & Goats	70	18	26.0
Pulses	60	8	13.3
Meat	<u>21</u>	<u>9</u>	<u>4.2</u>
Total of above	1 847	132	7.1
Total Agricultural	2 312	690	29.8

Leading Import Commodity Groupings

Commodities	Imports of the 14 countries	Exports of the 14 countries	$\frac{\text{Exports}}{\text{Imports}}$
Rice	92	8	9
Wheat and Flour	174	0	-
Maize	54	21	39
Dairy Products	40	10	25
Malt	<u>25</u>	<u>0</u>	<u>-</u>
Total of above	385	39	10

Table 3: Eastern and Southern Africa: Production and Trade in Cereals
 1974-1978 in 000 MT

Countries	Production			Imports			Exports		
	1974	1976	1978	1974	1976	1978	1974	1976	1978
Botswana	55	124	106	22	21	25		1	
Burundi	699	301	293	7	11	15			
Comoros	16	19	21	19	14	18			
Ethiopia	4,424	4,665	4,266	5	92	12	9		
Kenya	1,979	3,230	2,928	15	12	93	80	119	181
Lesotho	211	251	211	52	70	69	2		
Madagascar	1,988	2,179	2,081	102	78	261	7	7	2
Malawi	1,402	1,248	1,554	17	43	12	42	5	11
Mauritius	2	2	2	160	137	143			
Mozambique	801	756	645	62	177	191			260
Rwanda	192	234	242	3	9	8			
Somalia	303	227	237	42	123	124			
Swaziland	125	104	98	15	17	17	2	2	2
Tanzania	951	1,518	1,737	431	97	184	1		
Uganda	1,774	1,598	1,700	34	17	17			
Zambia	811	1,220	989	95	86	110	111	9	
Zimbabwe	2,061	1,785	1,790	79	25	24	53	55	65
Total	17,794	19,461	18,900	1,160	1,029	1,323	307	208	521

Source: FAO Production and Trade year book Vol. 29, 30, 32.

Table 4:

Eastern and Southern Africa: Production and Trade in Sugar
1975-1977 in 000 Tons

Countries	Production			Imports			Exports		
	1975	1976	1977	1975	1976	1977	1975	1976	1977
Angola	40	50	60	7	45	51	-	-	-
Ethiopia	136	146	135	-			7	26	4
Kenya	174	182	175	20	52	39	1	-	-
Madagascar	124	114	110	-			41	32	32
Malawi	68	86	98	0.1			31	45	57
Mauritius	468	731	715	-			498	551	524
Mozambique	228	248	250	-			52	6	37
Somalia	36	29	32	13	23	54			
Swaziland	224	209	226				201	194	214
Tanzania	110	106	114		12	21	18	24	11
Uganda	40	21	23		0.2	18		3	
Zambia	85	84	95	0.3					
Total	1,733	2,006	2,033	40.4	132.2	183	849	821	879

Source: FAO Production and Trade year book, Vol. 30, 31 and unofficial information.

Table 5. Eastern and Southern Africa: Production and Trade in cotton fibre, 1975-1977 (in tons)

Countries	P r o d u c t i o n			I m p o r t s			E x p o r t s		
	1975	1976	1977	1975	1976	1977	1975	1976	1977
Angola	13,000	13,000	12,000				11,724	6,037	9,800
Botswana	1,000	1,000	1,000				808	1,772	73
Ethiopia	18,000	24,000	24,000	401	95	-	4,508	2,404	486
Kenya	5,000	5,000	7,000	2,010	2,731	2,700	3,800	2,073	322
Madagascar	10,000	13,000	14,000				-	1,742	2,177
Malawi	6,000	6,000	8,000	60			2,193	2,028	2,000
Mozambique	28,000	28,000	30,000				17,788	16,347	6,200
Scmalia	1,000	1,000	1,000	212	210	210			
Swaziland	6,000	6,000	6,000				3,905	980	1,100
Tanzania	42,000	69,000	59,000	47	30		39,674	57,581	40,700
Uganda	35,000	41,000	41,000				25,377	19,301	10,400
Zambia	1,000	1,000	1,000				3,900	-	-
Total	166,000	208,000	204,000	2,730	2,877	2,910	113,677	94,081	73,253

Source: FAO Production and Trade Yearbook, vol. 30, 31 and some unofficial information.

Table 6. Eastern and Southern Africa: Total quantity of imports of oils and fats^{1/}
 1976-1978 (in thousand MT)

Countries	1976	1977	1978
Angola	8	46	47
Botswana	2	-	-
Burundi	1	1	2
Ethiopia	3	4	3
Kenya	55	58	59
Lesotho	1	1	1
Madagascar	22	13	13
Malawi	4	4	3
Mauritius	21	20	20
Mozambique	7	4	5
Rwanda	4	1	1
Seychelles	1	1	1
Somalia	6	12	16
Swaziland	1	1	1
Tanzania	27	28	29
Uganda	2	1	1
Zambia	24	20	19
Total	189	215	221

Source: FAO: African Commodity Intelligence Service, No. 04, 1980.

^{1/} Including the oil equivalent of oilseeds.

Table 7. Eastern and Southern Africa: Production and Trade in Meat, 1977-1979

Production = '000 MT
Imports = US\$ 000
Exports = US\$ 000

Countries	Production 1/			Imports 2/			Exports 3/		
	1977	1978	1979	1977	1978	1979	1977	1978	1979
Angola	63	64	66	1,400	7,500	2,100			
Botswana	48	49	51	497	672	650	48,574	32,330	76,300
Burundi	22	22	22	146	129	151	-	-	-
Comoros	2	2	2	1,400	2,000	2,533			
Ethiopia	341	344	350	18	34	-	523	309	180
Kenya	226	211	236				7,127	3,286	4,585
Lesotho	13	14	15						
Madagascar	139	144	147				4,758	6,841	7,664
Malawi	20	22	21	77	60	90			
Mauritius	2	2	2	8,798	9,760	9,750			
Mozambique	45	46	46	-	4,500	-			350
Rwanda	18	18	18	87	93				
Somalia	127	139	142				1,874		
Swaziland	16	17	18	1,544	2,010	2,400	3,861	6,051	5,000
Tanzania	156	159	150					55	
Uganda	108	113	131				235		
Zambia	39	38	39	1					
Zimbabwe	189	171	147	1,200	1,500	2,000	9,000	5,500	4,500
Total	1,574	1,575	1,612	27,768	28,258	19,674	75,952	54,372	98,579

Source: FAO Production and Trade Yearbook, vol. 30, 33.

1/ Beef and Buffalo meat.

2/ SFTC - 011 fresh, chilled or frozen meat.

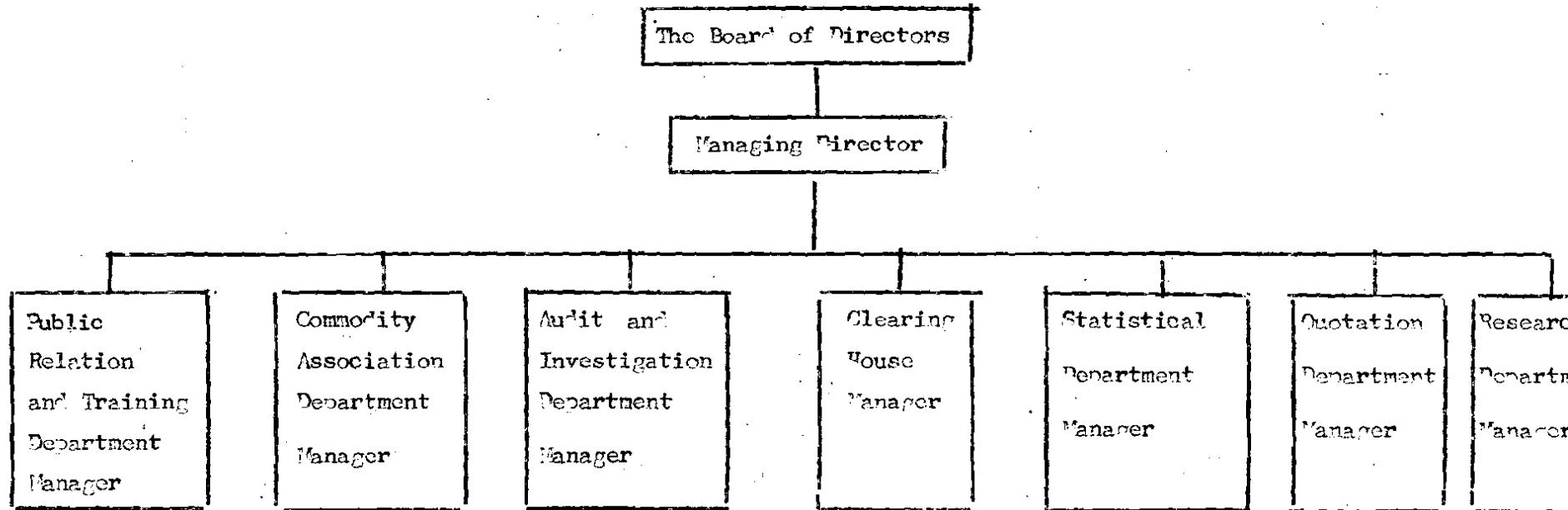
3/ SFTC - 011 fresh, chilled or frozen meat.

Table 8. Eastern and Southern Africa - Production and Trade in Tea
1977 - 1979 (In tons)

Countries	Production			Imports			Exports		
	1977	1978	1979	1977	1978	1979	1977	1978	1979
Burundi	1 000	1 000	1 000	-	-	-	1 390	1 258	1 545
Kenya	86 000	93 000	99 000	5 747	7 763	8 623	75 658	93 282	94 025
Malawi	3 700	32 000	33 000	42	-	-	29 961	36 777	31 096
Mauritius	5 000	5 000	5 000	7	-	-	3 319	4 430	3 899
Mozambique	17 000	15 000	16 000	-	-	-	12 300	10 000	11 000
Rwanda	5 000	5 000	7 000	-	-	-	5 367	5 115	4 400
Seychelles	-	-	-	29	44	70	2	2	-
Tanzania	17 000	17 000	18 000	7	18	-	11 977	14 987	15 024
Uganda	17 000	18 000	6 000	-	-	-	15 039	8 563	1 412
Zimbabwe	3 000	3 000	3 000	1 000	1 000	1 000	-	-	-
Total	183 000	189 000	188 000	6 838	8 825	9 693	156 013	168 514	162 401

Source: FAO Production and Trade Yearbook Vol. 33.

Table 9: Organizational Chart of the Proposed Commodity Exchange



* Job descriptions of the functional departments are attached to above organizational chart.

Functions of Department of the Exchange

Relations Department

To supervise and administer all matters concerning the public relations function of the exchange. Its primary function is to promote public awareness of the vital economic role fulfilled by the proposed commodity exchange and its place in the Eastern and Southern African States as a financial institution of integrity and responsibility. In addition to the above function this department will be charged with the responsibility of providing educational materials and services to various segments of the public concerned with or interested in the function and operation of the markets. The groups the department attempts to reach include commercial traders, bankers, commodity brokers and the economic community in the subregion.

Audits and Investigations

- (a) Monitoring the financial status of members of the exchange and uncovering financial weakness early enough to enable corrective action to be taken.
- (b) Market surveillance, including the review of all discretionary and omnibus accounts which must be registered with the exchange.
- (c) Aiding the Clearing House by providing information gleaned from its review of all applications for clearing house privileges.
- (d) Screening applicants for membership and reviewing applications from members.

Statistical Department

Maintained by all major commodity exchanges. It reports and disseminates daily market price data and such information as may become available from governmental and other sources about supply and demand factors.

Quotations Department

Responsible for supervising the instantaneous release of market price quotations over national and international wire services as well as supervision of all price data posted on the exchange floor.

Research Department

Conducts or assists in making feasibility studies with respect to new contracts that might be traded and also in the analysis and implementation of changes to be made in existing contracts.

Commodity Department

Responsible for the formation of various multi-commodity associations and standardization of marketing practices including preparation of memorandum and articles of associations.

Clearing House Department

Responsible for settling transactions executed on the floor of the exchange. Charged also with the responsibility of assuring the proper conduct of delivery procedures and the adequate financing of commodity trading. Responsible for acting as guarantor of contract performance according to the rules and regulations of the exchange.

**Table 10. Staff establishment and budget estimates of the
Proposed Commodity Exchange 1983 to 1985**

A.

Staff Establishment	Grade Level	1983 m/m	1984 m/m	1985 m/m
Managing Director	D-1	12	12	12
Department Managers	P-5	36	72	84
Secretary Managing Director	P-4	12	12	12
Secretaries	GS-8	36	72	84
Clerks	GS-7	36	72	84
General Labour	GS-2	36	36	60

Table 11. Estimates of Staff Costs

B. **Budget Estimates**

Grade Level	Personnel	1983		1984		1985	
		m/m	US\$	m/m	US\$	m/m	US\$
D-1	Managing Director	12	72 000	12	72 000	12	72 000
P-5	Department Managers	36	180 000	72	360 000	84	420 000
P-4	Secretary to Managing Director	12	48 000	12	48 000	12	48 000
GS-8	Secretaries	36	54 000	72	108 000	84	126 000
GS-7	Clerks	36	43 200	72	86 400	84	100 400
GS-2	General Labour	36	21 600	36	21 600	60	36 000
T o t a l		168	418 800	276	696 000	336	802 400

Table 12. Other Capital and Operational Costs
 (in US \$)

Items	Total	1983	1984	1985
(a) Estimated capital cost for office space	350 000	100 000	100 000	131 250
(b) Data Processing Equipment	50 000	60 000	-	-
(c) Stationery	45 000	15 000	15 000	13 125
(d) Office Machinery and Equipment	85 000	20 000	20 000	39 375
(e) Telex	15 000	4 000	5 000	6 000
(f) Transport	60 000	60 000	-	-
(g) Operations and Maintenance	30 000	8 000	10 000	10 500
(h) Travelling Costs	45 000	10 000	15 000	17 500
Total	690 000	277 000	165 000	317 750

Table 13. Summary of Estimates

Personnel and Operational Costs	Total		1983		1984		1985	
	m/m	US\$	m/m	US\$	m/m	US\$	m/m	US\$
(a) Personnel	780	1 917 200	168	418 800	276	696 000	336	802 400
(b) Capital and Operational		659 750		277 000		165 000		217 750
Grand Total	780	2 576 950	168	695 800	276	861 000	336	1 020 150