

# The Prices in Mozambican Agriculture: Some Observations

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#### THE PRICES IN MOZAMBICAN AGRICULTURE

- SOME OBSERVATIONS -

Ministry of Agriculture

Food and Agriculture Organization of the United Nations

Support to Agricultural Planning and Policy Analysis

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This report is the first field document prepared by the project identified on the title page. The conclusions and recommendations given in the document are those considered appropriate at the time of its preparation. They may be modified in the light of further knowledge gained at subsequent stages of the project.

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# LIST OF ABREVIATIONS

CIF		Cost, Insurance and Freight
CNP	_	National Planning Commission
CNSP	-	National Commission of Salaries and Prices
DINECA	-	National Directorate for Economics and Marketing
DL	-	Legal Diploma
DNCA	-	National Directorate for Agricultural Marketing
DNEA	-	National Directorate for Agricultural Economics
DNE	-	National Directorate for Statistics
ENACOMO	-	National Company for Mozambican Marketing
FAO	-	Food and Agriculture Organization of the United Nations
FOB	-	Free on Bord
GDP	-	Gross Domestic Product
IMF	-	International Monetary Fund
Mt	-	Metical (plural Meticais)
OAU	-	Organization of African Unity
PRE	-	Economic Rehabilitation Programme (1987-90)
RPM	-	People's Republic of Mozambique
SEA	-	Secretariat of State for Cotton
UNDP	-	United Nations Development Programme

World Bank

WB

## 1. INTRODUCTION<sup>1</sup>

The objective of this document is to contribute to an analysis of the prices in Mozambican agriculture with a view to improve the knowledge of this very important area of agricultural economics and to arrive at better informed and more consistent policy decisions. The document does not pretend to cover all aspects at the same level of detail. However, it is the intention to provide a general framework, synthesizing the existing information and experience in order to focus on some topics of particular importance in the present phase of rehabilitating the economy of Mozambique. The document is organized in three main parts: the first gives a general framework, the second analyses price developments between 1976 and 1986, and the third reviews topics of priority importance in the formulation of the price policy for the future.

The weak performance of African Agriculture in the last two decades, in particular in sub-Saharan Africa, has already been the object of various studies, reports and international meetings<sup>2</sup>. It is indeed indisputable that a profound crisis exists, which requires concerted measures and action on behalf of the African countries as well as the international commodity to be overcome.

There is a general consensus that a continuation of trends observed in the past is not viable and that adequate measures must be taken. However, which are the measures to be taken? The reasons for the present crisis are many, and there is no general consensus about which reasons are of primary and determining nature and which are of only secundary importance.

The World Bank (1981) identifies insufficiencies in internal agricultural policies of the African countries as the main factor and proposes a strategy for agricultural growth whose most important elements are:

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It is sufficient to mention here that the increase between 1970 and 1984 of per capita food crop production was negative in the majority of countries in sub-Saharan Africa. Furthermore, it was not just food production that declined. The same accounts for export products. Therefore, what is in reference is a profound crisis of the agricultural sector as a whole (see WB 1981, FAO 1980 and 1986).

- Concentration of resources on smallholders and export crops.
- Reform of incentive structures to ensure better prices.
- More open and competitive marketing systems.
- Better availability of consumer goods.

The WB underlines the importance of external assistance but also indicates that:

"African Governments, therefore, must be willing to take firm action on internal problems, be more open to proposals to revise policies in the light of experience, and be willing to accept the preposition that without policy reform higher aid will be difficult to mobilize" (WB 1981, p.8).

The proposals of the WB have created an intensive debate. Mkandawire (1982) classifies these proposals as a "package of delicately prepared proposals to facilitate capitalist penetration in the African economies and in particular in the agricultural sector". He also observes that there is a serious conflict between these proposals and the objectives of the Lagos Plan of Action<sup>3</sup>, which focus on selfsufficiency in food as a priority objective.

The Nordic countries (1984, p.3) state that "negligence of the incentive framework is the single most important reason why marketed agricultural production has declined". This view is therefore along the line of the WB position. In other aspects Nordic opinions focus more on the importance of food selfsufficiency in accordance with Lagos Plan of Action. A critique of the Nordic position as well as the analysis of the WB is that they do not take sufficiently into consideration important exogenous factors as the World economic crisis and in the case of Southern Africa the destabilization policy of South Africa.

The collaboration between Frelimo and the Nordic countries goes far back, and Mozambique entered the WB and the IMF in 1984, the same year the Nkomati Accord was signed and the external debt was renegotiated for the first time. In the following years South African aggression did not stop, the economic crisis deepened and to confront this situation the Economic Rehabilitation Programme (PRE) was prepared. PRE identifies the socio-economic destabilization as well as other exogenous factors as the fundamental reasons for the present crisis of Mozambique.

<sup>3</sup> Approved by the Heads of State of OAU in Lagos in 1980.

However, "there are also other causes of an internal nature which, although they are not determining, become important when they are combined with external causes. We are referring to the problems of organizing the management of the economy" (speech by Prime Minister Mário Machungo in the People's General Assembly, January 1987). Therefore, the Frelimo Party and the Government decided to introduce changes in the economic policy of the country, including the area of price policy. However, "it's all very well to agree that we've got to get the prices right', but how does one discover what the right prices are?" 4

#### 2. PRICE POLICY FORMULATION

# 2.1. General Framework: Theoretical Observations

#### 2.1.1. The Politic-Economic Organization of Society and Prices

The establishment of the material and ideological basis for a socialist society is included among the main objectives of the Constitution of the People's Republic of Mozambique. It is through State control of the economy this basis with new relations of production is to be established.

The State controls the economy directly through production and investment plans, as well as through indirect measures as control over prices, salaries etc. It is in this way that the socio-economic life of the country develops within the framework of a centrally planned economy, which is also characterized by State ownership of the land, of financial institutions, of health and education, as well as of production enterprises etc.

These facts have implications for the analysis and formulation of the price policy, but price policies are as important for countries with central planning as for countries more oriented towards the market. If an efficient price policy and effective control of markets do not exist there are no possibilities to determine and control economic development.

"Marx thought that with the liquidation of the capitalist mode of production and the substitution of private property of the means of production by social ownership, the conditions which gives production its commodity nature would disappear and instead of production of commodities (to be sold in the market) planned production in accordance with the needs of society and its members would immediately begin" (Ministry of Finance, 1985, document II pp. 2-3). It would seem that this viewpoint of Marx

This comment was made by Mr. M. Faber, Director of the Institute of Development Studies of the University of Sussex in its 1986 Annual Report.

was linked to the perspective of technological advances, to be realized during the capitalist phase, would have removed the production constraints before arriving at the socialist phase. Marx did not, therefore, elaborate a price theory which serves as a practical basis in a socialist country like Mozambique where the production constraints are of critical importance, a country where economic calculation, and the need to take rational choices etc. form part of the day-to-day socio-economic life as well as in the planning of the future. The experiences of the Soviet Union as well as other countries like Cuba clearly demonstrates the complexities of developing a relevant price theory and establish an appropriate price structure.

However, there is of course a close link between theory and practice, and the real question is: "What role should be played by what theorists call 'commodity-money relations' in a Soviet type system?" (Nove, 1983 p.98). Another way of putting this is to note that "in a socialist society there is no spontaneous 'movement' of prices. They are planned by the State. The average cost for the sector to which is added a certain markup serves as a basis for the planning of prices" (Ministry of Finance, 1985, document II p. 12). However, how is it that planners can determine the use-value of a product in the present phase, where the question of production has not been resolved, without involving the users directly in the process?

Linked to the debate of prices in socialist countries there are fundamental issues of the applicability and relevance of Marxist value theory and this debate continues!

It is in this way that reformists argue that a reform, which introduces more flexibility, where the economic system is decentralized and where managers are allowed to make choices regarding the composition of products and the purchase of inputs, also requires prices based on demand and supply.

It is stressed that what was said above should not be interpreted as an argument against any kind of price control. It is, however, impossible in the present phase to control all prices without creating a series of unwanted anomalities, and some of these are created because the producer and the consumer cannot negotiate a price appropriate to the circumstances of the case. The Polish economist Kalecki once observed that "the stupidiest thing to do is not to calculate; the second most stupid thing to do is to follow blindly the result of one's calculation" and the prices of demand and supply, in a more decentralized situation do transmit important information to producers of the urgency and importance of the demand.

<sup>5</sup> The citation made here comes from Nove (1983, p.99).

However, it is globally recognized, and general practice that Governments need to intervene in the price formation of agricultural products.

#### 2.1.2. The Development Strategy and Prices

The price policy is as already indicated defined within the political-economical system of the country and it also reflects aspects of the development strategy and its theoretical basis. Two viewpoints which are fundamentally different may be identified<sup>6</sup>.

The first has as its basis that prices should be kept low to facilitate the transfer of resources to the urban/industrial sector. Reference may be made to models as those of Arthur Lewis (1954) or theories which imply that primitive accumulation must be made "at the back of the peasants".

The second viewpoint is that prices are a critical factor in the decisions of the peasants. In other words the elasticity of production in regard to prices is significant. This view is often characterized as the neoclassical position.

In addition there exist various combinations of these two distinct points of view.

### 2.1.3. Specific Objectives and Measures

What was said above is in practice related to a large number of specific objectives. In accordance with FAO (1984) these objectives are often not made explicit by African Governments but can be summarized in the following way, distinguishing between food and cash crops (FAO, 1986):

#### Food Crops

- Stability of producer prices at a relatively low level.
- Provision of incentives for increased production to improve the selfsufficiency of the country.
- Guaranteed and stable prices and income levels.
- Improvement of nutrition.

<sup>6</sup> See Timmer (1980)

#### Cash Crops

- Raising government revenue.
- Increasing export earnings through increasing production.
- Price stability and stable income levels.
- Import substitution.

Common for the two groups are objectives like:

- Promotion of specific forms of production and socioeconomic reorganization and transformation.
- Ensuring input supplies for the national industry.
- Improving rural incomes and other income distribution considerations.

The concrete policy measures may affect prices directly or indirectly. Measures which affect prices directly include in particular fixed producer and/or consumer prices and prices conditioned through marketing margins or fixed profit markups. Minimum and maximum prices also affect the price structure directly.

Among indirect measures reference may in the first place be made to stabilization funds, subsidies and taxes at various levels (producer, consumer or inputs), quantitative export and import restrictions, supply and demand controls of the national market as rationing systems, food aid, the exchange rate and other aspects of macroeconomic policy.

In addition, the systems for production, marketing and processing as well as export and import vary among the various crops and are indirectly affecting the price structure.

The list and the comments made above together with the limited number of available policy instruments easily explain why situations occur where it seems that the Government is pursuing conflicting objectives through the same instrument.

#### 2.2. General Framework: Mozambique

#### 2.2.1. The Pre-Independence Period until 1974

It is interesting to observe that the Portuguese colonialist State pursued a very interventionistic price policy in Mozambique. The then Colony of Mozambique produced and supplied raw materials at very low prices to the Portuguese industry (as for example cotton) and guaranteed a protected and safe market at favourable prices for the industrial production of Portugal. An example which is well focussed on in the Report of the Central Committee to the Fourth Congress (Frelimo 1983, pp. 10-11) is that in 1961 the price of textiles produced in Portugal (with cotton from Mozambique) could be up to more than 40 times the price of the raw material produced in Mozambique.

Price controls were well established and included agricultural crops as maize, rice, wheat, soybean, cashew and groundnut. In the case of maize, for example, the purchase price was differentiated among 18 locations. The legal diploma no. 6/73 in its article 6.1 indicates that "price control may include any product". In the case of agricultural and livestock products, controls were to be established after joint study by the marketing services and the services or organisms which supervised production. The setting of maximum prices and maximum profit rates was also foreseen in the DL 6/73 at very favourable levels under normal circumstances.

Before Independence the commercial network was in the hands of the private sector. There was a difference between the marketing structure of export crops and for crops for internal consumption resulting from the different production structures. The system may be reviewed as follows:

- The marketing of the majority of export crops was made by companies or associations which grew these crops in plantations and processed them in their factories. This was for example the case for sugar, tea, sisal and copra (not including copra of the family sector which was marketed through private traders to the oil industry).
- Cotton and cashew were exported under Government control by the processing companies, but the purchase of seed cotton grown by the peasant sector was organized by the factories, and the cashew was purchased by private traders before being sold.
- Other crops produced for internal consumption such as food and oil crops as well as fruits and vegetables grown by the peasant sector and private settlers were marketed through the system of private traders ("cantineiros") who also sold consumer goods and agricultural inputs.

With Independence the need to restructure the price system, introduce new institutions and define clearly the objectives to be realized appeared. It was, however, nothing new that the Government as such intervened directly in the process of price formation.

# 2.2.2. The Transition Period and Independence (1974-77) 7

This period is characterized in the economic field by the struggle against sabotage and a crisis of under-utilization of the productive capacity of the enterprises. This period therefore witnessed a substantial increase in production costs to the point where the value of production was insufficient to cover the costs which implied deficits in the enterprises. In this context the State appeared - through the Central Bank - as a subsidizer of these deficits (through credits which were not repayed), postponing to future years the preoccupation of improving productivity, reducing unit costs of production and initiating a financial review of the enterprises.

The existing commercial network for the family sector collapsed at Independence with the exodus of the "cantineiros" and also the marketing system for export crops was heavily affected. It became necessary to establish quickly new structures. It was against this background that the National Directorate of Economy and Marketing (DINECA) was created in the Ministry of Agriculture with responsibility for the purchase, storage and marketing of family sector crops, and the people's shops were established for the distribution of consumer goods. For export crops a National Company for Mozambican Marketing (ENACOMO) was created, originally responsible for export of all export crops.

A process of establishing a series of state enterprises for import and distribution of agricultural inputs (Interquimica and Boror, respectively), livestock marketing (GAPECOM), marketing of fruits and vegetables (Hortifruticola) etc. was also initiated. In addition state enterprises were necessary in the production sector to take care of the plantations and fields left by the colonialists.

#### 2.2.3. The Third Congress and the Following Years (1977-83)

From the Third Congress of Frelimo held in 1977 the general outline of the economic policy of the country appears more clearly, and particular attention was given to prices as an integral element of this policy.

The Third Congress in its Socio-Economic Directives (Frelimo, 1977) defined that the measures detailed below should be implemented:

<sup>7</sup> The exposition here is partly based on document I of the Ministry of Finance (1985)

- Setting of prices at central level with priority for basic products and the carrying out of studies to ensure uniformity of prices at national level.
- Creation of a national coordinating organ for supplies.
- Establishment of new marketing margins taking into consideration the interests of the working class, and fixing the share destined for the State in the form of taxes.
- Creation during 1978 of a National Commission of Prices.

It was also defined that "private trade is permitted ... but its practices should be subjected to regulation" (Frelimo, 1977 p.64).

The Third Congress and the consequent legislation therefore identify as important objectives<sup>8</sup>:

- Broad participation by State organs in the direction and transformation of the economy of the country based on democratic centralism and utilizing as an important instrument the policy of prices.
- Prices should be used as an incentive for producers to increase production, to redistribute the national income in favour of the most disadvantaged groups (workers and peasants) and to improve the levels of consumption of the economy and the people.

<sup>8</sup> Legislation of a fundamental character include in particular:

<sup>-</sup> Resolution no. 20/79 of the People's Assembly which determines that it is the responsibility of the Ministry of Finance to centralize and organize all work in the field of prices.

<sup>-</sup> Decrees 10 and 11/82 which determine the intervention of the State in prices and define tasks and responsibilities of the different structures of the State in relation to prices.

<sup>-</sup> Resolutions 1 and 2/82 of CNSP about ways of publishing, fixing and conditioning prices.

<sup>-</sup> Internal resolution 1/82 of the Council of Ministers about price policy.

In addition it may be noted that in relation to the conditioning of prices the norms contained in DL 6/73 have been used.

- Stability and uniformity at national level (or in case this not being possible at provincial level) of prices of products of primary necessity, considering subsidies for some of these products and avoiding big increases in the general price level.
- Priority to the agricultural sector and external trade.
- Prices as an important means of the State to obtain control over a significant part of the national accumulation.

The institutional structure which was established include in the first place the National Commission for Salaries and Prices (CNSP), organ of the Council of Ministers headed by the Minister of Finance. In the various Ministries of the economic sphere departments of prices were created with the task of directing and organizing all work on prices and the analysis of proposals for altering, setting and controlling prices. In the case of the Ministry of Agriculture this responsibility was assigned the National Directorate of Agricultural Economy (DNEA).

It is the responsibility of the Ministry of Finance to organize and centralize all price work. The respective branch Ministries and their departments of prices as well as Provincial Governments follow methodologies defined by the Ministry of Finance and global orientations from the National Planning Commission (CNP).

The State intervenes directly in the price formation system through:

- Setting of prices (at various levels of production and marketing).
- Conditioning of prices set by enterprises.
- Authorizing free price formation.

Decree 10/82 lists the 45 products whose prices were fixed at central level until 1987. They include the main agricultural products for internal consumption and export as well as agricultural inputs. The Council of Ministers fixes the prices of electric energy, hydro-carbides, petrol, diesel and housing. The setting at central level of other prices and the definition of norms for the conditioning of prices is the responsibility of CNSP. The CNSP defines the various producer and consumer prices on the basis of proposals which in the case of the agriculture sector in particular involve the Ministries of Agriculture and Commerce.

Article 4.1 of decree 10/82 establishes that each Ministry

determines the prices of other goods and services to be used by enterprises or units under their responsibility, a responsibility which may be delegated to the Provincial Governors or the Presidents of Executive City Councils.

The majority of prices which were not fixed were conditioned and the norms of conditioning included the following aspects in relation to which some of the norms contained in DL 6/76 continue to be applied (although not effectively controlled):

- The methodology for cost calculation on which prices are based.
- The maximum profit margin.
- The maximum marketing margin.

The margins established fluctuate at wholesaler level between 10 and 25% and at retail level between 20 and 45%.

The Ministry of Finance is also responsible for fixing or determining the setting of taxes, tariffs and other differentials for all products and services and for determining the price subsidies to be granted.

In 1978 responsibility for agricultural marketing was transferred from DINECA to the Ministry of Internal Commerce where a National Directorate of Agricultural Marketing (DNCA) was created. With a view to promoting private trade a Law of Private Trade was approved in 1979, and in 1980 the People's Shops were abolished.

In 1980 a state enterprise Agricom was created in the field of agricultural marketing which assumed responsibility for buying from the family sector and distribution/sale of consumergoods to this sector<sup>9</sup>.

The medium-long term objective is to reestablish at local level a network of private and cooperative traders who maintain direct commercial relations with the peasants. Agricom should operate mainly at wholesaler level buying from traders (and whenever necessary from state enterprises on an exceptional basis), organizing storage, transport etc. However, in the initial phase Agricom assumed an important role in direct purchasing from the peasants due to the non-existence of a

<sup>9</sup> Agricom is responsible for family sector marketing of the following crops: maize, unhusked rice, sorghum, wheat, cassava, potato, sweet potato, soybean, beans, groundnut, sesame, sunflower, copra, mafurra, cashew and various other crops. See Tickner (1985)

private network.

In the case of cotton marketing responsibility was transferred to the Secretariat of State for Cotton (SEA) and in the case of other industrial crops like tea, sugar and copra from the plantations it can be noted that they are grown in direct connection with processing facilities.

The 1977-83 period therefore witnessed the creation of new structures at central level and the introduction of new legislation over prices and marketing. This period after some years of progress until 1982 also marks the start of the worsening of economic problems, resulting in the first place from South Africa's destabilization activities and a series of natural calamities. The lack of consumer goods made itself felt, enterprise deficits returned to their increasing trend and black marketeering increased considerably, and a generalized lack of confidence in the currency could be verified.

It may also be underlined that the political economy pursued in general during this period paid little attention to the role of 'commodity-money relations'. Central planning based itself excessively in quantitative planning with centrally fixed targets. It was complicated to introduce alterations in prices and adequate attention was not paid to the fact that macroeconomic variables indirectly affect the possibilities of the State to maintain a structure with fixed prices.

#### 2.2.4. The Fourth Congress and the Following Years (1983-87)

The Fourth Congress of 1983 made a critical analysis of the results obtained since the Third Congress and underlined the need to give priority to the family sector, reorganize the state sector and reinforce the role of the private sector in production and trade. The report of the Central Committee to the Congress (Frelimo, 1983) specifies that the price policy should stimulate the production of products marketed by the family, cooperative and private sectors. It should also promote productivity in the factories linking prices to normal costs of production and increasing efficiency. Finally, prices should be conceived as a stimulating factor for the reestablishment of the market in the economy.

The Fourth Congress also decided that the Government should initiate a process of decentralization of the planning system and methods of decision making and prepare an economic programme for the years 1984-86. This programme became the basis for negotiations in 1984 with the Paris Clube over the external debt<sup>10</sup>. Subsequently a number of economic measures were taken. A

<sup>10</sup> See CNP (1984).

new system for the management of foreign currency was introduced, and a delegation of responsibility from ENACOMO was initiated to some of the factories or processing companies for crops such as cotton, cashew and tea. The role of the private sector in marketing was promoted, a revision of centrally fixed prices including considerable increases in producer and consumer prices took place, and prices of vegetables, fruits, onions, sweet potato, cassava, ducks, rabbits and turkeys were liberalized. Competence was also delegated to Provincial Governments as far as price setting of potato, goat, sheep and fresh fish (within certain maximum and minimum levels) is concerned 11.

However, the crisis continued to deepen. The macroeconomic indices arrived at very low levels. Family sector marketing diminished continuously. The enterprises involved in agricultural production and marketing accumulated huge obligations. The development of a private commercial network stopped. Finally, the rural sector lost its (relative) self-sufficiency and became more and more dependent on food aid with a large number of affected and displaced people.

To confront this situation a Programme of Economic Rehabilitation (PRE) covering the period 1987-90 was elaborated towards the end of 1986<sup>12</sup>. This programme contains a large number of measures to stop the fall in the economic activity of the country and initiate a progressive recuperation. In the area of price policy the following objectives were specified by the Prime Minister Mario Machungo in his speech to the Popular Assembly in the beginning of 1987.

- Make profitable the majority of agricultural industrial, transport and construction enterprises taking into consideration present levels of capacity utilization, of work productivity and rationality in management.
- Stimulate marketed production from the family sector and from small and medium private agricultural producers.
- Eliminate or substantially reduce the financial disequilibrium existing between demand (expressed in monetary terms) and supply (at legal prices) of goods and services to the population.
- Hinder any significant fall in the real value of salaries and income of family sector peasants.

The PRE does not foresee the introduction of new

<sup>11</sup> See resolution 1/85 of CNSP.

<sup>12</sup> See RPM (1987) and Frelimo (1987).

institutions in the pricing system which remains as explained above. It is, however, foreseen that:

- Bureacratic and administrative procedures in economic management and in the determination of prices and salaries will be eliminated.
- Producer prices will become an instrument for promotion of surplus and the combat of black markets  $^{13}$ .
- The role of price and credit policies as well as other indirect measures for distributing resources will be increased instead of direct administrative intervention.

More concretely it is foreseen that:

- All products with fixed prices will have them adjusted to reflect the real cost of resources and to take the recent devaluations fully into account.
- The number of products with fixed prices will be reduced from 45 to 30 until the beginning of 1988 with additional reductions later on. Some of these products will have their prices conditioned, others will be liberalized 14.
- Some products on the fixed price list will continue to have prices fixed at all levels of production, but others will only be fixed at the consumer level.
- In the case of conditioned prices directors of enterprises will be free to modify them according to established norms and it is foreseen to do away gradually with conditioned prices when competition and supply improve.
- Subsidies will be given to some basic goods and services.

<sup>13</sup> The Prime Minister (Machungo, 1987) notes: "The price policy ... should drain the actual flow of exaggerated and illicit profits to the pockets of black marketeers. For this the State will continue to use administrative mechanisms, but it is above all by economic means that the struggle against black markets should be fought". This signals a modified attitude to this problem. Previously slogans like "death over the black marketeers" were common.

The CNSP already decided that the prices of some products including eggs, tea, wheat, and fertilizers can be established by the respective production companies on the basis of production costs, being in the area of marketing subject to DL 6/73. Five more products will be transferred to the list of conditioned products before end of 1987.

For the family sector the State will take measures to define the producer prices taking into consideration its importance for the national economy and the real prices of goods and services provided to the sector. It is also foreseen to use international prices at the official exchange rate and adjusted for internal costs of distribution and processing as a guide when setting producer prices in the agricultural sector.

That is, the Government and the Party through PRE confirm the complexity of establishing an effective price policy. It is necessary to take into consideration the following points:

- 1. There is an indirect relationship between the State budget and the prices which goes beyond the use of prices as an accounting unit or measure of the value of a product. If for example state enterprises in the field of production or marketing accumulate big deficits which are automatically covered by the State, dangerous financial disequilibria easily develop. The funds of the Government are limited and such a situation therefore puts at risk social objectives and produces an excess demand which provokes parallel markets over which the Government has no effective control.
- 2. The loss of control over the markets of the economy puts at risk the possibility of the Government to direct the economy effectively. It becomes difficult, for example, for the State to collect value added taxes and procure products. Therefore, suppressing private activity does not seem viable, it is better to recognize it and control it as required.
- 3. Incentives for producers are important. Producers respond to prices and other incentives when it is technologically possible, but not to administrative directives. It therefore becomes important to analyse the indirect implications of the exchange rate policy, the terms of trade between industry and agriculture, the availability of consumer goods etc.
- 4. There is a conflict between the need to have prices which incentivate production and the need for low prices of consumption. Subsidies (to the producer and/or producer) may be justified, but they are expensive, and their effects should be carefully analysed before being introduced. One cannot consume what one does not produce.

PRE therefore signals a much more important role to be given to 'commodity-money' relations, a less ambitious price setting system, more in-depth analysis of the relations between price policy and general macroeconomic policy etc.

The big challenge and fundamental question which the country faces is how to advance in practice with the process of

decentralization and price reforms under existing circumstances, maintaining at the same time the principles and fundamental objectives of planning and centrally directed and controlled development.

#### 2.3. Criteria for Price Setting

It has already been mentioned that it is globally recognized and general practice that Governments intervene in the price setting mechanisms for agricultural crops (at the level of the producer and the consumer, as well as in relation to inputs). However, the criteria for setting prices are not always clearly documented and there is no general agreement on what the criteria should be. In countries where systematic work in relation to producer prices was carried out the main criteria would appear to be (FAO, 1984):

- Costs of production.
- The establishment of producer prices derived from desirable consumer prices.
- Projected international prices.

In the case of Mozambique the terms of trade between a given agricultural product and the goods in the basket of the Ministry of Commerce have also been used.

Often the real basis for direct intervention in the prices is a mixture of these criteria and there are various examples of differences between the official methodology and the practice followed. It is, for example, difficult to find in sub-Saharan Africa countries where producer prices are automatically adjusted upwards in case of cost increases 15.

The cost of production criteria is the most widely used all over the World and in the case of Mozambique the price proposals prepared by the Ministry of Agriculture are calculated on basis of cost of production in commercial enterprises. Costs of production are in turn calculated on technological norms for the crops in question. Estimated prices for the family sector are calculated from the above data, and this obviously implies a big margin of error given that the production conditions are fundamentally different. This risk is further worsened when prices are fixed at national level as well.

<sup>15</sup> It must be recalled here that the major cost for smallholders is the implicit cost of family labour, where a more relevant criteria would be income per work unit.

The basic problem of this methodology is that the producer does not receive through the price a signal of the urgency and importance of the demand; a signal which could imply that he would change the level or composition of his production. The advantage of the cost of production criteria is that it provides a guarantee for the producer against significant price drops. Under normal conditions costs are covered and in case of productivity increases possibilities for increased profits exist. For the planners it is a criteria which is easy to use, and there is always a certain flexibility given that there may be various interpretations of the cost level.

The establishment of producer prices based on desirable consumer prices reflect the interests of the consumer in the process. There is no doubt that this criteria has had in other countries of sub-Saharan Africa as well as in Mozambique a big impact in price interventions. The danger of this criteria is the fact that one cannot consume what is not produced 16. The inverse relationship (in the absence of subsidies) with the producer price and the marketing and profit margins is important.

The criteria of international prices has not been very much used in Mozambique to date, although it is a criteria which is very much used in other countries, in particular with reference to export crops. The World Bank has also in the case of Mozambique insisted on the introduction of this criteria. The justification given is that international prices offer a measure of opportunity costs; and it is an already established experience that it is impossible to maintain prices far from the level in neighbouring countries without seeing goods crossing the frontiers.

The basic problems of this criteria is that international prices fluctuate widely and that the international market is a residual market which does not in a given moment necessarily reflect long term trends<sup>17</sup>. In addition, subsidies in the industrialized countries have for example created excesses in the case of food grains which means that international prices do not reflect in fact real opportunity costs. This last fact is

This formulation is obviously somewhat simplistic, but it is understood that a country cannot consume what it does not produce or obtain through trade or donations/credits.

<sup>17</sup> It should be mentioned here that for an importing country the relevant price is the CIF price plus transport and marketing costs to point of processing (or wholesale) minus transport costs of locally produced goods. For an exporting country the relevant price at producer level is the FOB export price minus marketing and transport costs between point of production and the port.

particularly important for a country where selfsufficiency in food is a strategic objective.

The utilization of the terms of trade reflects a correct preoccupation with the interests of the peasant as an individual who is producer and consumer as well. However, it must be underlined that this type of analysis without use of global indices is partial and in fact may be classified as an analysis of direct barter product by product. It therefore cannot be used alone without also analysing relative costs of production. That is, it is not only the relative price in comparison with the price of consumer goods which affect production. It is also necessary to analyse direct and opportunity costs of production.

Reference was already made to the objective of maintaining prices stable and uniform at national level and undoubtedly these two objectives were given much importance since Independence. It is correct that without stability at least during the on-going year planning becomes very much more difficult and producers (as well as consumers) become subjected to a series of nondesirable and unforeseen influences. It is, however, necessary to analyse well which products to stabilize and for how long because stability also implies inflexibility and lack of adoption to new conditions and economic possibilities. The measures to take have a cost and the point is reached where it for other objectives becomes necessary to change emphasis.

Uniform prices at national level has social and political importance and it also has administrative advantages to treat consumers and producers in various parts of the country equally. The consequent distortion in the use of resources may, however, be considerable when producers do not take account of transport costs which have to be paid by someone. Transport costs may increase substantially in case of products which are difficult to transport or in case of distant regions. When it is a state company (as Agricom) which has the marketing responsibility in these situations an economic-financial disadvantage of considerable magnitude is encountered as compared to private traders who concentrate their efforts on more lucrative areas. Therefore, the use of uniform prices imply a certain cost, and it should be well analysed which products to include and at which geographic level.

#### 3. PRICE DEVELOPMENTS BETWEEN 1976 AND 1986

#### 3.1. Presentation

For this study the developments between 1976 and 1986 of the prices of eight agricultural products with a strategic importance for the family sector were analysed. The products included are on the one side maize, rice, beans, (type II) and groundnut (that is four food crops) and on the other side cotton, cashew, copra and sunflower (that is four industrial crops with export potential). The period from 1976 to 1981 was chosen to analyse agricultural price trends in Mozambique since Independence. The year of 1976 is the first full year after Independence and 1986 is the last year comparable with previous years due to the measures of PRE which makes it difficult to make a similar analysis including 1987 as well.

The following data were collected:

- Nominal producer prices for all the crops.
- Nominal consumer prices for all the food crops.
- Nominal prices at factory gate or warehouse for industrial crops as well as their export value after processing.

It must be stressed that for the products where prices were set during the whole of the 1976-86 period sources are not completely coherent. It therefore was in some cases necessary to include information of a qualitative nature before estimating the exact price level.

To estimate the development of real prices the consumer price index of CNP was used 18. The choice of this index is very convenient as it covers exactly the period under analysis and also includes estimates of the influence of the black market. It is therefore the best overall index of consumer price developments. Yet, it is obvious that the use of this index is problematic, because the size of the black market is not known due to its illegal nature and due so the practical problems related to data collection. On the other hand, it is interesting to note that a comparison with other possible indices (to deflate the observed nominal trends) do not imply very different real

<sup>18</sup> See DNE (1985) and DNE (1987).

trends19.

It is obvious that a comparison with the prices of the basket of goods sold to the peasants is another way of discovering real price tendencies. The disadvantage of this methodology is that only partial conclusions, product by product in comparison with the individual consumer goods can be a drawn. However, the conclusions of this study appear in general in accordance with studies based on partial consumer basket comparisons<sup>20</sup>.

In addition to analysing real prices (that is, the trends in the terms of trade between producer and consumer prices) a comparison of the development in the average wage (calculated as explained in section 3.4) and producer prices was also elaborated. It must be remembered in this context that producer prices do not correspond directly to producer incomes given that there are input costs. However, these costs are of minor importance in this analysis given that the peasants between 1976 and 1986 did not buy, in general, improved inputs and used only very simple non-mechanized tools. It was therefore assumed that this aspect does not affect substantially the relationship between family sector and wage labour incomes (who are mainly urban labourers). However, it is clear that the drop in marketed quantities affected family sector incomes directly.

For the analysis of the relationship between prices and marketing, data on total national marketing of the eight crops under analysis were also used.

See the following comparison: Consumer price index (total) Consumer price index (non food products) GDP deflator 96.7 81.5 68.4 56.3 38.5 For information on these indices see DNE (1985 and 1987). Information on the GDP deflator made available in personal communication.

This basket includes grown sugar, bicycles, canvas trousers, cutlasses, blankets, hoes, machettes, axes, edible oil, paraffin, batteries, radios, soap, salt and cloth.

As already indicated the crops were divided into two groups, food crops and industrial crops (with export potential). The reasons for this distinction are the following:

- Food crops are marketed at producer and consumer level in the same form (that is in grain or with very little processing). The difference between the consumer price (without subsidies) and the producer price mainly consists of packaging, transport and storage costs and profits without physical transformation of the product.
- Industrial crops are not marketed at producer and consumer levels in the same form. Physical processing is indispensable for the product to have use value. Therefore, the difference between the two levels of prices include in addition to marketing costs and profits also processing costs (including physical losses during processing).

#### 3.2. Producer Prices

#### 3.2.1. Food Crops

Table 1 and figures 1, 2, 3 and 4 in Annex 1 show the development of nominal producer and consumer prices for maize, rice, beans (type II) and groundnut between 1976 and 1986.

It is noticable that prices remained in fact very stable at both levels and that the difference between the consumer and producer price became negative in Maputo and Beira for maize and rice in 1985, with the significant increases in producer prices and the subsidies in these two cities, and given that the consumer price did not increase. For groundnut and beans as well as for maize and rice outside Maputo and Beira, the difference between the two prices show an increasing tendency. In other words, Government accepted an increase in the marketing and profit margin over this period.

The stability of the producer price is as already referred important during the ongoing year. However, it is not essential to maintain prices stable from one year to the coming year(s) given that these crops are annual. The stability for extended periods, in particular in the beginning of the 1976-1986 period, can probably be attributed to the limited importance given to 'commodity-money' relations and to administrative-analytic difficulties in reviewing annualy the whole price system.

As can be seen from table 1 and figures 5, 6, 7 and 8 in Annex 1 which show the developments in real prices, the stability in nominal prices did not until 1981 result in any significant drop in real prices due to the low inflation rate. From 1982 and until 1985 real prices dropped considerably, but the increases

introduced in 1985 imply that the real level in 1985 was higher than in 1976 for maize, rice and beans (respectively 89, 6 and 82%). There was, therefore, in fact an attempt to increase incentives to produce these products and the real price was in all cases higher than in 1976. However, the inflation in 1986 (17%) implies that the real price of these products started to fall again. In the case of rice the real price in 1986 became less than (9%) the 1976 level.

For groundnuts the nominal increase in 1985 was small and the real price of this crop consequently shows a very negative trend between 1976 and 1986.

The stability or small increases for all food crops until 1980-1981 in real prices did not continue during the following years. With the appearance of inflation at large scale real prices started to show different fluctuations. Given that no conscious decisions were taken to change the relations between the four crops this is an indication that the administrative-analytic capacity was not able to react adequately to the new conditions through annual price reviews.

#### 3.2.2. <u>Industrial Crops</u>

Table 2 and figures 9, 10, 11 and 12 in Annex 1 indicate the development of nominal and real producer prices for cotton, sunflower, copra and cashew which are industrial crops which require substantial processing.

It is once more noted that nominal prices remained stable for periods of 2 to 5 years which implies important drops in real prices from 1981 when the inflation started to increase. In the case of cotton, sunflower and copra the drops in real prices during the 1976-86 period are respectively 38, 33 and 47%. For cashew the drop is more limited, a little more than 11% during the same period.

It is therefore indisputable that Government reduced considerably the price incentive to produce industrial crop with export potential. This fact is in contrast with the priority which the Government during the whole post-Independence period officially attributed to these crops. The increases introduced in nominal prices were, in other words, insufficient to counterbalance inflation.

It is interesting to observe that these tendencies developed with an official exchange rate which only fell a little from 1980-81. If producer prices had been linked to a more realistic exchange rate the above mentioned trends would have been more in favour of the producers (as is the case for maize and beans). That is, the producers of industrial export crops could have been

incentivated more if the exchange rate had been lower and the additional export income (measured in local currency) had been used to increase producer prices.

It is therefore clear that the policy followed implies a hidden producer tax, a fact which benefitted the Government budget but did not reflect the officially declared policy. This once more points at the hypothesis that the weak administrative-analytic capacity was an important constraint.

#### 3.2.3. Agricultural Marketing

Table 3 and figures 13 and 14 in Annex 1 show the marketing of food and industrial crops during the 1976-86 period. It is convenient to continue distinguishing between these two groups for two reasons:

- In the case of food crops there are possibilities for black markets when official prices do not correspond to local prices of demand and supply. Agricom buys on the one hand directly from the peasants and on the other hand from private or cooperative traders who work at local level. In the case of state farms Agricom only enters if necessary.
- In the case of industrial crops there are not the same possibilities for black markets. The crop either goes directly for processing or through Agricom.

That is market control is better for industrial crops than for food crops.

In the circumstances of Mozambique it is difficult to analyse the relationship between prices and marketing. A large number of exogenous factors exist. However, an analysis of trends confirms that it is still worth while to review this topic.

As may be seen in Annex 2 (or by comparing the relevant figures and tables on marketing and prices in Annex 1) there is an interesting relationship between prices and marketing for food crops from 1980-81 to 1984-85 when account is taken of the 1983 drought. Before 1980 the marketing system was still very weak and in addition there were the 1977-78 floods. In the 1985-86 years the effects of the war complicates the analysis.

For the industrial crops there is also a similar trend between price and marketing during the period from 1980-81 to 1984-85. In the case of cotton the difficulties of the marketing system after Independence were not as important as for the food crops, cashew and copra because the ginneries had their own procurement systems. In the 1985-86 period the marketing increased although real prices diminished, probably a reflection

of the special buying campaigns which included the supply of consumer goods.

That is, there is an interesting relationship between prices and marketing, in particular in the middle of the period under study, and the contradictions observed in the beginning and in the end of the period have, in general, obvious explanations based on exogenous factors. It is therefore reasonable to conclude that prices are important, but that other factors such as war, availability of consumer goods and the efficiency of the marketing network also condition the marketing results. In other words, it appears that an adequate price policy is a necessary, but not sufficient condition for realizing marketing objectives.

#### 3.2.4. Exports

Tables 4 and 5 in Annex 1 indicate volume, total value and unit export values for copra, cashew and cotton fibre. The decrease in volume is impressive, in particular since 1983. The level achieved in 1986 in comparison with 1976 was 28% for copra, 15% for cashew and 5% in the case of cotton<sup>21</sup>.

Nominal unit values fluctuate considerably during the whole period and table 4 in Annex 1 also indicates a comparison between these values and nominal producer prices. It is clear that the Government is taxing exports, in particular in the case of cashew, because processing costs amount to less than the difference observed. However, it is also clear that producers during the whole period received a share (of the value obtained in the international market) which is of the same order of magnitude although of course affected in anyone specific year by fluctuations in the international prices. If the fact that the "real" value of the Metical decreased is taken into account it may be concluded that the Government gradually increased its relative share of "real" exports (through a "hidden tax").

#### 3.3. Consumer Prices

Table 1 and figure 1 and 2 in Annex 1 show the striking stability of nominal consumer prices for maize and rice in Maputo and Beira. There were small increases for these two products in 1980 and 1982, but real prices in these two cities were only

The reason of utilizing unit values in Meticais is that this refects what Mozambique in fact receives in the international market, and takes into account the possible difference between the average international price in a given year and the price Mozambique is capable of obtaining for its products.

respectively 58 and 36% of the level in 1976. This is a notable development and appears directly linked to the availability of cereal food aid (and the indirect subsidies this implies<sup>22</sup>), because the real producer price of maize also increased substantially (and in the case of rice the drop was small).

The above mentioned observations may also be compared with the fact that real consumer prices for beans and groundnut dropped much less, but were less stable. Real prices were in 1986 approximately 80% of the real prices of respectively beans and groundnut in 1979 and 1976.

#### 3.4. Producer Prices and Salaries

After a period with non-controlled increases in salaries between 1975 and 1979 nominal salaries were fixed in accordance with the decree 4/80. With the labour law of 1985 some flexibility was introduced linking salaries to increases in productivity etc. However, it is difficult to estimate the average salary due to inexistence of data about the total number of workers.

Yet, based on the number of salaried workers of 891200 in accordance with the Census of  $1980^{23}$ , an estimated number in 1986 of 650000 and information on the salary fund, the average monthly nominal salary may be estimated at Mt 2890 in 1980 and at Mt 5420 in 1986. This implies that the real wage dropped approximately 40% between 1980 and  $1986^{24}$ .

This drop is higher than the fall during the same period in real prices of the food crops considered here, but of approximately the same order of magnitude as the drop in real prices of export crops.

Direct unit subsidies for maize meal and dehusked rice were maintained at low levels until 1985 when they increased substantially. The subsidy for dehusked rice, for example, increased in Maputo from 3.00 Mt/kg to 20.90 Mt/kg and for maize meal (also in this city) it increased from 3.00 Mt/kg to 8.30 Mt/kg.

<sup>23</sup> See DNE (1980).

Utilizing the consumer price index (with base in 1975) which was 107 in 1980 and 325 in 1986 real monthly salaries were Mt 2700 in 1980 and Mt 1670 in 1986.

#### 3.5 Summary and Conclusions

In summary it has been observed that between 1976 and 1986:

- Nominal producer prices remained stable at national level for very long periods (up to 5 years). Increases were introduced in jumps which afterwards were gradually affected by inflation, in particular from 1980-81.
- Real producer prices of food crops increased considerably in the case of maize and beans, but decreased a little for rice and considerably for groundnut. For all industrial crops there were considerable real price decreases.
- It is difficult to identify a straight forward relationship between producer prices and agricultural marketing, but there are interestingly similar tendencies, in particular in the middle of the period under study.
- Although producers maintained their relative share of unit export values Government increased its "real" tax through the overvaluation of the Metical.
- Consumer prices were even more stable than producer prices, in particular for maize and rice, and substantial subsidies, partly based on food aid, were introduced.
- Real salaries decreased a lot between 1980 and 1986. In fact they decreased more than real producer prices of food crops. In comparison with real producer prices for industrial crops the decrease was of the same order of magnitude.

That is, the consumers (in main urban centers) definitely benefitted from low food prices and the Government could have benefitted producers through a devaluation of the Metical (increasing at the same time the producer prices). However, at the same time the producers received real prices for maize and beans which increased substantially and the decrease for rice was small. In addition, the development of real producer prices of food crops was better than the development in real average salary, and for real producer prices of industrial crops the development was more or less of the same magnitude. It is in this context interesting to note that global consumption during the 1981-86 years was higher than GDP. That is, the policy followed was not a policy "on the back of the peasants", it was a situation where more was consumed than what was produced.

The price policy is not the "only factor that counts". Getting the prices right is a necessary, but not sufficient condition, and liberalization cannot by itself put the economic mechanisms to work. Availability of consumer goods, inputs and

efficient marketing systems etc. are also necessary.

Finally it may be concluded that the necessary capacity to undertake annual price reviews did not exist, a fact which became important when inflation started to increase. This lack of administrative-analytic capacity may also explain aspects which are otherwise difficult to understand such as for example the pronounced decrease in real producer prices for groundnut.

#### 4. MAIN TOPICS AND PROPOSALS FOR THE FUTURE

#### 4.1. Presentation

This chapter presents the main considerations to take into account in price policy formulation as well as proposals for future development of work in this area of the agricultural sector in Mozambique.

The price policy has as its point of departure the political and economic system of the country and the development objectives defined by the Party and the Government. As such the formulation of the price policy has to take into consideration the importance of achieving food selfsufficiency, the importance of generating exports and gaining foreign currency, the distribution of national income, nutritional aspects, the introduction of new technologies and the development of the agroindustrial sector etc. That is, the price policy has to be continously adjusted to new priorities and conditions existing in the country as well as in the international market.

#### 4.2. Main Considerations

Among the main considerations to be taken into consideration in formulating the price policy the following can be mentioned:

- There is a conflict between the interests of the consumer and those of the producer. The producers need to cover their costs and generally want high prices as an incentive to produce, and consumers want low prices so they can better satisfy their consumption needs. Between these two levels there are economic agents in the sectors for processing and distribution who also have their interest in obtaining reasonable margins. These conflicts cannot in the present phase be avoided in Mozambique where the problem of production is a contraint in the economic life of the country. It is therefore better to recognize this conflict and consider it in price policy formulation.
- Price policy formulation cannot be seen isolated from the macroeconomic policies pursued in general. The budget policy

affect the balance between supply and demand in the economy and therefore the framework within which the price policy is defined; the exchange rate policy has an important impact on the income of export crop producers and on the cost of imported goods and inputs; the tax and subsidy policy affect the price system as is the case with consumer, value added and export taxes, and it is obvious that transport tariffs affect the possibilities of the private sector to assume a role in marketing; the investment and technology policy imply limits within which prices must develop; the wage policy affects demand etc. It is therefore necessary to take these factors explicitly into account in price policy formulation.

- The structure of production and the system of marketing is intimately linked to the possibilities of the Government to implement in practice its price policy. Who produces and with what technology are important aspects. Tea is a product grown exclusively in the state sector where the price of raw material as such is irrelevant; but in the case of cotton the producer price of seed cotton produced in the family sector is of fundamental importance in ensuring a supply of raw material. The majority of the food crops require little processing contrary to many export crops which require substantial processing. One may for example compare beans and cotton. Export crops must be sold at international market prices; this is not necessarily so for products for internal consumption, although there may be opportunity costs which should be considered.

- The institutional capacity for analysis and implementation of the price policy is a limiting factor in many countries. It is complex to analyse this area of economics and it is necessary to have data and up-to-date information covering relevant aspects. Similarly, implementation requires administrative capacity at all levels. It might for example be desired for efficiency reasons to establish prices at provincial rather than at national level. But this requires information about transport costs and more administrative resources. Annual price reviews may also be useful, but require the necessary capacity. The utilization of just one crop model for each crop ignores substantial differences in technology and costs of production. However, to establish differentiated prices implies a heavy work load in studying and defining models by for example social sector and region of the country. Therefore, the implementation of the desired price policy is not necessarily possible in practice. This implies a need to assess other ways of established objectives. Geographical realizing differentiation may, for example, be more important than trying to establish prices at all levels between production and consumption. The efficient control of a small number of

strategic crops could possibly have a more effective impact than controlling superficially a large range of products.

#### 4.3. Liberalization and Intervention in the Price Structure

A number of developing countries with central planning systems are introducing reforms in the area of price policy and in the functioning of marketing systems. Reference may be made, for example, to China, Vietnam and Cuba. Although measures are different it is characteristic that there is an attempt to promote local initiative and increase the flexibility in the structure of prices and markets. In the case of Mozambique this process also started and reference was already made to the demands of the IMF and WB and the measures in PRE.

However, it is important to clarify what liberalizing means. Does it mean absolutely no intervention by Government in price formation? Or does it mean intervention with more flexibility? And finally how should new measures be introduced in this area?

The argument of liberalizing completely agricultural prices is normally based on the suggestion that it is the most efficient and that the State may always intervene through the use of income transfers as a measure to ensure the desired income distribution. However, this model and its assumptions are far from the reality of a country like Mozambique and it has already been mentioned that there is no country in the World which does not one way or the other intervene in relation to the agricultural prices. It is a common experience that the State cannot achieve socio-economic objectives as selfsufficiency in food and export promotion without intervention. It would therefore seem that this issue should be analysed product by product taking into consideration the differences already observed among the various products and their relative importance in the national economy. The products are reviewed below by degree of Government intervention, starting with those where limited Government intervention seems relevant<sup>25</sup>.

#### 4.3.1. Minimum Intervention

The Government already liberalized the fruits and vegetable market and this is in fact a case where minimum intervention arguments has weight. The production is undertaken in a large number of small fields around the consumption centres. The products are easily destroyed and quick distribution is therefore

<sup>25</sup> In what follows the analysis is not limited to the eight crops analysed in section 3, but it is stressed that livestock and forestry products were not included here.

essential. The role of a large number of individual sellers and traders is important and create competition and efficiency. It is finally very complex to intervene without creating undesired trouble as black markets etc. For an analysis of the results of the liberalization implemented in this field reference is made to the studies made in collaboration between the Government and the WB (Larson, 1987). In the case of exported fruits such as citrus the export price is given by the international market. The producer price should therefore have a direct relationship with this price.

In the case of products such as tea and sisal which require processing before their utilization it is irrelevant for Mozambique to fix producer prices. The whole production process is under control of agroindustrial complexes where the production of raw material is only the first element in a chain of vertically integrated activities where it is only the final price which is directly relevant. This situation may be compared with a case where the raw material (tea leaves for example) is produced by smallholders who sell to the processing factories and where the producer price assumes relevance.

In the case of the above three products which are also exported it is relevant to consider international prices if there is intervention in the consumer price. For tea and sisal Government could fix consumer prices but it could also leave the processors with this task without loosing control if marketing margins (as for example those in DL 6/73) are used. Technically the same procedure could be used for sugar, but here it must be noted that the internal production costs are very much higher than the international level. Therefore, consumer prices based on internal costs of production would be equivalent to a high consumer tax on this product which has big importance for the consumers. In the short run this measure does not, therefore, seem viable, but it is indispensable to increase efficiency of production in the longer run to equilibrate the situation.

#### 4.3.2. Maximum Intervention

The Government has given strategic importance to urban food supplies and the generation of foreign exchange. It would therefore be difficult to avoid maximum intervention in the prices of maize, rice and cotton.

Maize and rice are basic products in the diet and Government has to assure a minimum supply of these products under normal circumstances as well as in cases of natural calamities etc. That is, these products have the highest priority.

It must be stressed though that Government does not necessarily have to fix the producer prices. Minimum prices could

be considered, but in this case it is important that Government recognizes that consumer prices could fluctuate substantially between years of high and years of low production. If these fluctuations are not acceptable Government must fix the prices and/or subsidize prices at consumer level (if the necessary funds or food aid is available for this objective).

It is in all cases relevant to consider if it is really necessary to fix the prices at all levels to maintain central control, or whether it is not possible to fix less prices and introduce more flexibility with the utilization of given marketing margins, for example. It would probably be sufficient to publish only the producer and consumer prices basing the difference between them on realistic estimates of marketing costs.

Cotton is a crop which is very intensive in terms of manual labour and purchased inputs, and competes directly with food crops like maize. In addition, cotton is a strategic foreign exchange earner. It is therefore difficult to avoid maximum intervention (fixed or minimum price) in the producer price of seed cotton, because the instability following a liberalization would be inacceptable. However, for cotton fibre, prices negotiated between the ginneries and the textile industry could be introduced without difficulty considering that the majority of the production is exported.

That is, although it may be difficult to liberalize the prices of maize, rice and cotton more flexibility can be introduced. In all cases annual price reviews and margins based on appropriate crop models for the various social sectors will be necessary, analysing as well other factors such as production and marketing.

#### 4.3.3. Medium Intervention

There is a big number of crops where the degree of intervention is more difficult to establish. In the first place there are two industrial crops, cashew and copra, which are exported and in the case of copra also serves as raw material for the oil industry. Other oil crops like sunflower, mafurra and sesame may also be included in this group.

In the case of liberalizing the prices of these crops it would be reasonable to expect that processors would continue to use existing prices in a first phase. Real prices are at the moment so low that it would not be viable for the processors to lower the prices further without having a strong impact on the supply side.

In the medium term it is clear that there are possibilities for some processors to use their monopolistic position in a given

region. This possibility is more pronounced in the North where there are fewer factories, but considering the low degree of utilization of the installed capacity it is very doubtful that the processor would be able to use their position at the cost of the producers if they are operating in accordance with commercial principles. It is in this context also interesting to observe that there is already a tradition in Mozambique for transporting raw material from one part of the country to another. That is, possibilities for competition exist.

In analysing the effects of a possible liberalization of prices of these products it must also be recalled that the possibilities for increasing competition from producer to processor also depend upon the marketing system in direct contact with the peasants and upon the transport system to the factory.

In the extreme case where Agricom is the only organism which has in practice possibility to buy products from the peasants, transport them and sell them to the factory, it is in fact a situation of maximum intervention. The only possible flexibility which may be introduced in this kind of situation would be minimum prices or the utilization of fixed marketing margins, instead of fixed prices at all levels of the chain, possibly also introducing factory gate prices negotiated between Agricom on the one side and the processors on the other. This last flexibility can only be introduced if the effects on the consumers of edible oils are accepted by the State.

If in practice the State ensures viable competition among Agricom and the private traders at local level, guaranteeing for example access to means of transport at reasonable prices, there are possibilities for a situation where state intervention in the price formation may be established at the desired level. The State could leave the establishment of equilibrium prices to demand and supply of edible oils; and only intervene if the consequences from a production or consumption point of view were unsatisfactory. If there is need to intervene, the most efficient means would seem to be minimum producer prices combined with maximum marketing and processing margins.

As regards copra which can also be exported it must be recalled that international prices will have an impact on the internal price formation.

In the case of cashew which is an important export commodity, the considerations of the possible effects of liberalizing prices are very similar. The degree of utilization of the industrial capacity is so low that it is unreasonable to expect that the factories would use monopolistic possibilities. These possibilities are in any case counterbalanced by an eventual transport of raw material to other more distant factories. However, without competition at the local level of

marketing and in the transport the situation is comparable with maximum intervention. In the case where various competing traders exist it is possible to liberalize the prices leaving their definition to market forces where the impact of international prices would be determining. Liberalization would in the case of cashew have a very positive impact in what concerns the differentiation among the various qualities of this product, which is very easy when it is done at processing level. The degree of state intervention would in this case depend upon an appreciation of the relative importance of the need to increase production and exports, or the income of the Government.

Another group includes cassava, beans, groundnut, sorghum, potato and wheat. They are crops where the Government in principle could intervene in the price formation with a view to improve nutrition and selfsufficiency in food. That is, these crops are in this context comparable with maize and rice and are clearly distinct from for example fruits and vegetables. However, considering the present low level of marketing, they are not strategic crops in the same sense as maize and rice, and it appears reasonable to avoid for the time being Government intervention in these cases.

Tobacco serves, as the oil crops, as raw material for the national industry. If the Government wishes to promote family sector production it would probably be necessary for the State to intervene in producer price formation given that there are only two processors which have an oligopolistic position. However, at present the raw material is produced by the state sector which has capacity to negotiate its price with the industry. The need to intervene at this level does not therefore exist at the moment. The only case where the Government has to intervene is if the final price of tobacco products is unacceptable at consumer level. This possibility should probably be given little weight given that these products are not that important. In the case of export of tobacco the situation is comparable to that the tea.

#### 4.4. Conclusions and Proposals

Considering the limited institutional capacity and the lack of data and information in the field of price formulation it seems reasonable to limit the Government intervention in price formation to a small number of crops instead of the large number included in the past. The choice of crops must be based on two considerations: The importance of the crop and the production and market structure, which determines whether intervention would in fact be effective.

On the basis of the above analysis it is proposed that maximum intervention is considered in the case of maize, rice and cotton only. The introduction of minimum prices instead of fixed

producer prices could also be considered, but it seems advisable to fix prices for the time being, to maintain a maximum of possibility to use the price as an incentive to production<sup>26</sup>. However, it is advisable to leave fixing prices at all intermediate levels fixing only the consumer price (or the factory gate price) in addition to the producer price.

In relation to other products such as fruits, vegetables, tea, sugar and sisal minimum intervention is advisable either because these are export crops or because of the characteristics of the production and marketing system.

For the crops in the intermediate group liberalization could in fact be introduced without loosing effective control of the economy and without having negative effects on the supply. Minimum producer prices could be established as a guarantee against excessive price drops (in particular for export crops where this risk is big), and also maximum consumer prices could be considered. In all cases, fixing of intermediate prices could be left.

It must be stressed, however, that a fundamental assumption in leaving the fixing of intermediate prices (or establish marketing margins) is that there exists in practice a certain degree of competition among traders and processors. If not, they will have possibilities for using monopolistic situations. The Government policy towards access to transport means is in this context very important. If it is decided to establish minimum prices it is indispensable that Agricom has a market information system and sufficient capacity to act when necessary.

In the case where the State intervenes directly in the formation of prices, detailed information on production systems and relative costs of the various crops including transport and processing costs as well, is indispensable. It must be stressed that peasants in the family sector grow various crops which are in fact in competition one with the others in relation to factors of production including in particular manual labour. Any advance in the area of price intervention would be impossible without better knowledge of these fundamental aspects, and this is in fact a strong argument for focussing on maize, rice and cotton leaving considerations as to the introduction of minimum prices for other crops to a future phase, with possible exception of minimum prices for export products like cashew and copra.

It is important to regionalize producer prices as soon as possible to increase economic efficiency, but it must once more be stressed that this should not be exaggerated as this would create other inflexibilities in the price and marketing system. Only big regions which are fundamentally different should be considered.

### ANNEX 1

## Tables and Figures with Reference to Price Developments

## between

## 1976 and 1986

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TABLE 1: PRICE DEVELOPMENTS OF FOOD CROPS: 1976 - 1987 a) (escudos, meticais/kg)

Year		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Producer P			7 00	7 00	7 00	/ 00	/ 00	/ 00			47 00	47 45
Maize	nominal	2.50	3.20	3.20	3.20	4.00	4.00	6.00	6.00	6.00	13.00	13.00
	real	2.48	3.11	3.08	3.02	3.74	3.67	4.65	3.64	2.78	4.68	4.00
Rice	nominal	5.50	6.20	6.20	6.20	6.20	6.20	10.00	10.00	10.00	16.00	16.00
	real	5.45	6.02	5.96	5.85	5.79	5.69	7.75	6.06	4.63	5.76	4.92
Wheat	nominal	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	11.50	11.50
	real	4.36	4.27	4.23	4.15	4.11	4.04	3.41	2.67	2.04	4.14	3.54
Sorghum	nominal	2.30	3.00	3.00	3.00	3.00	4.00	5.00	5.00	5.00	12.00	12.00
	real	2.28	2.91	2.88	2.83	2.80	3.67	3.88	3.03	2.31	4.32	3.69
Cassava	nominal	n/a	n/a	n/a	3.50	2.00	3.00	4.50	4.50	4.50	free	free
dry	real				3.30	1.87	2.75	3.49	2.73	2.08		
Beans	nominal	6.50	10.00	10.00	11.00	15.00	15.00	15.00	15.00	15.00	23.50	23.50
type 1	real	6.44	9.71	9.62	10.38	14.02	13.76	11.63	9.09	6.94	8.45	7.23
Beans	nominal	3.00	5.00	5.00	5.00	5.00	7.50	7.50	7.50	7.50	15.00	15.00
type 2	real	2.97	4.85	4.81	4.72	4.67	6.88	5.81	4.55	3.47	5.40	4.62
Groundnut	nominal	8.50	10.00	10.00	10.00	10.00	13.50	15.00	15.00	15.00	20.00	20.00
	real	8.42	9.71	9.62	9.43	9.35	12.39	11.63	9.09	6.94	7.19	6.15
Consumer Pr												
Maize	nominal	4.83	5.00	5.00	5.00	7.00	7.00	9.00	9.00	9.00	9.00	9.00
	real	4.78	4.85	4.81	4.72	6.54	6.42	6.98	5.45	4.17	3.24	2.77
Rice	nominal	11.50	11.50	11.50	11.50	11.50	11.50	13.50	13.50	13.50	13.50	13.50
	real	11.39	11.17	11.06	10.85	10.75	10.55	10.47	8.18	6.25	4.86	4.15
Sorghum	nominal	n/a	n/a	n/a	5.50	5.50	7.00	8.50	8.50	8.50	16.50	16.50
	real				5.19	5.14	6.42	6.59	5.15	3.94	5.94	5.08
Cassava	nominal	n/a	n/a	n/a	n/a	n/a	8.50	10.00	10.00	10.00	free	free
dry	real						7.80	7.75	6.06	4.63		
Beans	nominal	n/a	n/a	n/a	18.00	27.50	27.50	27.50	27.50	27.50	34.50	34.50
type 1	real				16.98	25.70	25.23	21.32	16.67	12.73	12.41	10.62
Beans	nominal	n/a	n/a	n/a	10.00	10.00	14.00	14.00	14.00	14.00	24.00	24.00
type 2	real				9.43	9.35	12.84	10.85	8.48	6.48	8.63	7.38
Groundnut	nominal	12.00	13.50	13.50	18.50	20.00	24.50	26.50	26.50	26.50	30.50	30.50
	real	11.83	13.11	12.98	17.45	18.69	22.48	20.54	16.06	12.27	10.97	9.38
Consumer Pri in RPM (1975		101	103	104	106	107	109	129	165	216	278	325

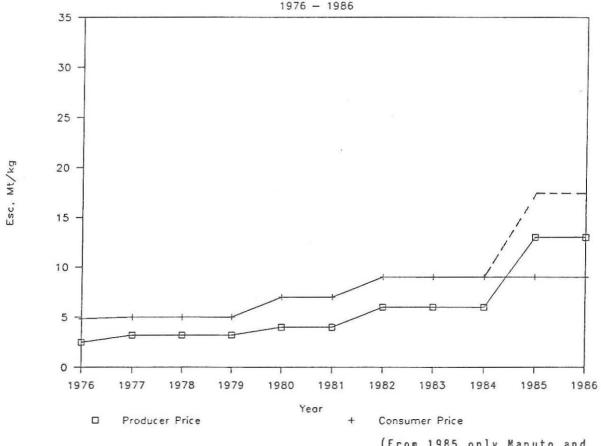
Sources: AGRICOM, CNSP, SEA

Notes: a) To calculate real prices, nominal prices were deflated with the consumer price index;

in general prices to use in southern Mozambique are shown.

b) Prices to use in Maputo and Beira; prices in other areas: 1985 1986 1987 maize 17.50 17.50 30.00 rice 35.00 35.00 60.00

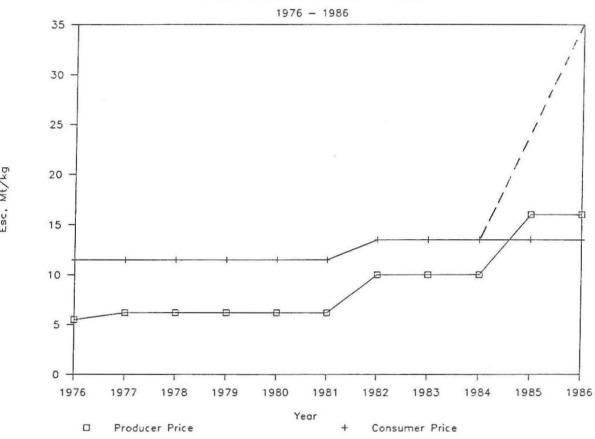
Figure 1
Nominal Prices: Maize
1976 - 1986



(From 1985 only Maputo and Beira with the rest of the country indicated with ---)

Figure 2





(From 1985 only Maputo and Beira with the rest of the country indicated with ---)

Figure 3

Nominal Prices: Beans (type 2)

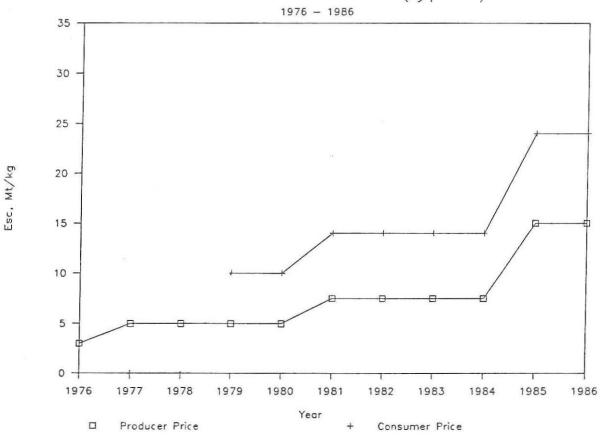


Figure 4

Nominal Prices: Groundnut

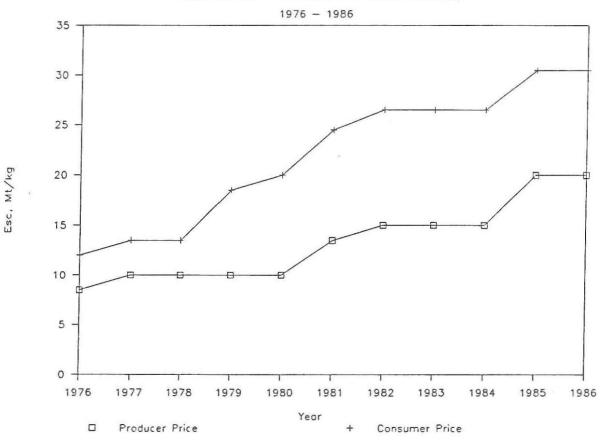


Figure 5 Real Prices: Maize

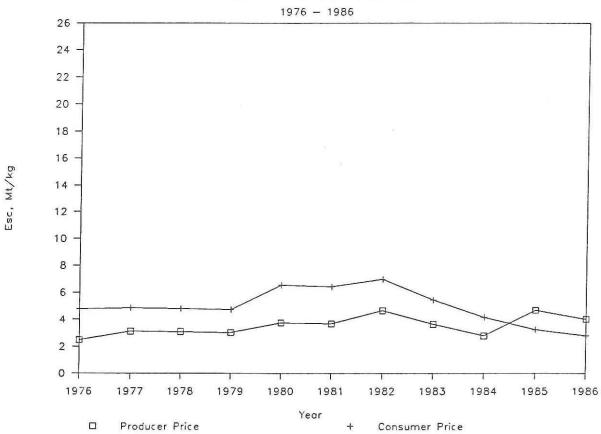


Figure 6

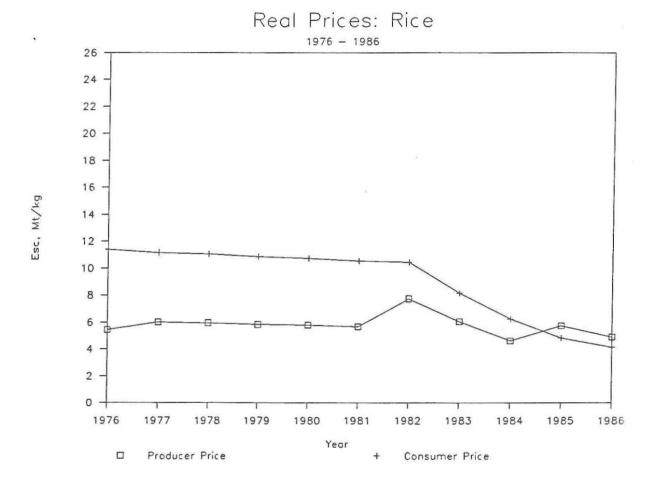


Figure 7
Real Prices: Beans (type 2)

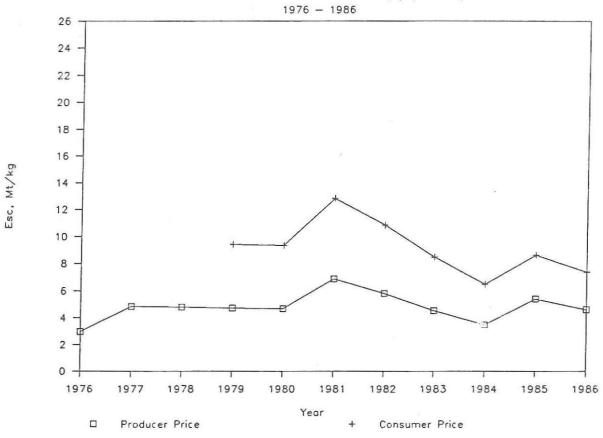


Figure 8
Real Prices: Groundnut

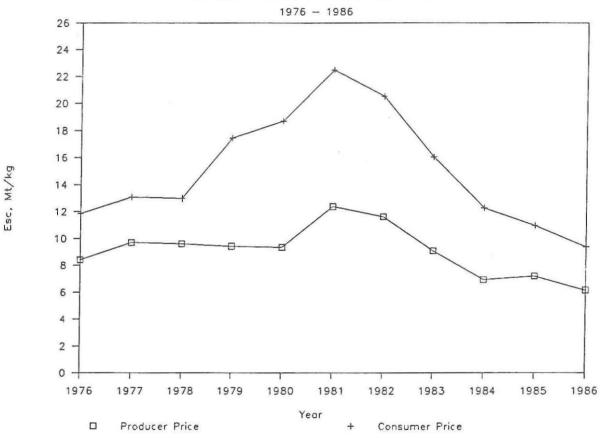


TABLE 2: PRICE DEVELOPMENTS FOR INDUSTRIAL CROPS: 1976 - 1987 a) (escudos, meticais/kg)

Year		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Producer Pri	ce							1,000,000	100	1,703	1703	1700	1701
Sunflower	nominal	7.00	8.50	8.50	8.50	8.50	8.50	10.50	10.50	10.50	15.00	15.00	50.00
	real	6.93	8.25	8.17	8.02	7.94	7.80	8.14	6.36	4.86	5.40	4.62	50.00
							1.0000		0.50	7.00	3.40	4.02	
Sesame	nominal	n/a	11.00	11.00	11.00	11.00	11.00	13.50	13.50	13.50	19.50	19.50	100 00
	real		10.68	10.58	10.38	10.28	10.09	10.47	8.18	6.25	7.01	6.00	100.00
						TO THE PARTY OF TH		10141	0.10	0.23	7.01	0.00	
Mafurra	nominal	2.20	2.20	3.00	3.00	3.00	3.00	5.00	5.00	5.00	8.00	8.00	70.00
	real	2.18	2.14	2.88	2.83	2.80	2.75	3.88	3.03	2.31			30.00
					T-ANTO		2.112	3.00	3.03	4.31	2.88	2.46	
Copra	nominal	3.20	4.70	4.80	4.85	4.85	5.00	5.00	5.00	5.50	E E0	F F0	40.00
	real	3.17	4.56	4.62	4.58	4.53	4.59	3.88	3.03	2.55	5.50	5.50	18.00
					- 115-5-55-5-6	,,,,,	4.27	5.00	3.03	2.33	1.98	1.69	
Cashew	nominal	3.50	3.50	3.50	3.50	5.00	5.00	5.00	5.00	10.00	10.00	10.00	/O OO
Nut	real	3.47	3.40	3.37	3.30	4.67	4.59	3.88	3.03	4.63	3.60	10.00	60.00
						0.500.00		5100	3.03	4.03	3.00	3.08	
Seed	nominal b)	8.00	8.00	8.00	8.00	11.00	11.00	11.00	12.50	12,50	16.00	44 00	15 00
Cotton	real	7.92	7.77	7.69	7.55	10.28	10.09	8.53	7.58	5.79	5.76	16.00	65.00
					10,000,00			0.55	7.50	3.19	3.70	4.92	
Prices at Fa	ctory Gate/W	arehouse											
Sunflower	nominal	8.37	10.70	10.70	10.90	10.90	10.90	12.90	12.90	12.90	16.50	44 50	
	real	8.29	10.39	10.29	10.28	10.19	10.00	10.00	7.82	5.97		16.50	60.00
							10.00	10.00	1.02	3.97	5.94	5.08	
Sesame	nominal	n/a	13.40	13.40	13.40	13.40	13.40	17.80	17.80	17.80	22 00	22 00	440.00
	reat		13.01	12.88	12.64	12.52	12.29	13.80	10.79	8.24	22.00	22.00	118.00
					(ATICAL)		16167	13.00	10.79	0.24	7.91	6.77	
Mafurra	nominal	3.30	3.30	4.50	4.50	4.50	4.50	6.50	6.50	6.50	42.00	40.00	
	real	3.27	3.20	4.33	4.25	4.21	4.13	5.04	3.94		12.00	12.00	48.00
					S1137 60		*****	3.04	3.74	3.01	4.32	3.69	
Copra	nominal	4.40	6.00	6.10	6.20	6.20	6.70	6.70	6.70	7 50	7 50	7.50	
	real	4.36	5.83	5.87	5.85	5.79	6.15	5.19	4.06	7.50	7.50	7.50	25.00
				5.5.51	2102	2.17	0.13	3.19	4.00	3.47	2.70	2.31	
Cashew	nominal	n/a	6.60	4.80	4.80	7.50	7.50	7.50	7.50	47 00	47 00		
	real		6.41	4.62	4.53	7.01	6.88	5.81		13.20	13.20	13.20	86.00
			3.5.00	,,,,,	4.55	7.01	0.00	2.01	4.55	6.11	4.75	4.06	
Cotton	nominal c)	50.00	50.00	50.00	50.00	50.00	50.00	E0 00	FO 00	F0 00	<b>##</b> ##	22.00	
Fibre	real	49.50	48.54	48.08	47.17	46.73		50.00	50.00	50.00	50.00	50.00	285.00
				40100	41.11	40.73	45.87	38.76	30.30	23.15	17.99	15.38	
Consumer Pri	ce Index	101	103	104	106	107	109	420	445				
in RPM			, 55	104	100	107	109	129	165	216	278	325	325
(1975=100)													
A PROPERTY OF THE PARTY OF THE													

Sources: AGRICOM, CNSP, SEA

Notes: a) To calculate real prices, nominal prices were deflated with the consumer price index; in general prices to use in southern Mozambique are shown.

b) First quality.

c) Type 1 national industry.

Figure 9
Producer Prices: Cotton

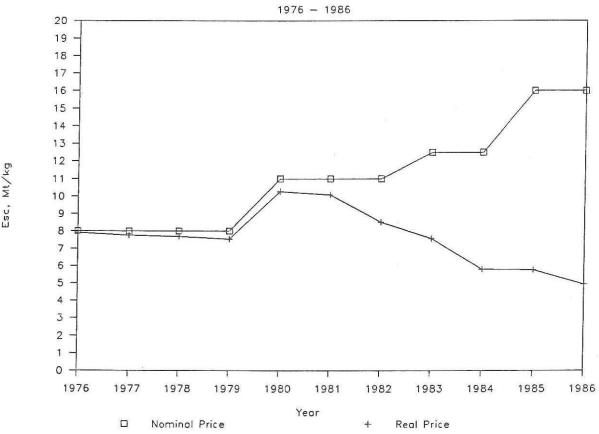


Figure 10
Producer Prices: Sunflower

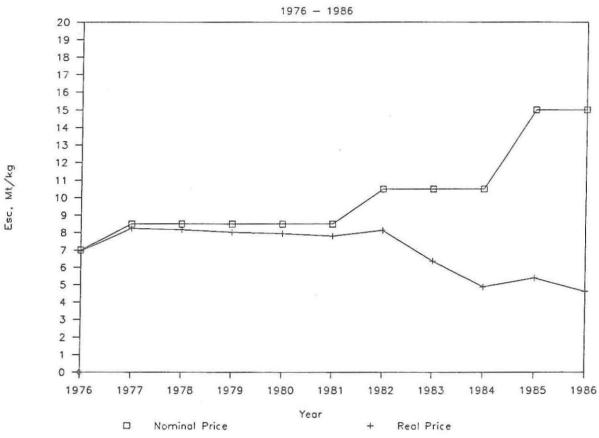


Figure 11

# Producer Prices: Copra

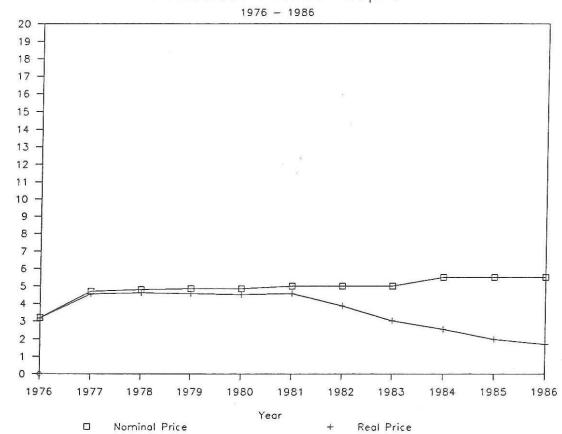


Figure 12
Producer Prices: Cashew

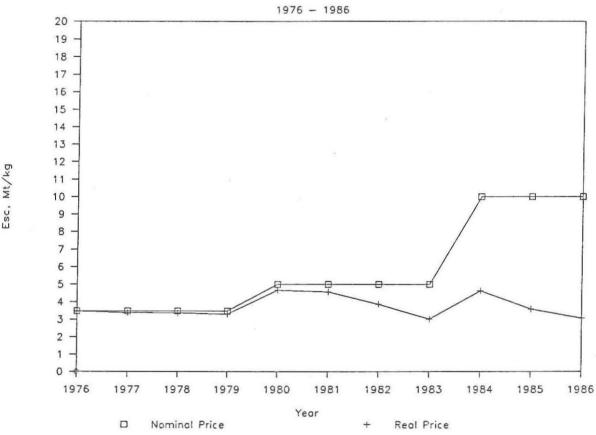


TABLE 3: AGRICULTURAL MARKETING: 1976 - 1986 (000 tonnes)

Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Food Crops											
Maize	90.0	34.0	70.0	66.0	65.0	78.3	86.2	55.8	82.6	58.6	21.5
Rice	75.0	60.0	44.0	56.3	43.6	28.9	41.5	17.3	19.1	17.9	19.0
Wheat	n/a	n/a	n/a	n/a	0.6	0.4	1.0	0.7	0.5	0.1	0.0
Sorghum	n/a	n/a	n/a	n/a	0.6	1.0	1.6	1.3	2.1	1.8	0.6
Cassava (dry)	n/a	n/a	n/a	n/a	8.8	10.9	9.5	8.5	6.9	6.4	6.0
Beans	14.0	14.0	10.1	13.0	9.6	14.9	6.9	4.8	3.5	3.6	2.8
Groundnuts	n/a	n/a	n/a	n/a	6.3	5.0	1.5	0.7	2.0	2.0	0.9
Vegetables	3.0	2.0	6.0	2.3	6.4	6.8	5.6	7.9	20.0	33.9	23.9
Industrial Crops										~	
Sunflower	7.0	10.0	7.0	4.8	11.8	12.1	10.8	7.3	5.0	5.7	1.0
Sesame	n/a	n/a	n/a	n/a	0.0	0.5	0.9	0.3	0.3	0.3	0.1
Mafurra	n/a	n/a	n/a	n/a	0.0	3.8	6.4	5.7	5.3	2.6	2.2
Сорга	72.0	48.0	60.0	51.0	37.1	54.4	36.6	30.7	24.8	24.0	28.6
Cashew	120.0	102.0	90.0	62.6	87.6	90.1	57.0	18.1	25.3	30.4	40.1
Seed Cotton	36.8	52.0	72.4	36.8	64.9	73.7	60.7	24.7	19.7	5.7	10.8
Tea (leaf)	67.3	77.3	67.6	86.0	90.2	99.2	109.7	51.1	59.8	25.0	6.4
Sisal (leaf)	325.0	325.0	375.0	424.1	298.0	233.8	139.9	122.4	136.6	78.8	22.4
Citrus	30.0	25.0	38.6	39.0	37.3	36.7	38.1	33.5	24.6	31.5	20.2

Source: DNE (1987)

Figure 13 Marketing of Food Crops 1976 – 1986

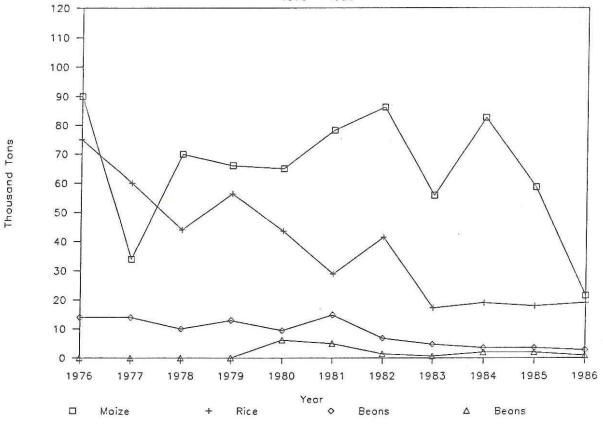


Figure 14

Marketing of Industrial Crops
1976 – 1986

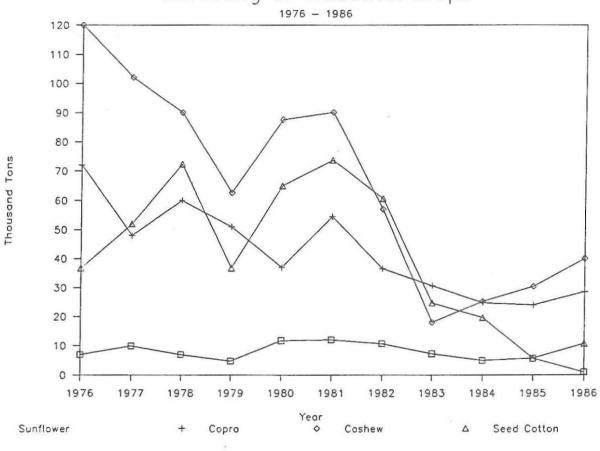


TABLE 4: RELATIONSHIP BETWEEN PRODUCER PRICES AND EXPORT VALUES 1976 - 1986 (meticals/kg, percentage)

Year		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Copra	nominal price	3.20	4.70	4.80	4.85	4.85	5.00	5.00	5.00	5.50	5.50	5.50
	unit value	5.17	9.17	12.11	19.96	15.32	14.18	9.13	14.47	18.81	17.26	7.22
	price/value %	62	51	40	24	32	35	55	35	29	32	76
Cashew	nominal price	3.50	3.50	3.50	3.50	5.00	5.00	5.00	5.00	10.00	10.00	10.00
nut	unit value	49.72	86.34	78.14	84.53	134.72	154.92	98.61	111.57	158.54	160.87	217.97
	price/value %	7	4	4	4	4	3	5	4	6	6	5
Seed Cotton	nominal price	8.00	8.00	8.00	8.00	11.00	11.00	11.00	12.50	12.50	16.00	16.00
Cotton Fibre	unit value	32.99	45.79	33.97	47.25	46.75	58.73	47.66	51.83	57.80	49.06	27.75
	price/value %	24	17	24	17	24	19	23	24	22	33	58

Source: Tables 2 and 5

TABLE 5: EXPORT OF AGRICULTURAL PRODUCTS: 1976 - 1986
(recurrent prices)
(value in million Mt, volume 1000 tonnes, unit values Mt/kg)

Vaca		107/	1077	4070	1070	4000	4004	1003	1007	100/	4005	4007
Year		1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Copra	value	212.6	334.8	416.6	580.8	297.3	173.0	111.4	86.8	79.0	219.2	84.5
	volume	41.1	36.5	34.4	29.1	19.4	12.2	12.2	6.0	4.2	12.7	11.7
	un. value	5.2	9.2	12.1	20.0	15.3	14.2	9.1	14.5	18.8	17.3	7.2
Copra	value	94.4	93.9	40.5	84.3	88.1	94.6	44.7	0.0	0.0	18.1	14.5
oil	volume	8.6	5.3	1.9	3.1	3.6	4.8	2.5	0.0	0.0	0.6	0.5
	un. value	11.0	17.7	21.3	27.2	24.5	19.7	17.9	0.0	0.0	30.2	29.0
Cashew	value	1049.0	1467.7	1437.8	1445.5	2101.6	1890.0	1646.8	647.1	650.0	498.7	675.7
Nut	volume	21.1	17.0	18.4	17.1	15.6	12.2	16.7	5.8	4.1	3.1	3.1
	un. value	49.7	86.3	78.1	84.5	134.7	154.9	98.6	111.6	158.5	160.9	218.0
Cashew	value	44.4	81.2	181.1	267.7	60.3	65.0	32.9	14.8	5.9	13.2	12.1
oil	volume	8.3	10.0	7.9	6.3	2.0	4.8	7.1	3.0	0.7	1.0	1.0
	un. value	5.3	8.1	22.9	42.5	30.2	13.5	4.6	4.9	8.4	13.2	12.1
Cotton	value	537.8	288.5	434.8	760.7	266.5	881.0	652.9	684.2	341.0	230.6	22.2
Fibre	volume	16.3	6.3	12.8	16.1	5.7	15.0	13.7	13.2	5.9	4.7	0.8
	un. value	33.0	45.8	34.0	47.2	46.8	58.7	47.7	51.8	57.8	49.1	27.7
Tea	value	199.8	409.6	407.5	680.1	938.0	502.0	969.8	591.2	458.2	104.2	50.8
	volume	12.7	12.3	13.5	23.3	30.0	16.0	25.1	13.3	7.7	1.8	1.5
	un. value	15.7	33.3	30.2	29.2	31.3	31.4	38.6	44.5	59.5	57.9	33.9
Sugar	value	536.9	260.1	182.0	951.7	797.0	888.0	331.8	346.4	244.2	294.6	326.3
	volume	71.9	37.4	24.6	118.7	63.8	63.1	28.5	25.0	16.4	16.8	19.5
	un. value	7.5	7.0	7.4	8.0	12.5	14.1	11.6	13.9	14.9	17.5	16.7
Sisal	value	81.5	137.7	137.3	197.4	129.1	103.0	100.1	37.9	33.0	4.1	0.1
	volume	10.1	13.9	11.3	14.0	7.0	5.8	5.7	2.5	2.0	0.2	n/a
	un. value	8.1	9.9	12.2	14.1	18.4	17.8	17.6	15.2	16.5	20.5	n/a
Citrus .	value	35.3	15.5	40.0	68.2	83.8	170.0	100.0	79.7	137.2	132.5	89.2
	volume	8.7	3.4	11.8	16.3	14.0	16.5	11.6	8.0	11.0	10.4	8.3
	un. value	4.1	4.6	3.4	4.2	6.0	10.3	8.6	10.0	12.5	12.7	10.7

Source: DNE (1987)

#### ANNEX 2

### Figures with Reference to Analysis of Marketing

#### and Real Producer Price Trends

#### between 1976 and 1986

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			Groundnut			59
			Cotton			60
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	7		Copra			62
	8		Cashew			63

 $\underline{\text{Note}}\colon$  For clarity in the exposition cashew, copra and maize prices were multiplied with 10 and rice and cotton prices with 5.

Figure 1

# Maize

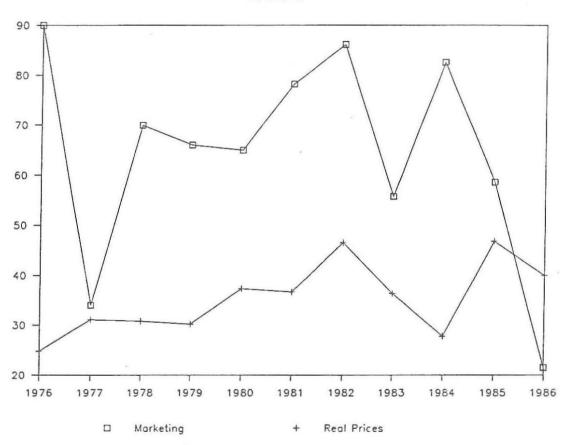


Figure 2

## Rice

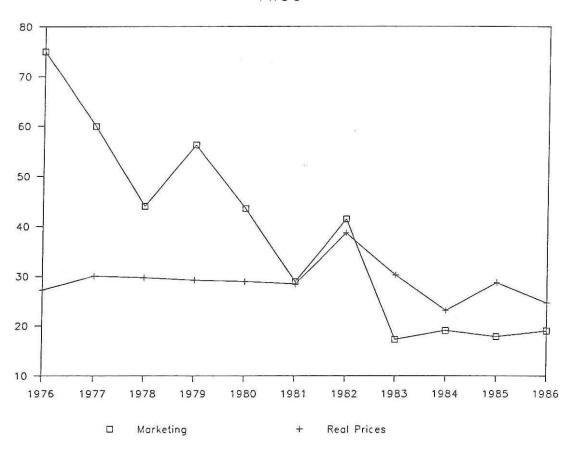


Figure 3

## Beans

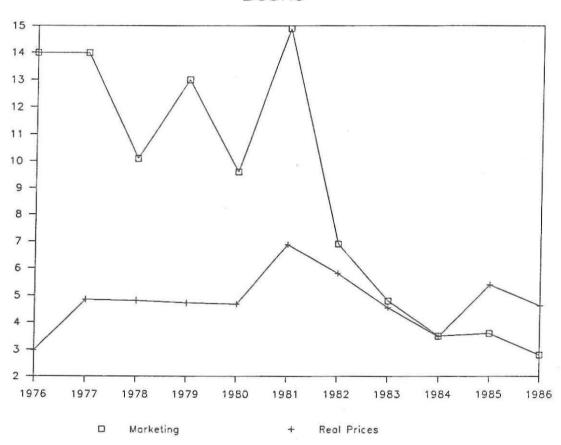


Figure 4
Groundnut

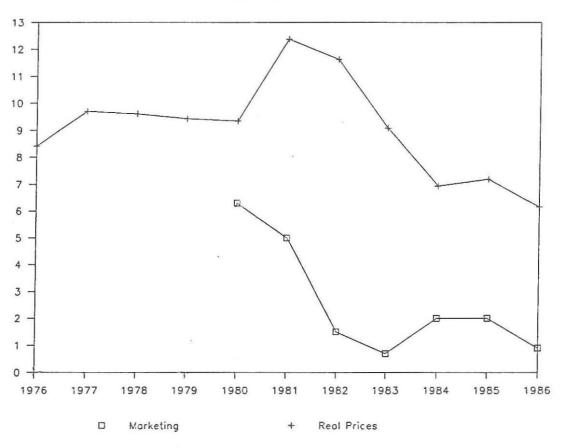


Figure 5 Cotton

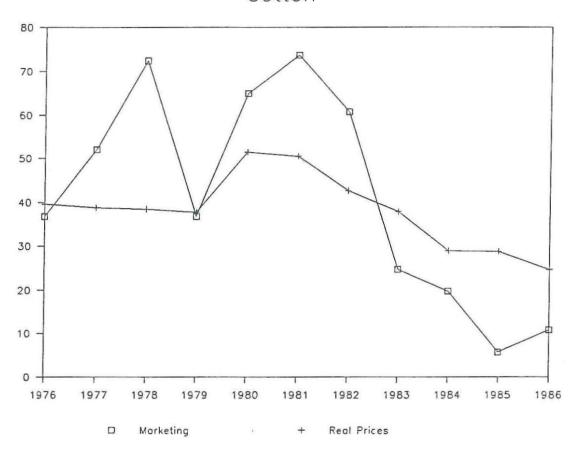


Figure 6
Sunflower

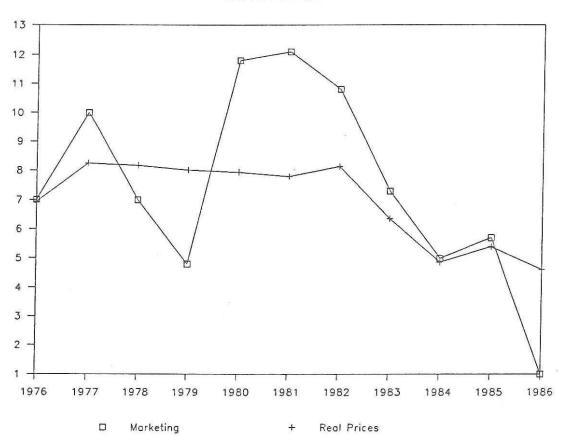


Figure 7

# Copra

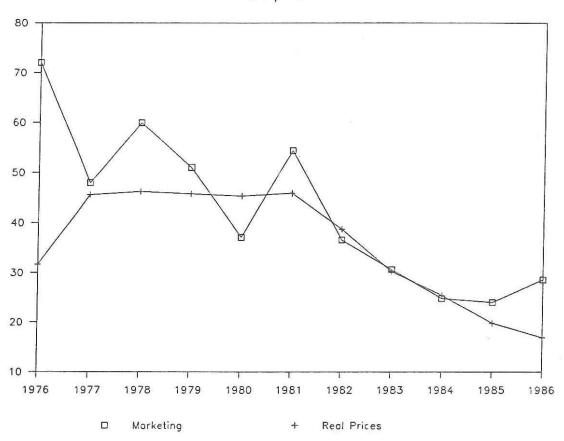
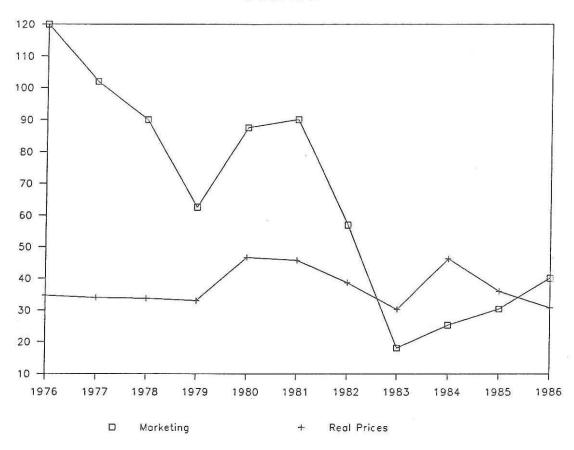


Figure 8 Cashew



#### LIST OF REFERENCES

- FAO, 1980 : Agricultural Chapter of the Lagos Plan of Action, Rome.
- FAO, 1984 : Agricultural Price Policies in Africa. Document ARC/84/4 prepared for 13th Regional Conference, Rome.
- FAO, 1986a : African Agriculture the Next 25 Years, Rome.
- FAO, 1986b: Agricultural Price Policy Experience in the ECOWAS Region. TCP/RAF/4406 Field Document, Rome.
- FAO, 1987 : Políticas de Precios Agrícolas: Problemas y Propuestas. Collección FAO: Desarrollo Económico y Social No. 42, Rome.
- Frelimo, 1977 : Directivas Económicas e Sociais, Terceiro Congresso da Frelimo, Maputo.
- Frelimo, 1983: Out of Underdevelopment to Socialism. Documents 1, 2 and 3 of Fourth Congress, Maputo.
- Frelimo, 1987 : Construamos o Futuro com as Nossas M os.
- Larson, D.W. 1987: Structure and Performance of the Fruit and Vegetable Marketing System of Mozambique. A preliminary report for World Bank, Maputo.
- Lewis, A. 1954: Economic Development with Unlimited Supplies of Labour. The Manchester School.
- Machungo, M. 1987 : Envolver Todos os Meios Disponíveis para o Programa de Reabilitaç o Económica. Discurso na Primeira Sess o da Segunda Legislatura da Assembleia Popular, Maputo.
- Mackintosh, M. 1985 : Agricultural Pricing Policy in Mozambique. Chapter 2 of IDS Study on Mozambique, Tanzania, Zambia and Zimbabwe.
- Ministry od Finance, Department of Prices, 1985 : II Curso de Capacitaç o Professional. Various stencilled documents, Maputo.
- Mkandawire, T., 1982: The Lagos Plan of Action and the World Bank on Food and Agriculture in Africa: A Comparative Study. Africa Development Vol. VII No.1/2.
- National Directorate of Statistics (DNE), 1980 :Populaç o, Ocupaç o e Força de Trabalho Vol.5, Tomo 1 da Análise Nacional do

Primeiro Recenseamento Geral da Populaç o, Maputo.

- National Directorate of Statistics (DNE), 1985 : Preços ao Consumidor e Nível do Consumo, Maputo.
- National Directorate of Statistics (DNE), 1987 : Informaç o Estatística 1986, Maputo.
- National Planning Commission (CNP), 1984 : Informaç o Económica, Maputo.
- Nordic Countries, 1984 : Nordic Position Paper. SADCC Conference at Lusaka 1-3 February.
- Nove, A., 1983 : The Economics of Feasible Socialism. George Allen & Unwin Publishers Ltd, London.
- RPM, 1987: Strategy and Program for Economic Rehabilitation 1987-1990. Presented at the meeting of the Consultive Group for Mozambique in Paris July 1987.
- Tickner, V. 1985 : The Agricultural Marketing System in Mozambique, Maputo.
- Tinner, P.C., 1980 : Food Prices and Food Policy Analysis in LDC's in G. M. Meier (ed) Leading Issues in Economic Development 4th Edition, Oxford University Press, New York.
- World Bank (WB), 1981: Accelerated Development in Sub-Saharan Africa: An Agenda for Action, Washington D.C.