

AGROP-06

A CRITICAL REVIEW OF AGRICULTURAL
POLICY REFORM IN MOZAMBIQUE

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DEDICATION

Voces que vao emergir
das ondas de que nos perecemos
pensem
quando falarem das nossas fraquezas
dos tempos sem sol
de que voces tiveram a sorte de escapar

B Brecht



I dedicate this piece of work to my dad, Alberto J Manja,
my mum, Ana J M Chithlango, to my children, Akapatanda
and Anyande

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Mozambique, like any other Sub-Saharan African country, has been under severe difficulties in the last few decades. There have been identified root causes of internal and external nature, though, emphasising that 'it is the internal factor and not the external one which is significant'.

Mozambique inherited a distorted sort of economy from the colonial power; an economy which had not been shaped with consideration to the country's best interests. It is described as a 'backward, distorted and very dependent economy' that was inherited at the year of independence, based principally on providing services and cheap labour to South Africa.

The report identifies distortions stemming from exchange rate inflexibilities, high level of consumer subsidies, the level of direct state marketing involvement and rigidities on pricing policies.

The inherited large scale agriculture and capital intensive bias combined with price distortions, lack of services, and the breakdown of the marketing network led to supply contraction in the years of unfavourable international terms of trade, with consequent Budgetary and Balance of Payments crisis.

Above all, the war of aggression added the single major contributing element to the economic regression of Mozambique.

The first three chapters provide a general background to the structural weaknesses of the country's agricultural sector, with reference to the colonial legacy and the experiences of the other countries in the Sub-Saharan region. In the last two chapters the economic rehabilitation program is discussed and recommended as a means of restoring incentives, attaining efficiency, and driving the country back to its comparative advantage.

CHAPTER ONE : INTRODUCTION

1 BACKGROUND TO ADJUSTMENT POLICIES

Many countries of the less developed world have experienced severe difficulties in the early seventies. It is argued that the adverse developments in the world economy caused by the sharp and sudden increase of the oil prices found many of these countries with structural weaknesses and therefore with little chance of resisting the shocks.

Indeed as Mamdani (1990), points out in underlying the IMF perspective 'it is the internal and not the external source of the problem which is significant.' Tony Killick (ODI, Working Paper 34), indicates that 'in the case of small low income countries, agricultural decline results more from poor performance than from long term processes of structural transformation.' Following the same source, it is noted from the table below how indicators of productivity have declined, with particular reference to sub-Saharan Africa. As an unavoidable consequence the output declined with negative effects to the relationship export-import. (Refer to Table 1)

The data in this table shows how the agricultural sector grew by only 1.2 per cent in the early 1980s, compared with 3.4 per cent in all LDCs, and it is said to be below the population growth of 2.6-3.0 per cent per annum for the same region. The imports grew dramatically during this period whilst the exports shrunk 'increasing the deficit which became progressively more difficult to finance. In the internal economy the imbalance emerged as increasing fiscal deficit' (Kydd and Spooner 1990).

At the same time, according to this source the governments of these countries tended to offset their balance of payment difficulties by 'increased borrowing taxes on imports and rationing of foreign exchange. By the early eighties many countries were running out of options.'

TABLE 1: Indicators of African Agricultural Weaknesses

	year	SSA	All\LDC
A. OUTPUT, TRADE AND CONSUMPTION			
1. Growth of agricultural output (% pa real)	65\80 80\87	1.7 1.2	3 3.4
2. Food production per capita (1979\81 equal 100)	85\87	100	111
3. Cereal imports and food aid (1974 equal 100)	86\87	223	157
4. Daily caloric supply per capita	\65 \86	2096 2101	2116 2509
5. Share of SSA in world agric. prim. exp. %	70\71 83\84	31.8 23.6	
B. PRODUCTIVITY INDICATORS			
6. Fertilizer consumption (100g of plant nutrient/ha)	69\71 \86	33 86	230 683
7. Average annual yields(tonnes/ha)			
a) coffee	69\71 78\80	.4 .33	.47 .49
b) rice	69\71 78\80	1.35 1.34	2.28 2.63
c) maize	69\71 78\80	1.02 .93	1.62 1.85
d) sorghum	69\71 78\80	.68 .69	.85 1.06
e) groundnuts	69\71 78\80	.77 .76	.88 .91

Adapted from Tony Killick (ODI, Working Paper 34) 1990

Some authors, though, advocate that the severe world recession, followed by sluggish world growth, the collapse of commodity prices and rising protectionism in developed countries have reduced developing countries foreign exchange earnings. It followed that most Third World countries could no longer sustain their previous pattern of development, but had to change their economies radically to survive in the new international circumstances (Stewart 1988).

Whilst it was obvious that these countries as a whole, and individually, should undertake strong macro-economic measures the related policies were not always consistent or effective. However the World Development Report (1986), recognises that increased food production and cash crop production have been the priority of objectives of developing nations. It recognises that in pursuing these objectives, governments of these countries have made substantial public investments to improve the physical infrastructure of the rural areas, expand irrigation and water control, and organize research and extension in agriculture. But while some regions of the developing world have been enjoying a relative success, African countries have noticeably failed. In trying to provide the macro economic aspects of the picture analysts have come up with the views summarised in the World Development Report as follows:

(1) The general economic policies that developing countries have pursued have limited the growth of agricultural production and hampered efforts to reduce rural poverty:

(a) In many cases sector-specific pricing and taxing policies have also resulted in substantial discrimination against agriculture.

(b) In addition, government intervention at all stages of production, consumption, and marketing of agricultural products and inputs, though undertaken to improve the efficiency of markets, have frequently resulted in greater inefficiencies and lower output and incomes.

(2) Even those countries which have been stressing the importance of agricultural development have established a complex set of policies that is strongly biased against agriculture:

(a) Some developing countries impose taxes on agricultural exports while lamenting the adverse impact of declining commodity prices on the farm sector.

(b) Some countries pay their producers half the world price for grain and then spend scarce foreign exchange to import food.

(3) Many countries, according to the same source, follow exchange rate policies that make producer prices low:

(a) Many countries have set up complex systems of producer taxation, and have then set up equally complex and frequently ineffective systems of subsidies for inputs to offset that taxation.

(b) Many subsidize consumers to help the poor, but end up reducing the incomes of farmers who are much poorer than many of the urban consumers who actually benefit from the subsidies.

This gloomy reality, that has been frequently highlighted by many analysts and summarised in the referred World Development Report, is worsened by the fact that so often many African countries have failed to adjust their exchange rates sufficiently in periods of rapid inflation with the result that their currencies became overvalued.

There were certainly many other recognizable factors, other than those stressed in this paper, and those can be related to specific political realities of individual regions and countries, different approaches and ideological fashions, and many other locally specific driving forces and interests.

Other economists though would prefer an alternative explanation to those problems faced by the whole of sub-Saharan countries. This alternative view emphasises the importance of institutions, support services and the role of historic-cultural factors.

Whatever the views are, as Chambers (1989) points out, to generalize about the state and rural development in the south is rash. Almost any statement needs qualification.

Indeed even within national boundaries, the macro and micro-economic analysis need to be combined and broken down into sectors, regions and sub-cultural groups, to fit dynamic realities.

The Mozambican economic reality will be analyzed, taking into account mainly the fact that (a) it is relatively a country of recent political independence, (b) it has been under external military aggression from the

early years, (c) it inherited a very dependent and distorted colonial economy. Therefore the recommendations will be based on hints of likely hypothesis under normal circumstances should the peace hold on.

1.1 Overview of the Mozambican Agriculture

As will be shown from the next chapter, the Mozambican government inherited the above described situation at the year of independence from colonial power. Indeed at that time the currency was held above real scarcity value; food prices were held down, both because of the effect of overvalued exchange rate, and also because of an element of subsidy meant to protect the urban consumer. However at that time the agricultural sector contributed with about half of the foreign exchange earned by the country on exports (Mackintosh 1988). The marketing of agricultural output to feed the urban areas and the rural needy areas was in the hands of few Portuguese and Indian private shopkeepers collecting the produce of the scattered population engaged in the 'family farming' sector.

After independence the state was forced to run monopolistic marketing boards and large agricultural enterprises massively abandoned by the colonial power and the most of portuguese businessmen. Soon after that, the Rhodesian government created the MNR for a destructive war against economic infra-structures and rural population. The drought followed soon after that and the socio-economic situation worsened increasingly and became unsustainable. The following chapter will look at this period, providing main macro-economic decisions taken with related data on marketing organization prices, output and agricultural export.

By 1980 the agricultural output fell dramatically and as a result the export declined, adding more difficulties to the budget and the balance of payments. By this year, according to many authors, the government had realised the harmful effects of holding an overvalued exchange rate and regarded monopolistic marketing practices as being 'wasteful, inefficient and corrupt' (Mackintosh 1988).

It was indeed the Mozambican government, probably as a last resort, and not the international financial institutions, imposing the beginning of the liberalization program. The conditions that came from the negotiations with the World Bank and the IMF were designed to liberalize the market and devalue the currency, and to relatively reduce government expenditure. These measures and their short term effects will be reported in Chapter Three.

Chapter Four will outline the possible long term implications in the light of an eventual long lasting and sustainable peaceful situation. After looking at the composition of the agrarian population, and their response to economic incentives, the paper concludes with recommendations towards the strengthening of the adjustment reforms on the basis of economic efficiency, sustainability, and institutional benefit, with the government assigned to getting the pricing, (exchange rate, interest rates, etc), and non pricing policies, (infra-structures, extension services, credit institutions, etc), in favour of agricultural growth.

CHAPTER TWO

2 BACKGROUND TO THE PROBLEM

More than 80 per cent of the Mozambican population are living on agriculture and, in turn, most of them rely on subsistence agriculture. The main staples grown for that purpose are maize, cassava, beans, peanuts, and in some regions sorghum, sweet potato and rice.

Cash crops are also grown by the rural population. The main cash crops are cashew nuts, copra, tea, cotton and sisal.

Ever since, the Portuguese authorities managed to obtain substantial output on cash crops from rural dwellers through compulsory regulations agreed with the local traditional authorities in what some authors agree resembled on many occasions pure slavery. This is probably one of the reasons why such disproportionate prices could prevail .

Indeed the report to the 'Frelimo, Quarto Congresso', reads that 'in 1961 the export prices of cotton for companies based in Mozambique were 500 per cent higher than the prices for which the same cotton had been bought from the peasants.' The colonial authority collected this output through a network of private traders of Portuguese and Indian origin. Thousands of shopkeepers of that origin performed, all over the country, the wholesale and retail functions handling diversified products from vegetables to many other groceries.

On the other hand large companies with foreign financial capital were set up in order to undertake the capital intensive production, processing and export of the main cash crops as referred above.

However it was the peasant agriculture which accounted for 70 per cent of the total agricultural output and supplied labour to settler farms and plantations, and also supplied migrant labour to the region, especially to South Africa and Rhodesia.

The Mozambican economy of the colonial era was very dependent on foreign capital particularly represented by British and German multinationals, (Tarp 1990). This perhaps may help to understand the very dependent pattern of the external relations with those countries rather than the colonial power, and explains the nature of dependent integration to the South African economy. As in line with the above arguments it is said that by 1970 a large proportion of imports consisted of consumer goods, 30 per cent of which was foodstuffs, footwear and clothing; according to the report to the 'Frelimo, Quarto Congresso': 'In 1974 foreign exchange reserves covered only 20 per cent days of imports, in 1975 exports covered the cost of only 50 per cent of the imports. This situation was aggravated by the fact that earnings in gold, (from the mine workers in South Africa), and the foreign exchange were channelled to the Bank of Portugal.'

TABLE 2 : The Structure of the Colonial Rural Economy (1970).

Region	Plantations	Settler Farms	Peasantry			Dominant aspects of regional rural economy
			Marketed output	Sale of labour	Own consumption	
NORTH (CD;N; Namp.)	Sisal (67%)	Cotton (17%) Tobacco(50%)	Cashew(78%) Cotton(37%) Food crops	seasonal labour to plantations & settler farms	Cassava (67%) G\nuts (56%) (sorghum, millet, maize)	Cash crop production, under forced cultivation by the peasantry, Later accelerated development of settler cotton farms
CENTRE (Zam;Man; Sof;Te)	Sugar (73%) Copra (69%) Tea (100%) Sisal (33%)	Potato (67%) Tobacco(27%) (& maize, veget,cot.)	Cotton (28%) Cashew (9%) Food	Seasonal labour to plantations & contract to Zimbabwe & Malawi	Rice (28%) Maize (64%) G\nuts(17%) Cassava (25%)	Plantation economy in the Zambezi valley, relying on huge quantities of seasonal labour
SOUTH (Ma;Ga; Inhan.)	Sugar (27%)	Rice (56%) potato(32%)	Cashew (13%) Food	20-30% of male adults worked on S.A mines. Seasonal labour to settlers & plantations	Maize (16%) G\nuts(27%) Cassava(8%)	Labour reserve for South African mining & settler farm based granary to feed the towns.
NATIONAL	15%	15%	15%		55%	

The % between brackets refer to % of national production of the particular crop.

Source: Marc Wuyts (1985).

2.1 Independence and the impact of state involvement

The negative agricultural performance of the early years after independence is mostly attributed to the massive exodus of the Portuguese settlers, resulting in a sudden breakdown of the marketing system for agricultural produce.

The colonial authority was, according to the available literature, very much interventionist in every sense. Finn Tarp states that prior to the independence the state set 'producer and consumer prices as well as marketing margins for an exhaustive list of products at the various stages of the production and marketing chain . . . A state marketing was created in the 1960s which acted as wholesaler and operated a network of warehouses'.

With the aim of re-establishing the marketing network the emerging state took over the abandoned shops, turning them into state or cooperative units. It is reported though that the government 'envisaged from the start, a useful role for private sector especially in the rural areas, within a framework of regulation'.

The regulations however did not say very much about how the private traders and small scale producers would be attracted into the market, in the sense that they emphasised the state control over the prices which should be set at 'accessible' levels for the consumer. 'The economic and social directives at the Third Congress included the introducing of nationally uniform pricing and the creation of a national price commission, the rationing of consumer goods, and the fixing of traders margins and the levying of commercial taxes' (Mackintosh 1988). This situation could probably be the reason why, after 1980/81, the traders evaded the official marketing channels and from then on

the parallel market and smuggling increased, depriving the government of a great source of revenue.

TABLE 3 : PRICE TRENDS 1976 TO 1983 : PRODUCER PRICES (escudos, meticals/kg)

	price	1976	1977	1978	1979	1980	1981	1982	1983	1984
maize	nominal	2.5	3.2	3.2	3.2	4	4	6	6	6
	real	2.48	3.11	3.08	3.02	3.74	3.67	4.65	3.61	2.78
beans	nominal	6.5	10	10	11	15	15	15	15	15
	real	6.44	9.71	9.62	10.38	14.02	13.76	11.63	9.04	6.94
rice	nominal	5	6.2	6.2	6.2	6.2	6.2	10	10	10
	real	4.95	6.02	5.96	5.85	5.79	5.69	7.75	6.02	4.63
g/nut	nominal	8.5	10	10	10	10	13.5	15	15	15
	real	8.42	9.71	9.62	9.41	9.35	12.39	11.63	9.04	6.94
cashew	nominal	3.5	3.5	3.5	3.5	5	5	5	5	10
	real	3.47	3.4	3.37	3.3	4.67	4.59	3.88	3.01	4.63
sunflower	nominal	7	8.5	8.5	8.5	8.5	8.5	10.5	10.5	10.5
	real	6.93	8.25	8.17	8.02	7.94	7.8	8.14	6.33	4.86
cotton	nominal	6.5	6.5	6.5	6.5	11	11	11	12.5	12.5
	real	6.44	6.31	6.25	6.13	10.28	10.09	8.53	7.53	5.79
copra	nominal	3.2	4.7	4.8	4.85	5	5	5	5	5.5
	real	3.17	4.56	4.62	4.58	4.67	4.59	3.88	3.01	2.55

Adapted from Finn Tarp 1990 (J.I.D. Vol 2 no 2)

The gap between nominal and real producer prices is indicative, and corroborates the idea that there has been a disincentive in real terms. Also the NPC calculated for rice and maize show a level of producer taxation ranging from (20 - 40%) in two districts of the Nampula Province.

On the other hand, studies seem to show that there was a strong element of subsidy to the consumer, and an implicit producer taxation, especially

through the overvaluation of exchange rate. In this respect it is said that Mozambique 'maintained an inflexible exchange rate until 1987, although the metical was becoming increasingly overvalued'. This policy had a dramatic effect in considerably reducing the export earnings of the country with an implicit tax on the cash and food crop producers. A close look at the table above provides evidence for the case of declining real prices for cash crops, especially in the case of cashew, sunflower and copra.

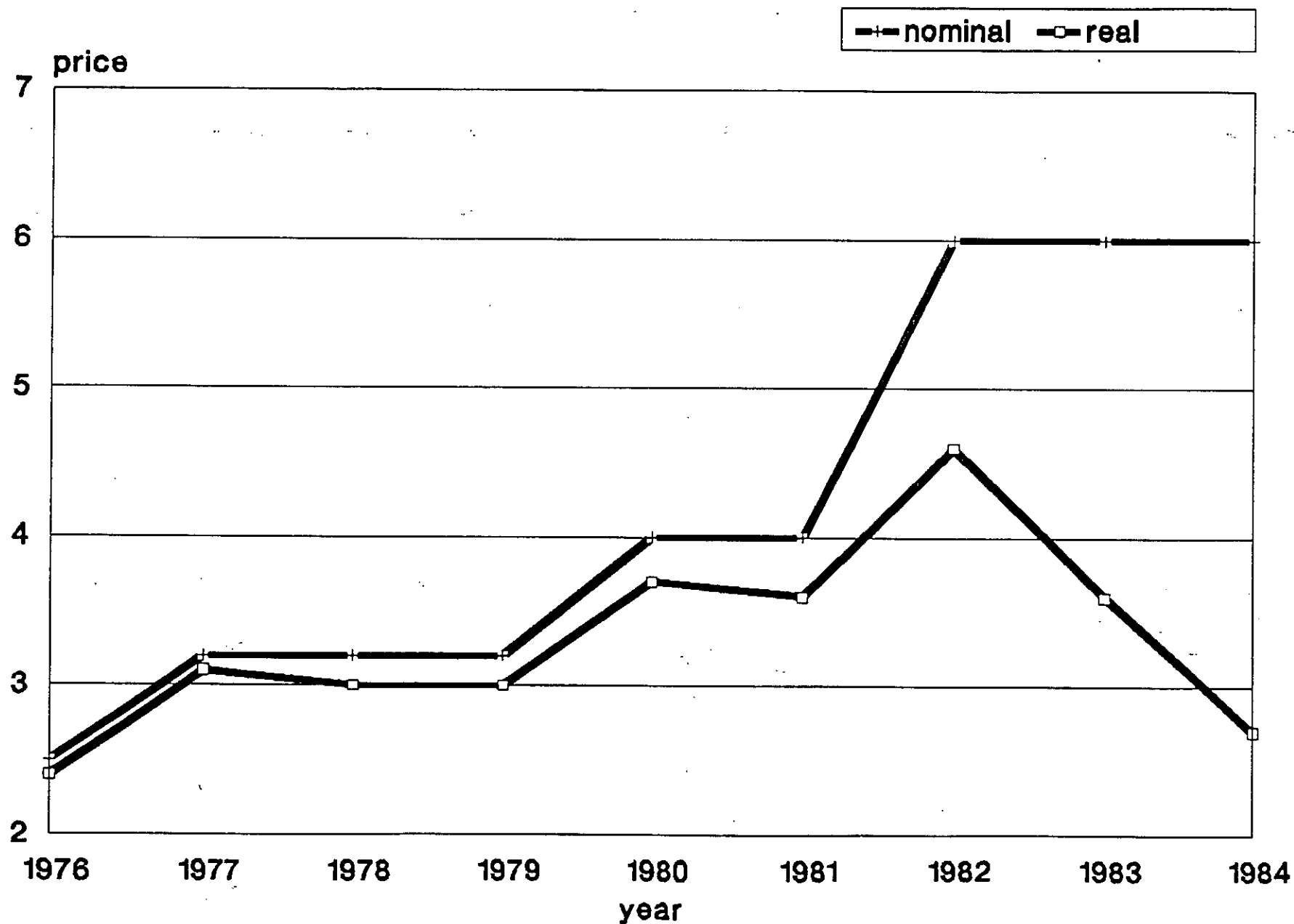
Figure 1 overleaf shows the gap between the nominal and real prices to producers which, combined with other distortions, had a dramatic effect on the aggregate supply of the small farmers' agricultural products.

On the other side of the picture, according to Alderman, Sahn and Arulpragasam (1991), the excessive marketing costs and explicit taxation throughout the marketing chain, erode all possible benefits of the subsidy to the final consumer to the advantage of the intermediaries. The following quotation from the above authors illustrates the situation:

'The dramatic mark-up as food passes through the marketing chain is evident in the case of maize. The marketing costs and explicit taxes between the port and the consumer amount to 95.7/Kg. This includes a 5 per cent fee to IMBEC, a 5 per cent circulation tax at this level, another 5 per cent circulation tax at the wholesale level and a further 10 per cent circulation tax at the retail level. Altogether, the mark-up of Mt 95.7/Kg represents 56 per cent of the cif price and more than the payment to the Treasury, a high margin for distribution in a port city such as Maputo.'

Nominal and real prices of maize(1976-84)

13a



At this time the spectrum of the country worsened in many ways. The production of food and cash crops declined as incentives disappeared and a myriad of other constraints arose as we shall see later

TABLE 4 : Marketed Agricultural Production (10 cubic metric tons)
(from Steven Kyle 1991)

	1980	1981	1982	1983	1984	1985
maize	65	78.3	89.2	55.8	82.6	58.6
rice	43	28.9	41.5	17.3	19.1	17.9
sorghum	0.6	1.0	1.6	1.3	2.1	1.8
beans	9.6	14.9	6.9	4.8	3.5	4.6
cassava	8.8	10.9	9.5	8.5	6.9	6.4
gr/nuts	6.3	5.0	1.5	0.7	2.0	2.0
TOTAL	133.3	139	150.2	88.4	116.2	91.3
cashew	87.6	90.1	57	18.1	25.3	30.4
copra	37.1	54.4	36.6	30.7	24.8	24.0
cotton	64.9	73.7	60.7	24.7	19.7	5.7
sisal	298	233.8	139.9	122.4	136.6	78.8
tea	90.2	99.2	109.7	51.1	59.8	25.0
others						
TOTAL	577.8	542.2	403.9	247	266.2	163.9

The table above is an indication of how dramatic the decline of production followed from the year 1980 because of the policies outlined above, combined with the negative effects of assigning to the state major role on production and marketing of agricultural products, as we will discuss in the next section. This has also to be added to the declining security situation in the same period.


2.2 The State and the Agricultural Sector

At the Third Congress, Frelimo decided on a planned economy; the state sector was assigned a dominant role and the peasant sector would be organized into cooperatives of communal villagers. Authors believe however that in practice there was a bias towards heavy development of the state sector; and in this respect the emphasis was on expansion rather than on consolidation of the existing production capacity. Indeed by 1978 the state already controlled some 100000 ha, which were expanded to 140000 in 1982. According to Wuyts (198x), 'four years after the congress Mozambique imported 50 million pounds in agricultural machinery, including 3000 tractors and 300 combine harvesters; the state's share of agricultural investment was well above 90 per cent, while the cooperatives received only 2 per cent and the family agriculture nil.' Consequently so often unattainable targets were set to the state sector based solely on pre-set technical norms, mostly in relation to area availability, rather than relating to existing productive capacity, organizational strength, and considerations on yields and especially costs. It is said that invariably the area prepared for cultivation would be superior to the area sown, and the latter superior to the area harvested, and that this led to the

situation of virtually all state farms being in deficit, an increasingly unsustainable burden to be financed by the Treasury.

By disarming the family sector and unduly overestimating the state involvement 'we have left undone things which we ought to have done. And we have done those things which we ought not to have done. And there is no health in us' (Chambers 1989).

2.3 The war and the economics of agriculture



As the table below indicates the South African backed war was the single most important happening among the major problems of Mozambican agriculture in the years prior to the reform program. However to this factor should be added the effect of the prolonged draught in the early 1980s, the international crises of the 1980s, combined with internal institutional difficulties and defects on management aspects. As Chambers (1989) says, 'it is easy to underestimate the appalling suffering and poverty resulting from civil disturbance and war; the insecurity of tenure, the disincentive to invest, the danger of loss of crops, the interruption to education, the distress migration and destitution of refugees.'

Table 5 below provides a broad approximation of what have been the destructions of the economy as a whole. In relation to this Kenneth Harmel says that 'the deterioration of the commercial network has been serious and has in many parts of Mozambique meant a semi or total isolation of the countryside from the urban sector. The average population to be served by each commercial installation has tripled since independence, coupled with

a consecutive decline in transport capacity, deterioration in road standards, and lack of vehicles.'

TABLE 5: Military and Economic Aggression against Mozambique

Military warfare	
No of primary schools closed 1983-1987	2600
Share of school network destroyed, %	45
Nr of health posts destroyed 1982-1987	820
Share of health posts destroyed, %	31
Number of rural shops closed 1981-1988	3200
Share of rural commercial network destroyed	50
Economic warfare	
% reduction of Nr of migrant workers in S. Africa	67
% reduction in SA transit traffic via Maputo port 1975	80
% reduction in service earning from S.A	93

Adapted from Kenneth Harmel, 1990

The reading of the referred table is conducive to the figures shown in Table 6 below, whereby there is an evident and dramatic fall in the marketing of the basic grains, compensated by an equivalent huge amount of the import of the same items.

TABLE 6: Grain Supply 1988 (adopted from Steven Kyle).

	1,000 tons	Percentage
Marketing of domestic maize	60	13
Marketing of domestic rice	41	9
Imports of food grains	360	78
Total market supply	461	100
Cost of food imports	US\$98.9 million	

2.4 The balance of payment crises

It is often suggested by authors that the management of the balance of payments is of fundamental importance for the success of a country in overall economic policy. Tony Killick suggests that 'there is not a country in the world that does not rely for its national well-being on international trade and payments.' It is even said that this is particularly relevant for most developing countries, 'whose trade and payments magnitudes are particularly large in relation to domestic economic activity.' The emphasis on international trade seems to be placed on three main aspects by this author as follows:

(a) By opening up the world as a potential market, it creates more profitable investment opportunities and permits national resources to be employed more productively.

(b) By giving access to the products of other nations, it avoids the need to strive for self sufficiency within the national boundaries...in the case of developing countries the pattern of specialization or comparative advantage largely boils down to the export of agricultural and mineral products. . . . in exchange for capital equipment and a wide range of industrial goods.

(c) By providing developing countries with the opportunity to increase their investments and savings by capturing the capital flows from foreign investors.

Moreover, the international trade provides the necessary foreign exchange as an essential input to the productive sector.

However as Table 7 below shows, and consistent with the explanation of the previous section, Mozambique have experienced severe drainage of foreign exchange through the efforts to sustain the destructive war, combined with some important macro-economic policy distortions and other unexpected factors.

The figures shown in Table 7 are combined with a negative growth of the GDP for the period of 1980 to 1986, prior to the adjustment process. This negative growth of the GDP is estimated as about 6 per cent average during that period, 'indicating an annual deterioration per capita of 9 per cent' (Harmel).

TABLE 7 : The Balance of Payments (from various sources)

Balance of payments	1981	1982	1983	1984
Trade balance	-520.3	-606.8	-504.8	-444.0
Exports(f.o.b)	280.8	229.2	131.6	95.7
Imports(cif)	801.1	835.9	636.4	539.7
Service balance	55.8	30.9	-0.1	-32.2
Current account	-464.5	-575.9	-504.9	-476.2
Debt amortization	309.2	329.3	296.5	337.8
Debt serv.% g & ser	75.1	97.2	129.4	196
Export/import	0.35	0.27	0.20	0.17
Currency(Mt/USd)	35.35	37.77	40.18	42.44

On the external balance it is suggested that it had deteriorated; and the deficit on external account has grown every single year, similar to the financial gap, pointing out that 'this gap is filled by three more or less equally important contributions: aid, new credits, and debt rescheduling.'

The reported extremely difficult balance of payments management led the government to start measures of economic reforms, opening up the country more clearly to private economic activities, encouraging foreign investment, improving the pricing system and heading for negotiations with the international financial institutions, namely the World Bank and the IMF.

The negotiations with these institutions culminated in 1986, in the form of debt rescheduling, increased aid flows and a package of conditionality measures designed to enhance a more radical economic-political process. The next section will look at and try to provide some indicators on the relative effects of these measures on the agricultural sector.

CHAPTER THREE

3 THE RATIONALE FOR THE ECONOMIC REHABILITATION PROGRAM

The economic rehabilitation program came about as the government admit recognition of some basic errors on policy formulation, as summarised below:

- (a) The policy on prices and wages has not yet been used to stimulate production.
- (b) Small scale projects and the promotion of local initiatives to resolve immediate problems in the life of the people have been treated as secondary matters.
- (c) State bodies have not possessed an overall understanding of the policies and have not been able to implement correctly the guidelines on priority to agriculture and food production. This was shown by the way the family sector was pushed to one side, and in the unbalanced dimensions given to the agricultural state companies in relation to the administrative capabilities.
- (d) The persistent difficulty in holding an efficient agricultural marketing network, have led to the persistence of bottle-necks which discourage production for the market.

The above aspects represent the main internal factors which, combined with the external factors described in previous sections, shaped the decline of the gross agricultural production of the country.

In 1983, when the government came to that conclusion the country was at a particularly low level of both production and export as shown by Table 3 (page 12).

3.1 A broad summary of the previous sections

The previous sections, in my view, dispel the major problems affecting Mozambican agriculture as being related to excess government intervention from the period prior to the independence, shown in the level of the exchange rate inflexibility, and in the level of consumer subsidies, marketing involvement, and rigidities on pricing policy.

It is argued that the economic difficulties of Mozambican agriculture involve a combination of domestic policy trends and multiple complex of exogenous shocks, (declining international terms of trade, environmental unexpected adversities, and war of destabilization).

There were identified drawbacks in the development planning concept, made evident by the bias towards large scale and capital intensive agricultural projects which, combined with the price distortions, caused the supply contraction, and the budgetary, and the balance of payment crisis.

The extremely low productivity of the agricultural sector is justified, among other reasons, by the lack of technical/administrative capacity and

motivation in the dominant state owned enterprises, and on the lack of incentives and low level of input use by the small scale peasant agriculture.

The international market trends have not been advantageous to the Mozambican economic interests since the prices of the main Mozambican exports have declined sharply whilst the price of imports increased in the same period. Further, the agricultural sector was severely affected by the prolonged drought which aggravated the food insecurity of the most needy population.

There was also a disproportionate area allocation to the state owned sector, with 56985 ha for maize, rice, and beans, compared to 17091 ha of the private and cooperative sector combined (Ministry of Agriculture 1992). It is shown that these sectors have exceptionally low productivity as measured in terms of yield per hectare. The state sector achieved only 0.4 tons per hectare in 1983, in spite of preferential allocation of inputs and heavy mechanization of operations on this sector. If this figure is combined with the fact that this sector was responsible for more than 65 per cent of the marketed agricultural output for export, it will improve the explanation on the worsening trade balance deficit and provide a more explicit reason as to why the policy makers decided on radical change from that year on. On the other hand, according to the Ministry of Agriculture Working Paper No 6, in the small holder sector typical maize yields were extremely low in the best producing districts of Angoche, Ribawe, and Monapo, ranging from 200 kg/hectare to 800 kg/hectare, which is considered to be below the average yields of between 830 and 3000 kg/hectare among low input smallholders in the Southern African region.

The main reasons for the reported averages are attributed to the very low input use on food crops by this type of producer.

The situation on the balance of payments aggravated sharply, as the trade balance shows a ratio of one export to six of import, and the current account deficit of nearly US \$500 million.

CHAPTER FOUR

4 THE OBJECTIVES OF THE REHABILITATION PROGRAM

After a successful round of negotiations with the IMF and the World Bank, the government came up with a handful of policy measures to correct the prevalent distortions. The broad objectives were directed at (a) reversing the decline in production and restoring a minimum level of consumption and income for all population particularly in the rural areas; (b) reducing substantially the domestic financial imbalances and improving the external account and reserves, and (c) enhancing efficiency and creating conditions for returning to higher levels of economic growth. This implied the adoption of measures to reduce price distortions, and the implementation of appropriate demand management policies, carrying out structural reforms in key sectors, increasing and redirecting external assistance to support the process of economic rehabilitation, assisting the population displaced by drought and the security situation, easing the external debt burden, and resuming debt service payment at a feasible level.

Since then the currency, Metical (Mt), has been successively devalued from the value of Mt 39 per US \$ dollar at the beginning of the adjustment program in 1987 to the current Mt 4000 per US \$ dollar in 1993. There was an immediate adjustment in tax rates, and changes in tax and customs administration; the budgetary recurrent expenditures were contained; money and credit policies were tightened; the interest rate structure was raised and simplified. These were the short term stabilization measures. They were followed by long term sectoral policies of adjustment.

In agriculture the main thrust was set towards the reversal of the decline in production levels and the correction of the balance of payment imbalances by the increase in export orientated production. Some recognized factors were pricing policies which had to be improved either by the total deregulation or by the setting of floor prices for some food crops.

In the agricultural sector, according to the economic policy framework, the emphasis was placed at the family sector, based on the stated fact that this is the poorest sector and yet the one with the highest potential for growth. The paper recognizes three main instruments for the implementation of this strategy:

- (a) The restoration of price incentives to producers, and availability of consumer goods for purchase by farmers.
- (b) The provision of improved agricultural support services and marketing infrastructures;
- (c) subjecting the state farms to the requirement that their activities become commercially viable.

4.1 The reform program : some evidences and concepts

Table 8 : Issues on peasant supply response.

	1986	1987	1988	1989
Cash crop production(tons)-State sector-totals	37169	29134	26850	32220
Cash crop by private sector(tons)-total	18010	12251	15260	25220
Peasant marketing(% change in volume)	-6	26	16	17
Export of goods(% change in value)	4	18	2	16

Source: Adapted from various references.

The table above shows a positive rise in agricultural output from the early years the liberalization process. The overall picture shows a reversal of the decline of food production from 1985, and a steady increase in the output of the export crops.

One important aspect of these figures, in my view, is the gradual change in relative importance between the small holders (represented by the bulk of family sector, the cooperative sector and the small private), and the state sectors, even for crops like cotton, copra, sisal, and tea plantation crops, traditionally grown by large foreign enterprises and state farms. It may be indicative that there was a sharp rise in the real producer prices for the same period, although it is still too early to draw any reasonable conclusions about the supply response of the small holder farmer. Mackintosh suggests though that, common to other studies in Africa, the Mozambican farmers are responsive to relative price

changes, with relation to the other constraints they may face and the actual real price ratios. In that sense the liberalization program may have had a short run positive impact, but other factors such as the timely availability of inputs, improvement in infrastructures and the supply to the market of consumer goods, are all of great importance to the peasant supply response, as recognised by authors elsewhere (Harmel 1990).

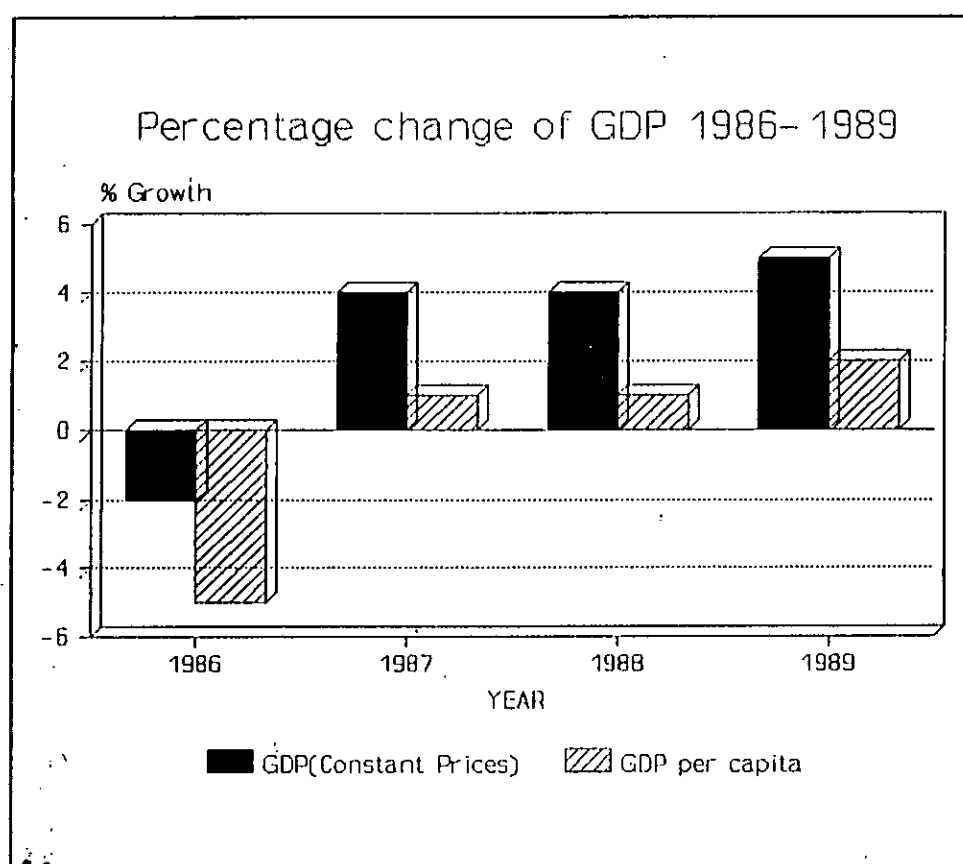
There is also a positive percentage change in the volume of marketing of the peasant agricultural sector with an increase by 26 per cent in the first year of the rehabilitation program (1987) and then decreasing to a level of 16 per cent and 17 per cent the following years; the agricultural output boom is reported by 'The Economist' quoting the World Food Program as having reduced the people under food aid support from 4 million in 1992 to 1 million in 1993, (refer to Figure W for possible explanations). The negative growth of the GDP of the pre-rehabilitation years has been reversed; however the GDP/capita of one per cent is still far below the population growth of 3 per cent, therefore unsatisfactory. (Refer to Figure 2 overleaf).

As Streeten points out it is extremely difficult to measure the aggregate supply response, in view of the fact that other factors (the availability of consumer goods, research and extension support, input availability, etc) are never equal or held constant, and therefore it is difficult to isolate the impact of the relative price changes on total agricultural output.

Typical of this subject is the prevailing controversy around the behaviour of the traditional small scale peasant in relation to price incentives,

Figure 2 : Percentage change of GDP 1986-1989

The negative growth of the GDP of the pre-rehabilitation years has been reversed; however, the GDP/capita of one per cent is still far below the population growth of 3 per cent, therefore unsatisfactory.



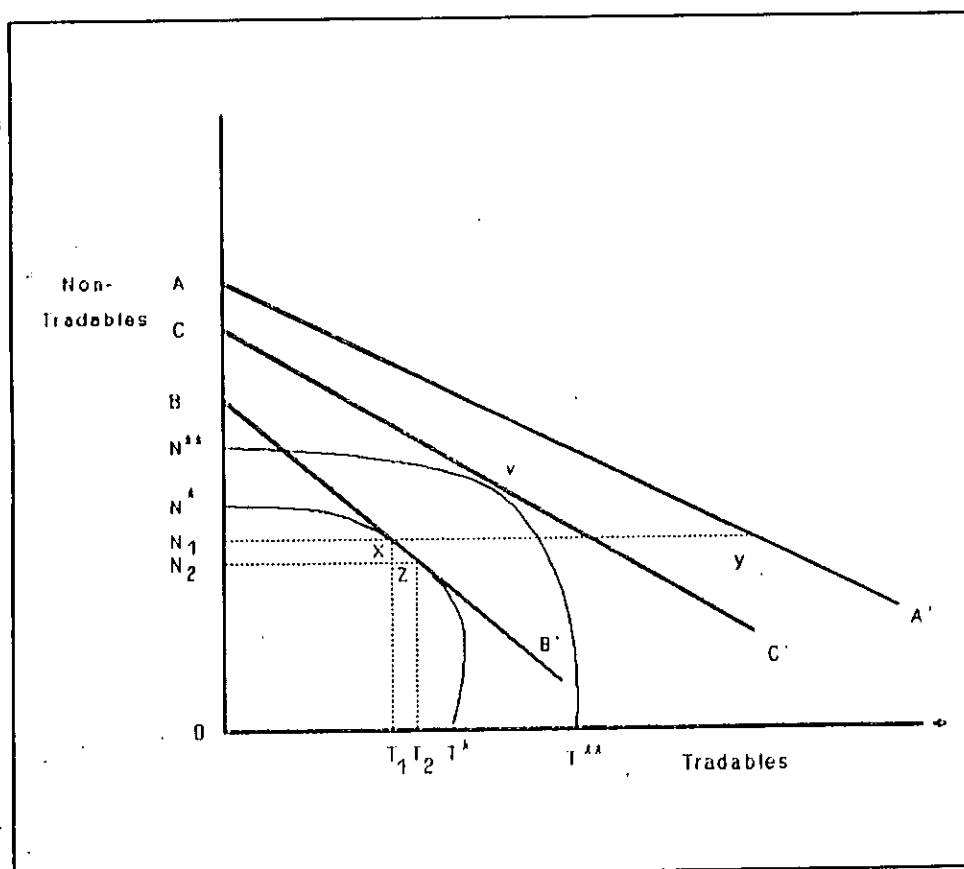
with some analysts believing that the African peasant pays no attention to prices when making production decisions, rather following their habits and subject to their subsistence constraint with risk aversion behaviour under certain anthropological assumptions.

There is considerable debate surrounding the relative importance of price and non price factors, but the evidence from various analyses seems to suggest that the real problem is not that of what is best, but that of combining them and getting the right sequencing under given circumstances. It is pointed out that there are circumstances where roads, inputs and institutional arrangements are more important than cash and *vice-versa* (Streeten 1987).

However, Edwin Dean (1966), in writing about the supply response of the African farmer stated in relation to Malawian growers, reported that among the major decisions of tobacco growers are (a) the expected money from tobacco, (b) the expected money rates for return to the alternative uses of resources which could be used in tobacco production, and (c) the expected cash level of cash goods; and states that the level of tobacco production is determined by the interaction between these three variables having both a substitution and an income effect. Also in Kenya it is pointed out that among many other important factors, the growth of real producer prices has clearly been important in stimulating agricultural growth. Scholars explain the short/medium term effects of these measures on the overall economy as follows. (Figure 3 overleaf)

Assume that pre-adjustment expenditure is at Y while the production point is X on N^*T^* , thus yielding a trade deficit of XY. The real exchange rate

Figure 3 : Theoretical explanation for the short term supply response under adjustment and liberalisation



Source : World Bank (1990)

P_n/P_t is given by AA' . The program of demand deflation plus devaluation depreciates the real exchange rate to BB' giving a new production point Z and eliminating the trade deficit. The output of non tradeable falls to N_2 while that of tradeable rises to T_2 . If at N^*T^* productive capacity is underutilised, an injection of foreign exchange, plus an improvement in resource allocation through the removal of distortions, would move the production frontier to $N^{**}T^{**}$ in the short term. Policy makers could then include this supply expansion in their calculations and would accordingly need only to cut absorption to OC rather than OB in the case of no output growth. Similarly, the size of the nominal devaluation will be less. This adjustment package would yield a real exchange rate depreciation of CC' (which is less than the depreciation to BB' under no growth), and the new production point would be at point v . Total output is higher at v (since the economy is now on $N^{**}T^{**}$), and the output of both tradeable and non tradeable is higher, the deficit has been reduced and the structure of output shifted to tradeable.

In the case of Mozambique, in my view there are several questions to consider before looking at the effect of official price change in the aggregate output *per se*:

(a) One of the problems is that in real terms the peasant had actually been enjoying higher prices from the parallel market, especially for food crops.

(b) The ability of the small scale farmer to hold the produce in order to take advantage of higher prices between the harvests is questionable under the non reliable security situation of the countryside.

(c) The risk avoidance behaviour should not be overlooked in the case of the Mozambican poor farmers who devote most of their produce to their own subsistence without other income earning activities. In this respect it is important to note that, as a government survey shows for three districts in the main food producing provinces, the very poor neither buy or sell food. It is reported that in two districts in the north of the country (Monapo and Ribawe) between 49 per cent and 60 per cent of all households did not participate in the maize market (Working Paper No 6). Money prices will probably be less important to those producing only for family consumption. The loss of confidence in the domestic currency as a store of value is related to inappropriate fiscal policies and may remain until there is reliable stabilization.

(d) Non price factors have been of major importance in different parts of the country; where there has been an improvement in infrastructures (roads, storage, transport) the marketed output has increased considerably. A well designed input supply policy may play a positive role.

(e) The flow of information is less than enough to be able to improve farmers' rational expectations on prices and other policy variables.

(f) There have been financial injections through donor supported programs which may make the farmers more output responsive in the short term.

Streeten states, and I agree, that the question is not whether the farmers are responsive to prices, but 'how responsive to what intervening variables other than price, and on what assumptions about other prices'.

Under this assumption I believe that there is a complex combination of factors leading to the agricultural growth of the early years of the adjustment policy. One of the factors may have been the deregulation of the market that brought the effect of (a) allowing and diversifying the availability of consumer goods at competitive prices; (b) assuring price incentives to the surplus farmer; (c) enhancing better flow of information and (d) releasing the government for much improved and needed support services.

4.2 Further considerations on pricing and marketing policy

It is a common perception that the pricing policy of a country and its agricultural marketing policy are very much inter-related.

Despite the fact that state intervention in the marketing system is neither peculiar nor original to less developed countries, the level and type of direct intervention is probably particular to them. They set up rigid administered prices for the marketing system, and create (and in many cases also subsidise), parastatals to exert the monopoly of certain channels, especially in the food subsector.

As summarized by Kydd and Scarborough, the main arguments have been centred on the fact that the private sector in those countries is not strong enough to support the desired levels of agricultural growth as it is planned. On the other hand there is the belief that there will be some social undesirable consequences from unconstrained private marketing activity, in terms of 'unbalanced regional development, and socio-economic differentiation.'

The dimension of the problem and level of intervention varies between countries, though it is said that some sub-Saharan African countries are amongst the most interventionist in the food marketing system, citing examples of Tanzania, Mali, Zambia and Mozambique, among others.

However, either from analysts or from governments, there have been many specific concerns about what it is called the exploitative nature of the middlemen, inadequate demand, inadequate physical and institutional infrastructure and, as it is said, resulting from all of this is the lack of organization (Jones).

With particular reference to food prices, the governments of the less developed countries face the well known dilemma of having to set prices high enough to provide incentives to their largely poor producers, whilst on the other hand devising ways of keeping the same prices to avoid worsening the dramatic nutritional status of their poor consumers, the majority of them spending most of their income on food. It is a subject on which governments have not been able to shape their decisions solely on the grounds of efficiency should their survival be somehow connected. Indeed major studies by the World Bank have found effective rates of protection in many countries showing distortions accounting to tax rates between 30 per cent and 40 per cent .

Streeten (1987) believes that the removal of those distortions would require the right choice and combination of the incentives, inputs, innovations, information, infrastructure, and institutions; the six 'Ins' as he states it.

The adoption of liberalization measures in Mozambique should imply the understanding of the above referred circumstances and concepts, since the overall environment is common; characterised by (a) unfavourable basic conditions, (b) fragmentation, and (c) inadequate legal framework.

Although the liberalization program brought positive changes in terms of raising competition among traders (shopkeepers and itinerant merchants) reflected in increasingly higher prices to the producer, the long term effects on output supply and income distribution remain dependent on many other aspects of which the country is still lacking. Surveys will be needed to know what percentage of the rural population are net buyers of food. Recent surveys in three districts showed a very low percentage of those who only buy food in the rural area (Working Paper 4E). 'The Courier' (1990) reports a decrease in the number of people needing food aid, suggesting that there is a certain degree of subsistence if there is good policy environment and good weather.

From the early experience of the Mozambican agricultural reform it is sensible to suggest that the case for administered prices, (not necessarily in pan-territorial basis) should be restricted to staple food crops, to assure a certain degree of price stability, and to avoid huge unexpected price swings which can hurt both poor producers and consumers. Some authors would suggest a role to the state in managing strategic stocks, importing food aid, importing food on commercial terms, and acting as the buyer and/or seller of last resort (Kydd and Scarborough), and also expose these boards to competition, thus improving their management and performance.

Most clearly, in the advent of liberalization the state should be decisive in providing complementary and essential services that will favour small scale producers and attract competitive traders; and this means (a) improving the input availability, (b) providing rural financial institutions and carrying out the necessary land reform (should the peace hold on), (c) restoring and ameliorating the basic infrastructures destroyed, (roads, communications, warehouses), and (d) strengthening producers' relationships with new technology and knowledge through a realistic network of extension.

Following the experience of the early years of the adjustment process, this report takes the view that price liberalization is essential for the success of the small scale producer provided that some other instruments, as referred earlier, are equally in place at the right time and in the right form.

CHAPTER FIVE

5 GENERAL PERSPECTIVE AND CONCLUSIONS

With 15 million people and more than 800 thousand square kilometres, fertile land, with sub-tropical and tropical environment, good rain and rivers, Mozambique is placed in a position of clear comparative advantage for many of the agricultural specializations. The distorted nature of the colonial economy, (relying basically on services through ports and railways, on which the country has also comparative advantage), denying adequate support to peasant agriculture and underdeveloping the rural markets.

What made things worse, other than excessive centralization and rigidities was the war of economic destabilization from South Africa and Rhodesia.

The advent of peace brings renewed hope and the reform program is the right instrument for adjusting, if anything, the inadequate and wasteful type of economic institutions .

There will be no sensible measure without difficult effects in the short term. The short and medium term effects of adjustment may be harmful to the very people they intend to benefit in the long run, the example being the devaluation of a currency combined with the removal of subsidies, which will drive the prices of importables up, with the possibility of triggering inflationary cycles if other measures are not combined. However, scholars tend to emphasise the positive output as stimulating and

demand depressing of devaluation measures, whereby it encourages production of tradeables and depresses demand (Kyllick).

The food security situation will worsen unless producers get the right signals, employment is generated by growth and the economy gets back on track. What has become apparent though is that, learning from past experience there should be caution in selecting development projects in order to rank them according to their comparative advantage and sustainability, and not merely on their short run profit maximizing, whatever their attractiveness. After all those experiences we should be aware of what is not good for the country, and yet the question remains about what is the best alternative among difficult choices.

Whatever the choice is, Mozambique with her wealth, (gold, gas, oil, minerals, coal, strong agricultural comparative advantage), and strategic geographic location, is unreasonably placed at the bottom of the world development ranking.

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