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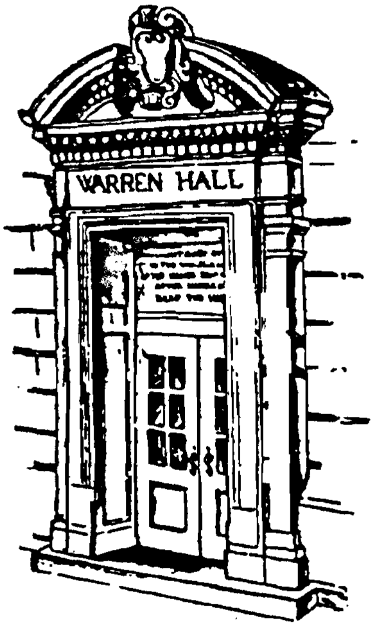

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A Comparative Analysis of Economic Development of Angola and Mozambique

by

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Glossary of Acronyms

ACP	African, Caribbean, Pacific countries
CAP	Caixa de Credito Agropecuario e Pescas
DNHER	Direcao Nacional de Hidraulica e Engenharia Rural
EC	European Community
EDA	Estações de Desenvolvimento Agrario
GATT	General Agreement on Tariff and Trade
GDP	Gross Domestic Product
IDA	Instituto de Desenvolvimento Agrario
IDF	Instituto de Desenvolvimento Florestal

A Comparative Analysis of the Economic Development of Angola and Mozambique

Introduction

Angola and Mozambique, both former Portuguese colonies, are often compared in terms of their potential for economic development. The purpose of this paper is to assess the degree to which this comparison is valid and to arrive at a vision of the prospects for each country in the years to come. These issues are particularly relevant at the present time, as both countries are engaged in a significant effort to promote growth in the context of a reorientation of overall policies away from the centralized, government dominated model followed since independence in 1975. Both countries are presently rebuilding after years of bloody and tremendously destructive civil conflict in which the basic economic infrastructure of both was almost completely destroyed.

Given their common colonial heritage, there are numerous experiences and historical legacies which are similar in both countries. Nevertheless, there are important differences deriving from a variety of sources which make comparisons between the two countries difficult and which may well prove determining factors in their future development.

This paper will first outline similarities and differences between the two countries, both in terms of physical characteristics and in terms of political, ethnic and economic characteristics. It will then present a view of recent economic developments in each country together with prospects for the future.

It is important to realize from the outset that many of the most important differences between Angola and Mozambique predate the arrival of the Portuguese in the 15th century. Both countries contain within their borders a variety of African ethnic groups many of which had no sense of common identity prior to the arrival of the Europeans. Both countries also contained substantial kingdoms, with well defined borders and centralized political control, most notably the Kongo kingdom on the west coast of Africa, which had its capital in what is now Angola (though it extended northward into what is now Zaire and the Congo), and the kingdoms of Sofala and Muenemutapa in Mozambique.

The goals of the Portuguese were not primarily ones of conquest and settlement. Rather, the principal aim of the early explorers was to open routes for extraction of commodities, among which were spices, gold, ivory and slaves. This had important implications for the local populations as it meant that there was no overriding need for the Portuguese to control territory and to rule directly. Rather, it was more convenient for them to reach accommodation with local political leaders in order to develop trading relationships which would allow them to extract the desired export commodities. While land grants, called *prazos*, were made by the Portuguese crown, these grants were more akin to zones of extraction than they were to colonial land grants made by other European powers. For the most part, there was no concerted effort to promote economic development nor to settle Portuguese on these lands, and this remained the case until the 20th century.

In this connection it is important to note some important precolonial differences between Angola and Mozambique in terms of international economic relations prior to the European arrival. While trade with interior areas to the east did exist in the Kongo kingdom, there was no well developed network of commerce via seaborne trade. In contrast, the Mozambican coast was part of an extremely well developed Indian Ocean maritime trading economy dominated by Arab trading centers such as Zanzibar and Kilwa. Accordingly, the role of the Portuguese in the Indian Ocean was more to displace the current dominant trading powers than to open up new trade relations as was the case on the west coast of the continent. Here, the dominant export was slaves; it is reported that approximately 3 million slaves were sent from what is now Angola mainly to Brazil, where the Portuguese needed laborers to work on the sugar plantations which formed the basis of that colony's economy.

Colonial Administration

One obvious similarity shared by the two countries is the nature of the colonial administration imposed upon them. As mentioned above, the Portuguese did not, for many years, endeavor to settle the land or to control directly, being content to deal with local leaders and structures in order to maintain the desired extraction of commodities. In one important respect the relationship between Portugal and its colonies differed substantially from the relationship that e.g., France and Britain had with their African colonies in that Portugal was itself in many ways a dependent economy. In terms of European power politics, Portugal had ceded much of its power over its international economic relations to Britain in the Treaty of Methuen in 1713 in return for British support of the Portuguese crown in its perennial struggle with Spain, a traditional opponent of the English. Accordingly, development of Portugal's own manufacturing capacity and indeed the advent of the entire Industrial Revolution was retarded due to the preference given to British imports, which were exchanged for Portuguese commodity exports such as wine.

Thus, the lack of development initiative on the part of Portugal in the administration of its colonies was a mirror of the lack of development in Portugal itself. Concomitant with this lack of economic development was a lack of development of human capital in the African colonies which was unsurpassed anywhere else in the world. Africans were regarded as useful only for the most menial tasks and so were not given any educational opportunities beyond the most basic, and even these were restricted to a very few. One result of this was that Mozambique, for example, was reported to have had only 33 college graduates in the entire country after the departure of the Portuguese at independence in 1975.

The relationship between Portugal and its colonies began to undergo some changes after the European division of Africa into spheres of domination at the end of the 19th century. This process put a premium on direct control of territory in order to lay claim to it, and so resulted in a policy to exert a more formal level of control in both Angola and Mozambique. Nevertheless, it was not until the post-World War II period that this process underwent a marked acceleration together with a distinct change in character. The Salazar regime in Portugal regarded the African dependencies as integral parts of the country. Indeed, both Mozambique and Angola were officially designated as parts of the Portuguese nation. In addition, there was a massive effort to populate the two colonies with Portuguese in an effort not only to extend direct control over them and to expand production there, but also to help solve Portugal's own problems related to unemployment.

This massive influx of Europeans resulted in a situation in which virtually every formal sector job in the economies of both countries were dominated by whites. Every salaried job, including taxi drivers, waiters, ticket takers, etc. was held by Portuguese, leaving no role whatsoever for Africans in the formal sector. Agriculture, too, became heavily Europeanized, with a large smallholder African peasant sector coexisting with a commercialized sector of medium sized European farms and large plantations. Equally important was a virtual monopoly by the Portuguese on the network of rural traders who linked all agricultural producers to the market. These bush traders and shopkeepers provided an outlet for peasant production and in return served as providers of agricultural inputs, consumer goods and informal credit.

In the area of agriculture, there were several important differences between the two colonies. Both Angola and Mozambique, from a purely agroclimactic/resource point of view, are capable of self sufficiency in food production, though the resource bases of the two countries are substantially different. (See below) Measures of comparative advantage indicate that it would in fact be economically efficient for this goal to be achieved, something which cannot always be taken for granted. At the present time <u>both</u> countries are heavily dependent on food imports, much of this in the form of food aid, but prior to independence Angola was a food exporter while Mozambique was a food importer.

This is an important distinction as development strategies for the medium to long term are formulated. In Angola, where the major population centers were supplied from domestic production via well developed marketing networks, the current problem is one of rehabilitation of production and marketing systems which already existed prior to independence, and which functioned to a greater or lesser degree until the renewal of hostilities in the 1990's. In Mozambique, the problem is one of development of markets which never existed before. Prior to independence, the major population centers of Mozambique "exported" labor and transportation services to interior countries and imported food. The areas of major agricultural potential, primarily in the North and in the interior highland areas never marketed large quantities of food to Maputo or Beira or other cities.

Independence and Internal Conflict

Independence in Angola and Mozambique was only indirectly a result of the longstanding liberation movements which were active in each country. Decolonization happened in 1975 as a direct result of political developments in Portugal itself rather than because of military or political victory by the independence movements themselves. While dissatisfaction with colonial policy had much to do with the army's intervention, and there can be little doubt of the eventual victory of the national liberation movements in the long run, independence in fact came as a result of external factors rather than internal ones.

In terms of the economies of Angola and Mozambique, the immediate result of independence was similar - the massive exodus of nearly all Portuguese had the effect of paralyzing both the economy and the functions of the government at all levels. Virtually all formal economic institutions ceased to function as all capital which could be removed was taken and all of those who had played important roles in running factories, stores or other entities left the country. In the agricultural sector, the result was complete paralysis as plantations and farms were abandoned and the rural marketing network completely disappeared over the course of one year.

Added to this was the immediate initiation of open civil war in both countries as competing factions vied for power. Here, however, the situation was different in the two colonies, and the implications for subsequent political development differed accordingly. In Angola, the immediate beneficiary of the Portuguese departure was the MPLA, a primarily urban and coastal faction with support from the urban and mestizo elite. There were several other opposition parties, but the most important of these in the long run was Jonas Savimbi's UNITA, with support coming primarily from the Ovimbundu people of the central highlands. UNITA, supported by the South African army and by the U.S. immediately sought to take over the country, and were on the verge of success when the arrival of the Cuban army to support the MPLA prevented victory and pushed them back from Luanda. The other main opposition group, the FNLA, had its main base of support in the northern provinces and was assisted by the Zairean army in this initial period of conflict. Also defeated by the Cuban army, the FNLA was eventually coopted into the MPLA power structure.

Though geopolitics and the support of outside powers did much to exacerbate this conflict, it is important to recognize that both the MPLA and UNITA had support from substantial segments of the population, making this a legitimate civil war in the sense that there were real differences in political and economic interests of the competing sides. The situation was substantially different in Mozambique, where the RENAMO opposition to the ruling FRELIMO party had no indigenous origins but rather was the creation of the Rhodesian secret police during the Ian Smith era. Conceived of as a way to prevent effective support of black Zimbabwean opposition movements, RENAMO had no substantial domestic political support (as evidenced by their performance in later elections) but were rather an externally directed terrorist movement. Later taken over by the South Africans, RENAMO has had difficulty articulating a political message apart from one of anti-communism, a stance which has become increasingly irrelevant as the government itself has participated in free elections and has become a convert to a free market development strategy.

In spite of these differences, many of the physical ramifications of the two conflicts are similar: both countries suffered from massive destruction of roads and other economic infrastructure; both have enormous internal and external refugee populations; both have become heavily dependent on food aid and food imports; both have ongoing problems with land mines and unexploded ordinance. Rebuilding in both countries should be understood to encompass not only these physical problems but also to include the building of a viable state.

This process will be much more difficult in Angola given the lack of trust or a formula for power sharing between UNITA and the MPLA, a problem that predates independence in 1975. Until some modus vivendi can be worked out between the two parties based on mutual respect and a framework for governing and building a state which is capable of legitimacy in the eyes of the people, there is little likelihood of a permanent end to the conflict that has plagued the country since independence.

In Mozambique, this problem arises in a somewhat different form. While FRELIMO was clearly the united front for all of those opposing Portuguese rule and RENAMO was clearly a creature of foreign powers rather than springing from domestic political groups, the legitimacy of the Mozambican state is still only embryonic at best in many parts of the country. This is not due so much to the existence of competing parties, as it is to the lack of government presence or services across wide areas. Even before independence Mozambique, as the less favored of the Portuguese colonies, was never as fully penetrated and directly controlled as was the case in Angola. A far lesser proportion of the population speaks Portuguese, the language of government, and literacy and education are far less widespread. The lesser integration of many peasant households into the market economy is another factor which decreases the importance of higher level political/social/economic institutions in the lives of many Mozambicans. Accordingly, the task of state building remains an important part of Mozambique's development.

The Angolan Economy

The Angolan economy is dominated by mining (primarily oil and diamonds) when viewed from the standpoint of value added. However, when viewed from the standpoint of the labor force, agriculture is by far the most important sector.

Angola's economy remains severely affected by the long war and the destruction resulting from it. However, it has begun the process of reactivation of production now that hostilities have ceased and transport and communication routes have begun to be opened. Recent agricultural surveys estimate that grain production in 1996 registered an increase of more than 80% over the previous year, due to both favorable weather and production from newly resettled rural populations. While these figures must be treated with caution (as with all data under the conditions now prevailing), it is clear that there has been some improvement since the signing of the Lusaka Accord.

Even so, the economy remains highly dependent on imports, financed primarily by oil exports, as shown in Table 1. However, this "oil economy" is a virtual enclave, fueled by oil rents and with few links to the rest of the country. In effect, Angola has two economies, one reliant on imports at the official exchange rate financed by oil receipts, while the bulk of the population lives in an economy operating at parallel market prices, largely divorced from the official economy. This economy is largely non-monetized, relying on subsistence production and barter, and has declined significantly over the past few years due to disruptions caused by the war.

As oil receipts have failed to keep up with government expenditures, they have been increasingly devoted to payments on the growing external debt, which stood at approximately $14 billion by the end of 1995. Accordingly, the government is taking steps to increase production which, though it will avoid a crisis in the near term, by allowing financing gaps to be covered, will merely postpone the inevitable adjustment to a later date at which time the gaps will be larger, the imbalances more severe, and the debt larger.

Macroeconomic Reform Program

The government enunciated a reform program in July 1995 designed to stabilize prices and achieve external balance. The government recognized that the severe imbalances and distortions afflicting the economy were serious impediments to development and growth. As stated in the Government's appeal to the Brussels Round Table Conference of September 1995, the main elements of the program are:

- Budget deficit and expenditure control - The Government committed itself to reducing the budget deficit to 13.5% of GDP in 1995, and by another 3% in 1996.

- Financial Reform - The Banco Nacional de Angola will undergo reforms designed to prevent the excessive emission of money to finance deficits and will continue the process of eliminating its remaining commercial banking functions.

- Monetary Policy - The Government is committed to curbing the growth in the money supply, even if that means overriding the needs of the government budget. Credit allocation procedures will be tightened to eliminate the virtually limitless access to credit on the part of some public enterprises.

- Exchange Rate - The Government is firmly committed to closing the gap between the official and parallel exchange rates.

- Price and Trade Liberalization - The Government stated clearly in the Round Table Aide Memoire its commitment to full liberalization of prices, wholesale and retail trade, and imports and exports.

- Foreign Debt - The Government will work to alleviate its debt burden and eliminate all arrears by halting and reversing the buildup in both commercial and government borrowing. The eventual goal is to reduce debt service to 15% of exports.

- Private Sector Development - The private sector is to be encouraged and is to be the driving force behind production. The government will progressively limit its role to one of regulation and policy formulation.

Public Enterprise Reform - In support of the desire to allow the private sector to take the lead in productive activities, the Government intends to privatize all government enterprises though it will retain part ownership in some. Though the process will be gradual, the former Finance Minister Augusto Tomas stated in an interview reported in February of this year "Vamos privatizar tudo". To date, the government has remained committed to this course of action.

In support of this program, the Government entered into discussions with the IMF in order to start the process leading eventually to a Fund approved ESAF together with structural adjustment lending by the World Bank. Unfortunately, it has proven more difficult than anticipated to adhere to the targets set by the Government in the Round Table document.

At the present time, available economic data show the Angolan economy to be in a state of increasing instability. Last year's inflation amounted to 3,783% according to statistics of the Ministry of Finance, and is running ahead of that pace so far in 1996. This is a significant acceleration over the previous, already high rates of 1,878% and 917% in 1993 and 1994.

The most recent monthly figure of 52% in April reflects the results of a Government salary increase of approximately 5,000% which was released in April retroactive to the beginning of the year. The resulting surge in consumption pushed prices significantly higher, also pushing the parallel exchange rate higher. Table 2 shows the evolution of inflation over the past several years.

The parallel exchange rate reflects inflation quite closely, though there are significant periods during which the official rate remains unchanged. As can be seen in Table 3, high inflation coupled with irregular devaluations of the official rate have resulted in variations in the spread between the two markets of from near zero last May to 576% in February of 1996, when another devaluation took place.

The failure of the stabilization program initiated last year, and the ensuing reemergence of the inflationary spiral of the preceding period underscore the need for a serious stabilization program. As can be seen in Table 4, there has been an erosion of some of the gains in pricing that were achieved last year. Nevertheless, the government has undertaken several measures in 1996 which, though they have not had the desired effect, demonstrate that the authorities remain willing to pursue expenditure control and the associated policies needed to address the severe imbalances at the root of the problem.

Among these was a large salary increase in February of 1996 which was designed overcome the problem of the rapidly eroding value of government paychecks, which by that time were in many cases less than $5 a month. This increase brought salaries to a 25% share of government expenditures, up from less than 10% in the previous year. (The average for Africa is approximately 20%) It is clear from these figures that the bulk of the government budget problem is not one of salaries for the central government apparatus but rather lies in the area of defense and debt service, which account for the majority of expenditures.

The Government remains determined to build a political consensus in favor of reform and to act on that consensus. They are committed to implementing steps which will unify the exchange rate and bring the budget deficit under control during the current year. Most recently, the President reiterated his determination to see through the needed reforms and appointed a new economic management team to ensure that the program will be implemented. In his speech announcing the new cabinet, the President underscored the determination of the Government to take the steps necessary to bring inflation under control and to stabilize the economy.

Fiscal Policy and the Government Budget

It is clear that the primary cause of the instability evident in the above figures is the continuing deficit of the central government. The absence of a unified budget and accounting procedures make it difficult to accurately assess the true size of the fiscal deficit, but it was in the range of 25-30% of GDP in 1994, and continued to remain highly in deficit last year.

One of the principal reforms emphasized by President Dos Santos, and supported by international institutions, is the reform of budgeting and fiscal control, particularly with respect to oil accounts. Given progress in this area, it will be far easier to budget and plan for needed investment expenditures in the agricultural sector (as well as elsewhere). Clearly, this is a prerequisite to the achievement of a rehabilitation and development program for the sector.

Oil and the Angolan Economy

Oil production constituted 40 per cent of GDP in 1991, 90 per cent of exports and was the basis for 75 per cent of government revenue. Angola's per capita income amounted to about $600 in 1992. This level of per capita income places Angola in the ranks of lower middle income countries, but masks the far lower level of development of the non-oil economy, particularly in rural areas. Since 1980 Angola's overall economic growth rate has remained relatively high as oil production increased, while the non-oil sectors have stagnated or even declined. Tables 4 and 5 show oil prices and the importance of oil in the balance of payments.

The oil dependence in Angola is more pronounced than in some other oil-exporting countries such as Nigeria, Indonesia or Algeria and thus poses an even greater challenge to overall economic management and the development of the non-oil sectors of the economy. The problems have been masked by the war: there has been no question regarding the pace of oil extraction and the use of oil revenues; at the same time, the progressive decline of the non-oil economy has been portrayed as being mainly linked to the war while ignoring the detrimental effects of misguided management of the oil resource, a grossly overvalued official exchange rate (and thus depressed domestic producer prices), and the non-developmental use of the proceeds from oil extraction. This problem needs to be addressed squarely if the non-oil economy, including in particular agriculture, is to be restored and further developed.

Rational management of oil revenues and other resources such as diamonds is the key to overall development in Angola. Since the extraction of non-renewable natural resources is tantamount to the sale of an asset, the proceeds cannot be considered as permanent income. A portion of the proceeds, depending on the remaining lifetime of the reserves and the return on investment, would need to be invested productively so as to generate permanent income. At the same time, the non-oil economy would need to be insulated from oil induced exchange rate fluctuations through appropriate management of international reserves which, depending on the specific situation, might require investment of oil proceeds abroad. In addition, management of inflation is necessary for provision of a stable environment for growth and is an especially important prerequisite for development of a private sector financial system.

Angolan Agriculture

In sharp contrast to many countries in Sub Saharan Africa, Angola is blessed with an excellent resource base for agricultural production. Prior to independence and the ensuing hostilities and dislocations, Angola was a net exporter of food and a major producer of coffee as well as other export crops. These facts are particularly impressive in light of the fact that these exportable surpluses were, for the most part, produced using traditional technologies and few modern inputs. So, not only is Angola a natural food and cash crop producer and exporter, but there is considerable potential for growth through modernization and technical change. (See Table 6)

Agro-climactic conditions vary widely, from humid tropical lowlands in the north and northeast to desert on the southern coast bordering Namibia. The central highlands contain large areas with good rainfall (1500-2000 mm/year), relatively moderate temperatures, and adequate soils, and are also the region with the highest population density. The coastal and southern areas are far drier, with average rainfall of less than 100 mm/year in southwestern desert areas and between 500 and 1000 mm/year in the four southern provinces of Namibe, Huila, Cunene and Cuando Cubango. Irrigation is essential to production in these zones, and fortunately there are abundant surface and subsurface sources, many of which have been developed to some degree.

While population is densest in the high potential areas of the central plateau (Bie, Huambo, Cuanza Norte, Malange, Uige and parts of Benguela and Cuanza Sul), there are large sparsely populated areas, especially in the east, which are capable of supporting much larger populations than at the present time. The war resulted in large refugee movements into cities and coastal areas. Though these movements can be expected to be at least partially reversed now that there is a peace agreement, in the meantime there is considerable population pressure in the relatively dry coastal areas.

Staple crops range from cassava in the humid north and northeast to maize in the central highlands and sorghum/millet in the drier southern provinces. Potatoes are an important crop in the central plateau and rice is also grown over large areas in the north. Cattle are raised over broad areas in the central plateau but are particularly important in the southern provinces of Cunene, Huila, and Namibe where there are an estimated 3 million head of cattle.

The most important cash crop has historically been coffee, which grows well in the highlands from Uige and Malange through Cuanza Norte and as far south as Huambo and Bie. Exports are currently negligible, though Angola was once the world's fourth largest exporter. Cotton, sugar cane, sisal, bananas and wood are other important cash crops, though production is very low by historical standards at the present time.

More than 70 per cent of Angola's pre-independence population earned their living from agriculture, which accounts for approximately 20 per cent of GDP. With a relatively small population of approximately 10 million and population density of between 7 and 8 inhabitants per square kilometer, Angola is well endowed with agricultural resources and has the potential to grow a wide range of tropical and semi-tropical crops. Prior to independence in 1975 Angola was self sufficient in food and exported numerous crops, of which coffee was the most important. During this period, agriculture had a dual structure, with a commercial sector of about 800,000 ha. managed by Portuguese settlers using modern technologies, and a traditional sector composed primarily of subsistence smallholders cultivating about 3.4 million ha. Agriculture was well supported by transportation and marketing infrastructure.

Prior to independence in 1975 Angola possessed a healthy and productive agricultural sector which was capable not only of feeding the country's population, but also provided large surpluses of both food and cash crops for export. Then, as now, a majority of the population lived in rural areas and derived their income from agricultural activities.

After independence, many of the former commercial farms and plantations were converted into state farms, most of which have now been either leased to the private sector or taken over by their former managers. The departure of the Portuguese led to the virtual disappearance of the rural marketing and informal credit network, since these activities had been monopolized by the former colonists. The ensuing civil war caused a collapse of marketed production as large numbers of rural inhabitants fled or reverted to subsistence production. Infrastructure suffered greatly with widespread destruction of roads, bridges and warehouses together with the presence of thousands of land mines in rural areas. Much of what marketed production there currently is comes from medium size private farms near urban areas.

Since that time agriculture has suffered from several external shocks as well as from policy distortions at the macroeconomic and sectoral levels. First, the exodus of the Portuguese following independence resulted in the virtual disappearance of the rural marketing system, which has not been replaced to this day. Second, civil war has resulted in widespread destruction and dislocation of population, with a consequent decline in production to less than 20 per cent of pre-independence levels in most crops. Third, government policy after independence stressed centralized control of all prices, margins and investment decisions, though this structure is now in the process of being dismantled. Fourth, the discovery of oil and the expansion of this sector to 40 per cent of GDP has resulted in severe Dutch Disease effects, which fall most heavily on traded sectors such as agriculture. Now that peace has been achieved, resettlement of rural areas and reestablishment of rural-urban linkages in both input and output markets are the main goals for the immediate future.

Prior to independence, Angola was a net exporter of food, principally maize, which was produced by smallholders using traditional agricultural technology. There is ample reason to believe that this success can be replicated in the future, and in fact it is likely that there are large potential gains from technological change in the smallholder sector. The process of introducing modern technology and building a national research and extension system will take a considerable amount of time but the potential payoff in terms of output increases and export earnings in the short term using existing technology is nevertheless substantial. Reopening of key transport routes and assistance to farmers in the form of seeds, tools and fertilizer can provide a rapid contribution to the food supply that is at the same time consistent with long run comparative advantage.

In sharp contrast to many countries in Sub Saharan Africa, Angola is blessed with an excellent resource base for agricultural production. Agro-climactic conditions vary widely, from humid tropical lowlands in the north and northeast to desert on the southern coast bordering Namibia. The central highlands contain large areas with good rainfall (1500-2000 mm/year), relatively moderate temperatures, and adequate soils. The coastal and southern areas are far drier, with average rainfall of less than 100 mm/year in southwestern desert areas and between 500 and 1000 mm/year in the four southern provinces of Namibe, Huila, Cunene and Cuando Cubango. Irrigation is essential to production in these zones, and fortunately there are abundant surface and subsurface sources, many of which have been developed to some degree.

Angola is fortunate in that long run strategy can be based on an excellent agricultural resource base where some of the conflicts common in African agricultural policy are absent. Perhaps most important is the fact that there is no trade-off between production of food crops and production of export crops since maize, the staple grain in a large part of the country, was also (after coffee) one of the major agricultural exports prior to 1975. With a comparative advantage in maize production, and a great potential for productivity improvements with the introduction of modern technologies, a move toward food self-sufficiency is at the same time a move to exploit comparative advantage. In addition, maize, an annual crop, can also provide the quickest contribution to the balance of payments after peace is achieved. Other staple crops such as cassava, millet, sorghum and rice are also capable of a relatively rapid supply response. Though a rapid short term response using existing technology can be achieved, building and strengthening of research, education, and extension should be undertaken as soon as possible due to the long gestation periods required by these investments and their high returns. Coffee, which was the main agricultural export twenty years ago, can also be revived to some degree, though this will take longer.

Given the predominance of smallholder agriculture, a long-run emphasis on this sector is appropriate on both efficiency and distributional grounds. Nevertheless, the existing commercial agriculture sector, particularly the areas surrounding major coastal cities, has the potential to make significant contributions to efficient urban food supply. This is in line with the situation in many other countries, where high value perishable crops are typically produced within easy marketing distance of important urban demand centers. While this sector has important potential, direct government intervention and/or use of scarce resources would not be efficient given the current demonstrated commercial viability of this type of production.

The relatively small population and the existence of large areas of unused arable land imply that change is more appropriately to be sought at the extensive margin rather than through intensification, as would be the case in a land-scarce environment. This means that extensive technologies such as mechanization are more consistent with Angolan conditions than is the case in many other parts of Africa. Nevertheless, there is also considerable scope for improved varieties of major crops, as well as a need for irrigation in many of the drier areas. Evidence from neighboring countries indicates that a doubling of yields for maize is a reasonable goal which can be achieved using existing technologies already proven under African conditions. In addition, it is also important to note that smallholder use of fertilizer has a relatively longstanding history in the central altiplano, in contrast to most other smallholder sectors in Africa.

Angola's Future and the Examples of Nigeria and Indonesia

The contrasting experiences of two other oil exporters, Nigeria and Indonesia, provide strong support for an emphasis on agricultural investment coupled with an exchange rate policy designed to avoid over-appreciation. Indonesia is a positive example of the use of appropriate policies to encourage agricultural development in an oil rich country while Nigeria is a negative example illustrating some of the pitfalls inherent in management of oil export proceeds.

Indonesia followed a policy of emphasis on agricultural infrastructure and technological improvement with modern high yielding varieties, as part of an overall economic policy program which resulted in high non-oil growth rates over sustained periods. Price policies encouraged fertilizer use, supplied from domestic production using petrochemical feedstocks. Indonesia also avoided extreme exchange rate overvaluation, though there were periods in which it appeared to be overvalued to some extent. Agriculture received a large share of public investment, more than 20 per cent in the initial years of the oil boom. An important aspect of government policy was its <u>long run</u> nature. Successful sector development has been a matter of decades with an early and sustained emphasis on an agricultural investment program. An added benefit is the beneficial effect on income distribution, since the majority of the poorest in Indonesia (as in Angola) were rural. While Indonesia's emphasis was on its staple crop, rice, a similar strategy has considerable appeal with a focus on the important staple crops in Angola. Maize in particular has potential for large yield increases using existing technologies. (See below)

Nigeria's example is in many ways the opposite of Indonesia's in that the exchange rate became progressively more and more overvalued as time went on. Urban bias was pronounced, with a consequent flow of resources away from rural areas and toward large cities. In the agricultural sector no progress was made in smallholder production technology during the oil boom years while government investments in the sector were concentrated in large projects with disappointing results. A large portion of government expenditures on agriculture were devoted to fertilizer subsidies rather than investments in infrastructure or agricultural services such as research, extension and education. Consequently, Nigeria is now a major importer of agricultural products which it exported prior to the oil boom.

Food Crops vs. Export Crops and the International Market

Perhaps one of the most basic and often debated issues in long term strategy for agriculture is the relative emphasis to be given to food crops as opposed to export crops. Angola is fortunate in the sense that its second biggest agricultural export prior to independence was in fact a food crop: maize. Maize is not only a major potential export crop, but together with cassava, rice, millet and sorghum, is one of the major staple food crops as well. Currently, the vast majority of marketed maize is imported, making rehabilitation of marketed maize production the quickest way for agriculture to provide a contribution to the non-oil trade balance in the short run while at the same time remaining in line with long run comparative advantage.

Angola's most important agricultural export prior to 1975 was coffee. Approximately 240,000 MT were exported in 1972, the peak year for coffee production, while at the present time the amounts marketed are negligible, amounting to only 1,500 MT in 1993. It is clear that rehabilitation of coffee production will only happen after a considerable lag. First of all, no new coffee plantings have occurred since before independence, making the age of current plants well beyond the period of peak production. New plantings will only yield a crop after several years and will not reach peak production for almost a decade.

It is also clear that coffee is unlikely to return to its former status as a major export, for reasons related both to internal conditions and to the world market. Internally, coffee is no longer the mainstay of the rural economy in areas where it was formerly dominant. Peasant producers do not farm large monocropped areas of coffee as was done on Portuguese plantations prior to 1975, and the large labor requirements of such plantings, as well as the managerial capacity required to run large plantations make rehabilitation along pre-independence lines a non-feasible option in most areas. Rather, coffee is likely to be one of several crops for any particular farmer, grown either in small plots or in association with other crops. This is likely to remain the case for the foreseeable future.

In terms of the international market, there are now several countries in Africa and Asia which have recently begun substantial coffee exports, filling the gap left by Angola's disappearance from the market. Consequently, prices have declined since the mid-1970's though there are still opportunities for export of high quality coffee which could be grown in Angola. SECAFE currently estimates that coffee exports are unlikely to exceed about 25 per cent of previous peaks, and can reach that level only about eight years after rehabilitation of producing areas has begun. Real international coffee prices remain at less than half the levels of the 1970's and early 1980's, even after recent increases from historically low levels.

Generally speaking, Angola's good agro-climactic conditions mean that DRC's are low for a wide range of crops, including both export crops such as coffee and staple grains such as maize. (See Table 7) This provides strong support for a policy which combines food self sufficiency with support for export crops such as coffee. The issue for the government is to determine which public investments can yield the greatest marginal improvements in DRC's as they currently exist, as well as those which are most effective in facilitating renewed investment by the private sector.

Table 8 shows maize yields for Angola and other countries in central Africa. It is clear that there is substantial room for improvement; a doubling of yields is not unreasonable to expect using existing technologies and varieties already proven in neighboring countries. A recent study of this issue (World Bank 1991a) concluded that " ... all available evidence indicates that local and traditional varieties have considerable untapped yield potential ... There is no reason to believe yield improvements will have to wait for new varieties ... " (p. 81).

It is likely that for the near term, it makes sense to restore some export production where that can easily be achieved, and to restore production of staple grains for domestic consumption, since output in both categories is on the order of 10 per cent of pre-independence levels for most crops. This indicates that there is a large unused capacity that can be relatively easily tapped in the short term.

It is important to emphasize that although food self-sufficiency is not a prerequisite for food security and so is not necessarily a goal to be achieved for its own sake, the apparent Angolan comparative advantage in food production makes it likely that it can and should be achieved. This follows from a strategy of investing in activities with low DRC's since maize (among other food crops) appears to score well by this and other measures of comparative advantage.

The Retreat from a Command Economy and the Role of the Private Sector

In agriculture, as in other sectors, Angola is currently undergoing a marked shift in the relationship between the state and the economy. Previously, the role has been that which is typical in a command economy, where all activity has been controlled and carried out directly by the government. In shifting away from this model of development, it has become necessary to redefine the role of the government as it relinquishes its hold on activities which it used to dominate and direct. It is clear that while the government intends to retreat from direct control in many areas, there are nevertheless several key roles which the government must perform in order to ensure a healthy and efficient economy. Overall, the government can best promote private sector development by providing a conducive environment which enables efficient growth. In general this implies a government role restricted mainly to provision of essential public goods which the private sector is unable to provide for itself together with a stable institutional, legal and policy environment within which the private sector can freely make investment and allocation decisions. Such an environment will be attractive not only to domestic but also to foreign investors.

Most obvious of these is the need for the government to rebuild and expand infrastructure, especially since the recently ended hostilities resulted in the destruction of so many roads, bridges, buildings, irrigation systems, etc. Equally important is the role of the government in promoting and maintaining a stable policy environment conducive to development and growth. Management of such policy tools as the exchange rate are key as is the protection of the basic institutional requirements of a market economy: a well functioning legal framework, stable financial system, clear rules of the game, and the power and will to enforce these. Education and health are also areas which require government presence and action, and which are very important to the agricultural sector as well as to the rest of the economy.

Privatization or "redimensioning" of parastatal enterprises constitutes an important element of sector strategy both to clear the way for private sector development and to eliminate the large drains on public resources stemming from money losing state enterprises. There are at least four major state enterprises in the agricultural sector which merit attention, all of which have been listed by the government as candidates for restructuring and/or partial privatization.

FRESCANGOL has benefitted from preferential access to foreign exchange at official exchange rates to import meat and chicken, and is able to substantially undercut private producers due to their inability to import needed inputs. Privatization of FRESCANGOL in the short run would be an effective first step in promoting development and growth of existing and potential domestic meat production. The existence of local producers means that there is scope for <u>efficient</u> import substitution, resulting in both an increase in low cost local production and a savings in foreign exchange. There is sufficient capacity to produce chicken in the green belt around Luanda to make chicken and egg imports unnecessary. The only constraint is the ability of the feed producers to acquire the needed raw materials. In short, they could be importing chicken feed instead of chicken and eggs. Even these imports will be unnecessary once domestic grain production is reactivated. Consumers, in contrast, are already facing parallel market prices for chicken in most cases, implying that the main effect on the chicken market of privatizing FRESCANGOL would be redistribution of rents on the supply side. In terms of beef, there are about 3 million head of cattle in the southern provinces which are currently being marketed in

Namibia. Given some investments by the private sector in slaughterhouses, refrigeration and coastal transport, the country would be self sufficient in beef as well, provided that FRESCANGOL did not flood the market with imports purchased at preferential exchange rates. This would, however, take some time to achieve, but privatization of FRESCANGOL can nevertheless be pursued in the immediate future.

ENAMA imports heavy equipment for the agricultural sector. It is not at all clear that there is any sense in having the government buy heavy machinery for import when tractor and other machine services can be adequately supplied by the private sector. This enterprise is therefore redundant at best, and a drain on the treasury at worst. Divestiture of remaining vehicle fleets could be achieved in a relatively short time.

ANGOSEMENTES is the government company which imports seeds at the official exchange rate. After unification of the various exchange rates under the government stabilization plan, there will be little reason to maintain a fully owned government enterprise devoted to this activity. It is clear that there is a role for the government in regulation of quality and phytosanitary aspects of seed imports. Slated for partial privatization, a move toward majority ownership and management control by a private sector partner merits serious consideration, perhaps along the lines of SEMOC, the analogous parastatal (now a joint venture) in Mozambique. One seed sector activity which clearly needs government support is the recently established national seed bank. Dedicated to preserving the varietal diversity which underpins virtually all plant breeding and seed development efforts, this is an activity which is highly unlikely to be supported by the private sector.

DINAMA imports fertilizer and pesticides and distributes them to the countryside. (See Table 9) The case of this institution requires some caution as there are areas of the country (particularly the central planalto) where soils are of relatively low fertility and the use of fertilizer has been well entrenched for many years. Increases in prices resulting from the end of government controls should be coordinated to the extent possible with reactivation of the marketing system so as to maintain some reasonable relationship between fertilizer and output prices. On the other hand, it is unclear how much, if any, fertilizer is reaching these zones at the present time anyway. Clearly, DINAMA must be privatized in the near future if current inefficiencies are to be corrected. Functions such as marketing and distribution could be spun off in the short run without any substantial adverse consequences, and it is clear that substantial involvement of DINAMA in such activities will undercut private sector development of marketing services.

While re-establishment of a rural marketing network must await demobilization of troops and reestablishment of transport links, it is apparent from the high level of activity in parallel markets in cities that the entrepreneurial talent needed to replace the departed Portuguese traders exists and can in time fill the gap in rural zones if given appropriate incentives. Key aspects will be: a. Removal of controls on wholesale and retail margins; b. Re-establishment of marketing and transport infrastructure; c. Provision of credit for marketing activities. This last item is likely to take some time due to the current weakness of the private financial sector but is important in promoting private sector development in agriculture due to the role of small traders and marketers in providing finance and credit for their customers. Overall it is clear that the government's intention is to allow the private sector to take the lead in investment and allocation decisions, while the government plays an important role in providing support services. It is important that this intention be supported by clear policy directives ruling out reactivation of parastatal marketing and distribution activities.

Perhaps the most severe constraint on short run supply response as well as long run growth in agriculture is the virtual absence of a rural marketing system. Prior to independence, marketing was performed by a network of more than 30,000 small traders and shopkeepers who provided peasants with consumer goods and agricultural inputs as well as serving as primary purchasers of their output. In addition, these shopkeepers and traders provided informal credit services by providing seed, fertilizer and other inputs at the beginning of each season, taking payment in kind at harvest.

Along with independence in 1975 went the wholesale exodus of the Portuguese who had run the rural marketing system. The new government filled the resulting vacuum with a rural marketing parastatal, ENCODIPA, which had a monopoly on rural marketing functions in the post-independence period, and whose successor and related organizations (e.g., DINAMA, ENAMA, ANGOSEMENTES) still retain many of these functions, though not the monopoly position. It is clear that these organizations are not adequate to support the desired private sector development within the agricultural sector. Accordingly, their elimination will help clear the way for private marketing and trading as incentives and physical conditions improve.

Though monopolies and price controls have been eliminated, controls on marketing margins for many agricultural products have not, with wholesale margins fixed at 10 per cent and retail at 24 per cent. Given the poor condition of the rural road network and the uncertainty and/or outright inaccessibility of many municipalities, these controls are in many cases prohibitively low. The Ministry of Commerce stated in February 1994 that all controls on marketing margins would be eliminated by year end. This has not yet been achieved but would constitute the single biggest policy change that can help reactivation of rural marketing. (See Table 10)

There can be little doubt that there is abundant indigenous marketing talent in Angola. The size and level of activity in parallel markets in all major cities attests to this. However, until transport infrastructure is rehabilitated, margins decontrolled, and production reactivated through appropriate investments and price policies, there is little incentive for extension of these trading activities to rural areas.

In terms of physical infrastructure, there are several areas which will require attention and government action. First is the road network. At independence Angola possessed an excellent road network, but it has since fallen into disrepair, in addition to being the target of military campaigns and land mines. Secondary feeder roads are in extremely poor condition in many areas, and improvement in these as well as trunk roads would go a long way toward lowering marketing costs. Other needed infrastructure includes rural shops, warehouses, and markets.

Here the government can be instrumental in providing needed materials and/or credit for construction of these facilities. However, evidence from many countries as well as Angola's own history, makes it clear that government involvement in marketing activities is best confined to a strictly supportive role, consisting of maintenance of physical infrastructure such as roads and a stable institutional and regulatory environment.

Reactivation of the marketing network can be aided by availability of consumer goods for sale in rural areas, as well as agricultural inputs. These supplies can provide the incentives for marketed surplus that are lacking in the current situation.

The Mozambican Economy

As is the case in Angola, Mozambique's current economic structure owes much to its colonial past. The economic structures and relations imposed by Portugal, a long war of independence, and post-independence policies aimed at promoting the fast industrialization of the economy all play an important role.

Of particular importance in Mozambique was Portuguese economic activity based on various forms of forced labor. At first this consisted mainly of slavery-based plantations and later a system of forced and contract labor. Local populations were required to supply contract labor and there was an extensive use of forced labor for plantation and public works. Taxes were levied to force the local population to work for cash wages on plantations and in mines, in Mozambique or in neighboring countries in order to earn the cash to pay taxes. This system resulted in higher production of cash crops such as cotton and rice.

Mozambique also generated substantial income from transport services for South Africa and land-locked British colonies to the West. Over time, the Mozambican industrial sector became very dependent on South Africa for spare part and services. The sources of foreign exchange (agricultural exports, transit services and workers remittances) and the trading partners (Portugal, South Africa and the neighboring British colonies) were therefore few. This dependence on external sources of income, and the lack of diversification that characterized it continued into the post independence era.

Between 1940 and 1974, the Portuguese population in Mozambique rose from 27,000 to 200,000 as Portugal engaged in a deliberate policy of encouraging emigration from Europe to the colonies and the economy became totally dependent on a non-African labor force for all but the most menial tasks. The mass exodus of expatriate settlers at independence (about 90% departed within 18 months) left Mozambique with a virtual vacuum in terms of the availability of skilled labor. It has been reported that at the time of independence, only 33 college graduates remained in the country.

Prior to independence, Mozambican agriculture had three distinct sectors: large plantations, medium scale settler farms and small African family farms. The commercial sector included 2,000 farms, including the few large plantations, and cultivated about 175,000 hectares or around 7% of the country's total cultivated area of about 2.5 million hectares. The average size of commercial farms' concessions (not freehold but long-term usufruct rights that could be transferred and inherited) was about 45 hectares. The farms produced for the market, mainly export crops (cotton, tea, cashew, coconuts and sugar) but also a substantial commercialized food production. There were about 1.5 million African smallholder farms cultivating 2.3 million hectares (1.5 hectares per farm). They practiced shifting cultivation, essentially for subsistence on land allocated through the customary land tenure system. The colonial government did not provide support services to smallholders who, because of the lack of resources and secured markets followed a risk-averting strategy, producing a low but steady level of output.

It is important to note the lack of interconnections between the regions of the country during the colonial era. Taken as a whole, Mozambique has ample land and food production potential to be self-sufficient. However, this fact obscures the regional differences persisting from the colonial period to the present. Though there is ample grain production potential in the North and Central highland regions, these areas have never been large suppliers to the large population centers of the arid South. Marketing networks to move surplus grains in this way were never developed, and the South has historically always been a food deficit region, exporting labor and transport services in return for food needs. Thus, development of the country's natural comparative advantage in own-production of food will require not only the rehabilitation of infrastructure and marketing systems destroyed by the protracted war, but the development of entirely new interregional linkages and marketing channels.

FRELIMO, the *Frente para a Libertacao do Mozambique* (Mozambique Liberation Front), assumed control of a country after independence in 1975 and after the mass exodus of the Portuguese population. In line with the Marxist economic philosophy of the ruling party, there was a strong tendency toward centralized control of large production units in a system envisioned as an industrialized command economy. In the agricultural sector, the State took over the 2,000 abandoned commercial farms. Because of the acute shortage of technical and management skills, settler farms were regrouped into larger units. Parastatals were set up to undertake the marketing/trade functions left vacant by the departing traders. This initial drive at State control, partly dictated by urgent practical considerations, was further reinforced by ideological factors, underpinning a socialist development strategy based on a rapid "modernization" of the Mozambican society.

Under a centralized management system, output targets and resource allocation became increasingly determined by the government in Maputo. Prices were fixed for most commodities, at all stages of the production and distribution chain. External dependence was increased further by the adoption of a development strategy based on heavy (public) investments in imported capital intensive technologies. The foreign exchange and technical assistance requirements for the operation and maintenance of these investments further aggravated the country's dependence on external resources. In addition, the low returns of most of these investments created balance of payments problems and forced the government eventually to abandon this strategy.

After 1980, the opposition organization, Resistencia Nacional Moçambicana (RENAMO), intensified its activities as support and control were taken over by South Africa as the previous support from the white minority Rhodesian government was lost. RENAMO had little in the way of a political program beyond opposition to FRELIMO, and pursued its goal of overthrowing the government through a widespread campaign of destruction and terrorism throughout the country. It is difficult to exaggerate the damage and dislocation caused by the armed conflict. Attacks by Renamo have been targeted on infrastructure, particularly roads, hospitals, and schools, as well as on the rural population more generally in an effort to disrupt food production as much as possible.

The costs have been heavy in economic terms (see Table 11), but are perhaps most damaging in human terms. More than 4 million people in rural areas have been forced to leave their land or are so adversely affected by the war that they can provide less than half of their food needs. More than a million more have fled entirely and are now refugees in surrounding countries (see Table 12).

Mozambican Agriculture

At independence in 1975 approximately 80% of the population was engaged in agriculture, most of them subsistence farmers growing various staple crops. The most important of these is maize which is grown at higher elevations in the north and west and in dryland areas in the south. Cassava is also grown widely on lower elevations particularly in the north while millet and sorghum are cultivated in various areas. Rice is grown in coastal areas near the Zambezi delta.

The two main export tree crops, coconut and cashew, are grown in the eastern regions of the country, while cotton is grown mostly at medium elevations in the north. The departing Portuguese abandoned approximately 2000 estates growing mainly tea, sisal and sugar cane.[1] These crops, together with cotton and cashews grown by smallholders, constituted the main exports from the agricultural sector.

Table 13 shows the relative sizes and contributions to production of the principal types of farms in 1983. Family farms are by far the most important in terms of land area, but state farms contributed disproportionately to marketed surplus and exports. Private farms are also significant producers for the internal and export markets while cooperatives account for a very small share of land and production.

The state farm focus of the government's rural strategy in the years immediately following independence emphasized rapid mechanization and expansion of the area under cultivation. In accord with this plan, massive equipment purchases, including 1200 tractors and more than 500 combines were made in 1977, followed by additional acquisitions the following year. Overall, 90% of centrally planned agricultural investment went to the state sector prior to 1983.[2]

Agronomists from socialist countries were brought in to assist in coordinating state farm production. All of these efforts succeeded in reversing the production declines of the early 1970s, though almost exclusively through area expansion rather than productivity increases.[3]

However, the emphasis on state farms encountered various problems which eventually caused the government to rethink its strategy. One serious problem was an extreme lack of managerial and administrative personnel in what were some of the largest plantations in Africa. In addition, much of the machinery purchased was used only seasonally, which together with repair problems, left it idle a large percentage of the year. Extreme seasonality of labor requirements on large monocropped units led to difficulties as well. Finally, state farms proved to be vulnerable targets for rebel attacks after 1981.

Marketing - The departure of all but 20,000 of an original 250,000 Portuguese settlers at independence left the government in charge not only of the plantation sector, but most of the rural trading network as well since the departure of many traders left large areas without any network for distribution and marketing of goods.[4] This situation reinforced the government's vision of a centrally directed development in which provision of goods to rural populations could be controlled. The need for rural marketing of consumer goods was met with a network of government stores called lojas do povo.

Though the government set up its own trading organizations, it was recognized from the outset that private traders would continue to operate at the retail level. In fact, this was necessary since the system of government stores did not prove adequate in many areas. Nevertheless, traders' margins were regulated and the government retained a monopoly on wholesale trade, which was under the direction of the Ministry of Internal Commerce.

Exclusive responsibility for crop marketing was vested in government organizations. The Ministry of Internal Commerce was responsible for all agricultural trading and the supply of goods to rural areas. Cashews and cotton were each controlled by separate parastatal organizations, the Secretaria de Cajú and the Secretaria de Algodão. The Ministry of Agriculture was responsible for marketing of state farm output. In 1981 all marketing of crops (except cashew and cotton) and distribution of goods to rural areas was consolidated in Agricom, a new government enterprise under the control of the Ministry of Internal Commerce. Agricom is obliged to buy all crops offered to it at the stated government price. Throughout the post-independence period until the reforms of the mid 1980s, the government viewed the terms of trade of agriculture vis-a-vis non-agriculture in barter terms. That is, policy and planning were based on the quantity of consumer goods required in exchange for marketed surpluses; the fact that money changed hands in the process was of secondary importance to planners.[5]

Table 14 presents data on crops marketed in the 1980s. It is clear that maize and rice are by far the most important marketed food crops. It is important to note that these figures, as with virtually all agricultural statistics in Mozambique, are of very uncertain quality. Nevertheless, the broad outlines of the data seem to conform with observable trends.

Price Policy - Before the reforms of the 1980's, prices for virtually all crops were set centrally by the National Price Commission and the National Planning Commission. A high priority in early years was the setting of prices on a pan-territorial basis. These prices were left unchanged for long periods of time. Official prices for major crops in the post independence period are shown in Table 15 where it is clear that prices were sometimes left constant for as long as seven years.[6]

To present these prices in real terms is difficult in Mozambican conditions, given the repressed nature of inflation resulting from the highly controlled economic structure. Nevertheless, it is clear from the Consumer Price Index in the table that the relative terms of trade of rural producers declined drastically in the 1980s.[7] Table 9 shows producer prices deflated by the CPI. It is clear that by the mid-1980s real terms of trade had deteriorated significantly for most producers. Even so, in the years preceding the sharp rise in the CPI the purchasing power of the metical dropped in rural areas more as a result of extreme scarcity of goods to buy than as a result of price inflation per se. When goods are available they are often sold outside of official channels at prices well above official levels.

By the end of 1980, production in many sectors had been restored to 1975 levels but were still below levels achieved in 1970 before the struggle for independence began to disrupt economic activity. In addition, large external deficits of the years since independence resulted in a large external debt, with an associated debt service well in excess of export earnings.[8]

Food Consumption

The collapse in income and inability to produce food for subsistence caused by the war and economic collapse have resulted in a drastic drop in consumption and a consequent increase in malnutrition. Measures of malnutrition such as height for age, arm circumference, and low birth weight show that Mozambique scores at the low end of the range in Sub-Saharan Africa. (World Bank 1989) Though the urban rationing system has helped to some extent (see below), malnutrition is widespread over virtually the entire country.

It has been estimated that only 10% of the rural population could be counted as "food secure" in 1988 in that they were assured of an adequate diet through employment and/or own-production. Another 35% were dependent on emergency relief or marketed distribution to meet requirements. (World Bank 1989) These deliveries can be highly unreliable, with some areas not receiving food for months at a time.[9]

The situation in urban areas is different in that home production can supply only a very small portion of food requirements. Marketed supplies and food relief must meet virtually all needs. Given the low or nonexistent incomes earned by the majority of urban dwellers, availability of marketed supplies does not guarantee an adequate diet, even with the rationing system. The average urban household spends more than 60% of income on food, and a large number of families are in a far worse situation than this average would suggest, with expenditures on food reaching 90% of income for the poorest groups. (World Bank 1989)

Policy Reforms and Economic Rehabilitation

Initial Reforms

The government recognized in the 1983 Frelimo party congress that its own economic policies were a contributing factor in the economic collapse, and that a significant reorientation was required even though it was clear that the problem of rural insecurity could be expected to persist for the foreseeable future. The attempt to promote rural development on an Eastern European model centered on large state farms and centralized allocation, and pricing was not successful. Concentration of available capital on low productivity state farms prevented a more efficient use of resources, while family sector production for the market declined in the face of fixed prices and lack of goods to buy in rural areas.

In addition, efforts to organize the rural population in "communal villages" had an added disruptive effect. By 1982 nearly 20% of the farm population lived in these villages.[10] However, most villages produced little if anything on a communal basis as family plots remained the preferred unit of production. The lack of incentive for communal production was exacerbated by government inability to provide needed inputs or services on time. Reversion to subsistence production occurred on a widespread basis as the crop marketing network failed to operate.[11]

Overall, the situation in both peasant and state farm sectors resulted in a sharp decline in marketed surplus. An important contributing factor to this problem was the extreme imbalance in foreign accounts, where imports exceeded exports by a factor of six by 1986, partly because of the need to import food. This prevented imports of consumer goods as well as the raw materials needed to manufacture those produced locally. Of particular importance was the lack of agricultural implements - hoes and plows - which hindered family sector production. Azam & Faucher (88) present estimates of manufactured goods supplied to rural areas and find that these supplies are a significant determinant of marketed agricultural production, especially in cotton/cashew growing area.

Hostilities and terrorism in the countryside forced a massive displacement of populations toward safe areas near the cities, along the Coast, and to neighboring countries. By 1990, there were about 1.0 million dead and close to 5.0 million displaced persons. A large part of the country's economic infrastructure had been destroyed including the destruction or closure of about 1,000 clinics and health posts, and 3,000 schools. The disappearance of rural traders from many areas and the destruction of transport links cut producers off from markets for their output, inputs and consumer goods. Agricultural GDP fell by 5% p.a. in real terms. By 1986, cotton and sugar production had collapsed to 9% and 16% respectively of their 1980 levels. Production of tea and cashew, which together contributed about a third of the country's total exports, fell to 30% of 1980 levels. Livestock herds and wildlife were decimated. Although it is difficult to assess the total food production of smallholders, it is estimated that the overall food production may have fallen by as much as 30% between 1981 and 1986 as many smallholders reverted to subsistence production. The collapse of production of marketed grain domestically forced a heavy dependence on imports and food aid which grew to more than 90% of total marketed grains.

The Government recognized in 1983 that its policies were a contributing factor in the economic collapse and that within agriculture, a smallholder based strategy held the most promise for growth and equity in the long run. One of the first steps toward the liberalization of pricing and marketing arrangements was to eliminate controls on fruit and vegetable prices in 1985. This liberalization resulted in a substantial increase in production, in particular in the relatively secure "Green Zones" surrounding the principal urban centers. The success of this initial experiment led to broader reforms after 1987 under the Economic Rehabilitation Program.

One of the first steps toward liberalizing agricultural pricing and marketing was the freeing of vegetable and fruit prices from administrative controls in 1985. As shown in Table 14, this resulted in a substantial increase in production, primarily in the relatively secure "Green Zones" surrounding the principal urban markets of Maputo, Beira and Inhambane. The success achieved with this initial effort paved the way for more radical subsequent reforms in response to continuing declines in marketed output.

Structural Adjustment and Aid Flows

The Government's initial reform effort laid a foundation for subsequent agreement with the World Bank on a package of policy reforms to be supported by loans and official debt relief. However, the contribution of World Bank loans to financing the overall gap in requirements has never been dominant. Table 16 shows total net disbursements of official development assistance together with World Bank lending, all of which has been done on the standard concessional terms for IDA loans. Nevertheless, this money represents a large part of the cash available to the government, with the majority of the remaining gap being closed by debt forgiveness or rescheduling together with commodity aid. The Bank has played an instrumental role in coordinating and facilitating this aid, particularly in its role of promoting structural adjustment.

The Economic Rehabilitation Program (ERP) implemented in 1987 and subsequent years succeeded in arresting the drastic decline in economic activity of the preceding years, and in restoring moderate growth in 1987 and 1988. GDP stopped declining in 1986 and GDP per capita posted a modest increase in 1987. The broad objectives enunciated by the government were:

a. reverse the decline in production,
b. ensure a minimum level of consumption,
c. strengthen the balance of payments, and
d. lay the foundation for economic growth.

More specifically, the ERP aimed to:

a. increase agricultural production for domestic consumption, export, and agro-industries,

b. increase industrial production to support agricultural marketing, for import substitution, and to stimulate the development of exports such as minerals and marine products,
c. rehabilitate physical infrastructure and industrial capacity, in particular for the support of directly productive activities,
d. increase international rail and port traffic, and
e. mobilize external resources, both in kind and in the form of grants and debt relief.

In contrast to policy prior to 1984, which placed emphasis on increasing production in the state farm sector, the new strategy was directed toward increasing incentives to market production from the family farm sector which accounted for more than three quarters of the population. In particular, it was recognized that the system of fixed prices for agricultural products had gradually eroded incentives for marketing output from the smallholder sector. Also, the extreme scarcity of consumer goods in rural areas represented a significant constraint to the effectiveness of price incentives.

Overall, the ERP was designed to promote growth based on Mozambique's abundant agricultural resources through a program of liberalization of marketing and prices. Though the government relinquished direct administrative control of much of the agricultural production and marketing systems, it remains committed to centralized distribution of consumer goods and government guaranteed markets for smallholder production since the security situation prevents private reestablishment of the rural trading system. Both the lack of capital and the high risk relative to return of rural trading hinder private sector expansion into trading and distribution.

The first steps toward realigning prices and restoring incentives were two large devaluations of the metical: by 80% in dollar terms in early 1987, and by another 50% in June of the same year. These moves had an immediate effect both on the official foreign exchange market and on the parallel market, where rates for the US dollar exhibited a tendency to converge to the newly devalued official rate from about 1500-1800 MT/$ to about 1200 by 1988. Though quite variable, the parallel rate remained at a level about 100-120% higher than the official rate through 1990. By mid-1991 the official rate had reached 1,500 mt/$ with a parallel rate about 75% higher.

Concurrently with the devaluations, steps were taken to restore fiscal balance in order to end financing of government deficits through monetary expansion. The increase in the money supply of 50% in 1987 and of 43% in 1988 represents a substantial decrease in the real supply of money after the large price increases are taken into account. The periodic devaluations of the metical since 1987 have provided additional real depreciation.

Nevertheless, it was recognized from the outset that expenditures would outstrip revenues for the foreseeable future, necessitating continued external support for the government's budget. Within this overall context, a significant re-allocation of expenditures was programmed. In agriculture, spending was shifted from the state farms toward the provision of support services for the family sector and large new irrigation projects were de-emphasized in favor of low-cost small scale irrigation. Transport expenditures were directed toward maintaining and rehabilitating existing roads and railways, particularly since rail transhipment to interior countries has the potential to generate large amounts of foreign exchange.

Overall, capital expenditures to complete ongoing projects were given priority over new ones, and new projects were to be judged on the ability to maintain them and sustain recurrent costs rather than on simple availability of financing. In order to ensure adequate planning and evaluation, the Ministry of Finance and the National Planning Commission initiated annual preparation of investment programs with a three year horizon.

In addition to raising official prices for agricultural products, the number of commodities with fixed prices was reduced from 44 at year-end 1986 to 28 by mid 1988 and to less than 20 by the middle of 1989. At the same time, the number of goods subject to distribution by central allocations was reduced from 43 at the end of 1986 to 30 by the middle of 1988, and to 11 by the middle of 1989. Continued distribution of some goods at fixed prices will continue in order to ensure minimal levels of supply to all areas in the absence of an efficiently operating trading system. In particular, a rationing system was put into effect in the two largest cities of Beira and Maputo in order to counteract the effects of the drastic price increases on the large numbers of refugees and poor in those areas.

These efforts have been supported by large amounts of food aid from the U.S. and European countries. Indeed, this aid has been essential in preventing mass starvation, as can be seen from the fact that 87% of marketed grain supplies were imported in 1988, much of this in the form of food aid. Overall, grain imports amounted to more than 85-90% of total marketed supplies over the period of the ERP.

Economic Performance after the ESRP

After 1987, the Government made an effort to reduce fiscal deficits. Given the very low level of public expenditures, emphasis was placed on increasing fiscal revenues through expanding the tax base and improving collection performance. Total fiscal revenues increased from 13% of GDP in 1986 to 20% in 1993. But total expenditures increased as well from 30% to about 42% of GDP during the same period. As a result, the overall fiscal deficit before grants increased from 18% of GDP in 1986 to 22% in 1993. These deficits were financed externally but with increased fiscal and monetary discipline, the domestic rate of inflation was brought down from more than 160% in 1987 to about 44% in 1993. The current account deficit broadly reflected the evolution of the fiscal deficit, declining to about 50% of GDP in 1991 before increasing to 57.5% in 1992 and 56% in 1993 as the GDP dropped due to the effects of the drought in that year.

Under the ESRP the official exchange rate was devalued from an average of MT 929/USD in 1989 to MT 3,723/USD in 1993, and to MT 7,000/USD in February 1995. The parallel market premium for foreign exchange decreased from an average of 2,100% in 1989 to 10% in December 1994, and the real effective exchange rate depreciated by close to 100% by end 1993, but appreciated again in 1994. As a result, the international competitiveness of the

Mozambican economy has improved markedly, incentives for rent-seeking activities have been curtailed, and it has been possible to gradually shift the allocation of foreign exchange from an administrative to a market-based mechanism. In addition, the tariff structure was reformed, reducing the number and dispersion of rates. A new tariff code was introduced and export duties, including those for agricultural products were reduced to an insignificant 0.5%.

The inadequacy of domestic savings gives rise to an extreme dependence on foreign aid. Domestic dissavings is very high (-11% of GDP in 1993), leaving Mozambique's economic recovery program to be financed by a large flow of foreign aid. In 1993 alone, Mozambique received close to $ 1.0 billion (30% of GDP) in grants and concessional loans. Foreign aid represents about 75% of imports and 50% of Government's budget (70% of the investment program and 35% of recurrent costs). It is clear from these figures that Mozambique is one of the most highly aid-dependent countries in the world. In the medium-term, however, the economy will not be in a position to generate sufficient domestic savings to sustain the required rate of investment, even assuming an accelerated economic growth, nor the foreign exchange receipts necessary to finance essential imports. Mozambique will therefore remain dependent on foreign aid for the foreseeable future.

Agricultural Sector Since the ESRP

Estimates of total and marketed agricultural production over the period 1975 to 1994 were presented in Table 14. Table 17 presents growth rates since 1989. During the first half of the 1980's, agricultural output fell sharply as a result of the spreading armed insurgency, rigid administered prices, and the institutional neglect, if not repression, of the smallholder sector. The latter, without access to basic services, and heavily taxed by a vastly overvalued exchange rate and official producer prices, was also increasingly cut off from markets to sell their products or buy essential consumer goods. As a result, smallholders' marketed production plummeted as they adopted a strategy aimed essentially at food self-sufficiency and survival. Under the ERP, Government strategy to revitalize the agricultural sector has been essentially based on the improving macroeconomic environment and the gradual liberalization of the pricing and marketing policies.

Subject to the natural variability imposed by the rainfall régime, it took some time for the liberalization and reforms under the ERP to become wide and deep enough to make a difference. After a satisfactory 4.0% growth rate in 1989, agricultural production grew at only 1.1% in 1990, and dropped by -4.0% and -11.3% in 1991 and 1992, respectively, mostly on account of the extended drought, pulling down the rate of growth of the GDP as well. When rains normalized in 1993, the sector displayed a substantial 21.4% growth, followed by an estimated 5.0% in 1994 and a projected 10.6% for 1995. The behavior of the crop sector is very similar to the overall sector pattern, except that it shows a drop in 1990, and that the 1992 drop, at -7.3%, is milder than for the sector at large. The livestock sub-sector shows a deeper drop as a result of the drought and a one-year delay in recovering from it, with a substantial increase (21.9%) occurring only in 1994. (Table 5.11)

Within the crop sub-sector, the food crops reacted more strongly to the end of the dry spell, with a 43.9% jump in 1993 led by maize (90%), beans (80%), groundnuts (70%), and sorghum (67%), and then maintaining such higher level in 1994; it is expected to grow again at 9.2% in 1995. The export crops, instead, continued having a negative rate of growth in 1993 (-19.2%, led by a dramatic -55.9% fall in cashewnut production), but recovered to some extent in 1994 (21.1%, led again by cashewnuts) and are expected to continue doing so in 1995 (14.1%). Copra, which showed a good performance in 1993 (39.3%) and 1994 (27.2%) is expected to remain at that level in 1995; sugar production, in turn, would cap a good 1993 and 1994 (15.8% and 26.8%, respectively), with a respectable anticipated 85% increase in 1995.

There is therefore little doubt about strong short-run response of agricultural production to real price increases. This response was achieved in spite of punishing structural physical and institutional constraints. Indeed, the removal of physical and institutional barriers to production and resource flows have received much less attention than the improvement of price incentives and the dismantling of administrative controls. There are several reasons for the heavy emphasis on price incentives. First is the sheer magnitude of the distortions between administered and market prices, and the fact that it was in Government's power to decide the changes. Second, the war prevented the Government from undertaking any significant program of infrastructure construction or maintenance, or the private traders from reestablishing their network and stores, in most of the countryside. Finally, the stabilization program imposed a severe constraint on Government's public expenditures and investment program.

Further progress in the short-term requires the pursuit of incentive reforms and the removal of the most binding physical and institutional constraints: the rebuilding of the rural physical infrastructure; the restoration of security and the resettlement of displaced population in productive activities in rural areas; and the effective liberalization and decentralization of economic decision-making. In the longer-term, sustainable development will require establishment of a viable national marketing system for rural/urban movements of food and industrial crops as well as marketing inputs and consumer goods in return. Establishment of a national research and extension system will also be key.

Exports

Total registered exports have grown from 105 million dollars in 1989 to almost 150 million in 1994, with an average growth rate of about 5% p.a. if the exceptionally high (162.5 million) year 1992 is excluded. Prawns constitute the single largest export item in Mozambique, accounting for 46%, or almost one half, of total registered exports - although both quantities are likely to be significantly under-reported.

Export crops contribute some 27% of the total. Their average total value for the 1989-1994 period was 36.3 million dollars, compared to a grand total of 135.6 million dollars. (Table 18) Cashewnuts was the largest, with almost one half of the total up to 1992, but it then experienced a dramatic short-term decline in the last two years, pulling total crop exports down from 30% of total exports to 22% in 1993 and 1994. In 1994, large exports of cotton and sugar brought total crop exports back to its 1989-1992 level. If 1993 is excluded, total value of crop exports is almost 40 million dollar (39.2), or 29% of total exports. Cotton is the second largest export crop, with an average close to 10 million dollars in 1989-1993 (one-quarter of total crop exports), and twice as much in 1994 (18.9 million compared to 38.3 million, respectively). The third place belongs to sugar, with average annual exports of 8 million for the five years in the 1989-1994 period in which it was exported, and one year (1993) without exports. Sugar accounted for another quarter on average for those five years, and less than 20% if all years are considered. Copra, with an average of 3.2 million dollars p.a., citrus, with 1.7 million, and tea, with 0.3 million, are the other three exported crops of any significance, while timber accounts for 1.15 million - another figure likely to be significantly under-reported.

At first glance, it may seem strange that, in spite of the significant devaluation of the metical and the Government's export promotion policies, total agricultural and crop exports are trendless. As suggested above, this is the result of the drastic drop in cashewnut exports. Had these maintained their 1989-1992 average value, total crop exports would have reached 52.0 million dollars in 1994, i.e., one-third larger than the 1989-92 average, and equivalent to 32% of the (enhanced) total exports. Crop exports without cashewnuts display an irregular but significant growth, from 18.1 million dollars in 1989 to 35.0 million in 1994, or some 5% p.a. on average.

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Notes

1. Isaacman and Isaacman (83) p. 149.

2. See Tarp (84).

3. See Barker (85) and Isaacman & Isaacman (83) p. 149 for discussions of state farm organization and production.

4. Isaacman and Isaacman p.145.

5. See Mackintosh (87) and (88) for a description of agricultural marketing during this period.

6. The accuracy of Mozambican price data and information on marketed output is uncertain. Various sources conflict, especially for the years immediately after independence. The data presented here are the most comprehensive and consistent series available.

7. This index applies to the capital, Maputo.

8. See Munslow (83).

9. See for example, the account by Finnegan 1989.

10. See Isaacman and Isaacman (83) p. 155.

11. See Harris (78) and Roesch (84) for a discussion of the establishment of communal villages.

Table 1. Angola: Gross Domestic Product, 1994-95

	1994	1995	Change
	millions of 1994 Kwanzas reajustadas		
Agriculture and Fishing	122,480	137,177	12.0%
Extractive Industry	367,085	420,879	14.7%
Oil	359,728	411,147	14.3%
Diamonds	7,063	9,423	33.4%
Others	294	308	5.0%
Manufacturing	16,877	17,384	3.0%
Electricity	239	261	9.1%
Construction	10,504	12,079	15.0%
Commerce	57,332	64,211	12.0%
Transport and Communications	13,466	15,639	16.1%
Banking and Insurance	9,301	4,096	5.0%
Other Mercantile Services	91,596	101,214	10.5%
Non-Mercantile Services	33,969	35,667	5.0%
Import Taxes	10,916	10,916	0.0%
Total	**728,365**	**819,524**	**12.5%**

Source: Ministry of Planning

Table 2. Angola: Inflation 1993-1996

	1993		1994			1995			1996		
	Actual		Program	Actual		Program	Actual		Program	Actual	
	Montly Rate	Annual Accum.	Montly Rate	Montly Rate	Annual Accum.	Montly Rate	Montly Rate	Annual Accum.	Montly Rate	Montly Rate	Annual Accum.
	%	%	%	%	%	%	%	%	%	%	%
January	30.42	30.42	30.00	25.33	25.33	20.00	38.60	38.60	24.50	36.00	36.00
February	20.26	56.84	25.00	11.94	40.29	15.00	32.42	83.53	23.00	22.50	66.10
March	16.43	82.61	20.00	14.47	60.60	10.00	28.91	136.59	22.00	34.93	124.80
April	23.85	126.17	15.00	16.90	87.73	15.00	16.76	176.23	20.00	51.86	241.38
May	37.85	211.77	12.50	12.80	111.77	12.50	14.71	215.38	18.00		
June	26.51	294.42	10.00	6.93	124.51	15.00	16.50	267.33	16.00		
July	23.04	385.29	7.50	16.70	162.01	12.50	22.28	349.19	15.00		
August	40.61	582.37	5.00	23.00	222.30	10.00	43.29	543.79	14.00		
September	21.24	727.31	5.00	23.41	297.78	8.00	52.71	882.92	12.00		
October	30.68	981.12	3.00	28.35	410.55	6.00	30.41	1,181.79	10.00		
November	38.96	1,402.33	3.00	32.55	576.74	5.00	82.00	2,233.38	9.50		
December	28.98	1,837.71	3.00	58.40	972.00	4.00	66.00	3,782.93	8.00		

Source: Instituto Nacional de Estatistica

Table 3. Kwanza/Dollar Exchange Rate

Month		1995 Official Market	1995 Parallel Market	1995 Spread	1996 Official Market	1996 Parallel Market	1996 Spread
January	Average	526.64	1,570.00	198.11	5,692.00	32,722.58	474.89
February	Average	561.11	1,678.57	199.15	7,469.76	43,466.38	481.90
March	Average	592.23	1,628.23	174.93	37,040.18	53,862.90	45.42
April	Average	672.78	1,762.00	161.90	45,506.90	75,395.83	65.68
May	Average	1,689.38	2,023.39	19.77			
June	Average	2,208.90	2,299.17	4.09			
July	Average	2,302.24	3,001.61	30.38			
August	Average	3,068.39	5,620.97	83.19			
September	Average	4,175.53	8,405.00	101.29			
October	Average	5,692.00	10,441.94	83.45			
November	Average	5,692.00	14,215.00	149.74			
December	Average	5,692.00	21,403.23	276.02			

Source: Banco Nacional de Angola

Table 4. Angola: Oil Product Prices

Product	Current Prices (Kwanzas)			US Dollars (Parallel Exchange Rate)		
	August 1995	May 1996	Change	August 1995	May 1996	Change
LPG	1,275.00	23,000.00	1,704%	0.19	0.18	-5%
Gasoline	1,870.00	30,000.00	1,504%	0.28	0.24	-15%
Kerosene	700.00	13,000.00	1,757%	0.11	0.10	-2%
Diesel	995.00	18,000.00	1,709%	0.15	0.14	-4%
Light Fuel Oil	750.00	10,000.00	1,233%	0.11	0.08	-30%
Heavy Fuel Oil	500.00	7,000.00	1,300%	0.08	0.06	-26%
Asphalts	450.00	10,000.00	2,122%	0.07	0.08	17%

Source: Ministry of Economy and Finance

Table 5. Angola: Balance of Payments

	1994	1995	1996 (Projected)
	millions of US dollars		
Current Account	-340	260	215
Commercial Balance	1,563	1,880	2,000
Exports	3,017	3,580	3,850
Oil	2,902	3,475	3,700
Non-oil	115	150	150
Imports	1,454	1,700	1,850
Service Balance	-1,413	-1,470	-1,630
Service Credit	150	130	130
Service Debits	1,563	1,600	1,760
Net Factor Payments	-735	-710	-815
Worker Remittances	-65	-60	-65
Profits and Dividends	-358	-350	-400
Interest Payments	-312	-300	-350
Credit	13	150	150
Debit	325	450	500
Unilateral Transfers	245	560	660
Financial Balance	-700	-1,250	-1,070
Direct Foreign Investment	170	330	330
Medium & Long Term Capital	-640	-1,350	-1,150
Short Term Capital Balance	-230	-230	-250
Errors & Omissions	12	25	0
Overall Balance	-1,208	-965	-855
Financing	1,027	965	105
Change in Reserves (increase -)	14	-35	0
Accumulation of Arrears	700	900	105
Rescheduling	313	100	

Source: Banco Nacional de Angola

Table 6. Angola: Agricultural Production: Present Estimates and Early 1970s Levels

Products	1971/72/73 Maximum Production	1986/87 Actual Production	1989-90
	tons or as indicated		
Cotton	86,015 ('71)	307	2,5
Sugar Cane	80,000 ('74)	14,000	11
Groundnuts	26,936 ('71)	1,688	1,7
Paddy Rice	57,604 ('71)	772	3,0
Banana	75,000 ('73)	24,000	114
Potatoes	138,757 ('71)	8,000	3,4
Sweet Potatoes	250,000 ('73)	100,000	54
Cafe	240,000 ('74)	13,500	10,8
Beans	65,000 ('71)	2,452	3,3
Sunflower	21,008 ('72)	120	
Wood	553,664 ('73)	64,000	
Cassava	1,134,262 ('71)	250,000	1,600
Sorghum/Millet	74,000 ('71)	20,000	63
Maize	710,000 ('71)	250,000	
Palm Oil	20,000 ('73)	560	
Sisal	47,920 ('71)	238	1,0
Tobacco	4,800 ('73)	114	0
Wheat	22,500 ('71)	210	
Beet	24,500 ('73)	3,536	
Cattle (head)	4,300,000 ('73)	3,420,000	
Goats (head)	872,000 ('71)	1,300,000	
Swine (head)	500,000 ('73)	150,000	
Corn			180

Source: World Bank, *Angola: An Introductory Economic Review*, World Bank Country Study, Washington, DC, 1991; PNUD and Food Security Bulletin (1988); World Bank Report 8906 ANG (1990); Agropecuaria de Angola em cifras 87005 ANG (1991)

Table 7. Angola: Domestic Resource Cost

	Domestic Resource Cost
Maize - traditional	0.56
Maize - intermediate	0.42
Maize - improved	0.49
Sorghum - traditional	0.54
Sorghum - intermediate	0.67
Sorghum - improved	0.91
Potato - traditional	0.65
Potato - intermediate	0.55
Potato - improved	0.45
Cotton - traditional	0.64
Cotton - intermediate	0.91
Cotton - improved	0.67
Coffee - traditional	0.64
Coffee - intermediate	0.35
Coffee - improved	0.34
Beef	0.32
Chicken	0.58

Source: Food and Agriculture Organization, "République Populaire d'Angola: Mission d'Identification Générale de Projets dans le Secteur Agricole," FAO Report No. 3/92 CP/ADB-ANG 11, January 1992

Table 8. Maize Area, Production and Yield in Mid-Africa, 1987

Country	Area Harvested	Yield	Productio n
	1000 ha	kg/ha	1000 mt
Angola	850	353	300
Burundi	135	1,222	165
Cameroon	450	844	380
CAR	80	800	64
Congo	11	727	8
Gabon	7	1,429	10
Kenya	1,600	1,188	1,900
Nigeria	700	2,000	1,400
Rwanda	86	1,191	102
Tanzania	1,948	1,211	2,359
Uganda	280	1,275	375
Zaire	860	903	777
Zimbabwe	1,211	769	931

Source: FAO Production Yearbook, 1987

Table 9. Angola: Distribution of Fertilizers, 1992

Province	NPK 12-24-12	Ammonium Sulfate	NPK 15-5-25-3	Total
		1,000 MT		
Benguela	4,380	4,000	--	8,380
Bengo	40	--	30	70
Bie	2,456	--	13	2,469
Cabinda	--	--	0	--
Huambo	4,814	--	1,367	6,181
Huila	4,135	--	1,288	5,423
Lunda Norte	--	--	--	0
Lunda Sul	--	--	--	0
Malanje	--	155	15	0
Moxico	--	--	--	0
Namibe	--	1,772	258	0
K. Norte	--	--	--	275
K. Sul	10	140	125	758
K. Kubango	500	258	--	658
Kumeme	400	258	--	18
Uige	12	--	6	20
Zaire	--	20	--	20
Total	**16,189**	**6,016**	**2,157**	**24,362**

Source: DINAMA, Relatorio de Actividades, 1992

Table 10. Fixed and Controlled Margin Pricing Regime, 1993

Fixed Prices	
	Electricity, Telecommunications, Water, Postages, Public Transportation, Domestic Flights, Oil Products
Controlled Margins	
	Agricultural Inputs, Tools, Tires, Cement, Plastic Bags, Wheat and Corn Flour, Beef, Chicken, Matches, Rice, Cooking Oil, Sugar, Soap, Milk, Construction Materials

Source: Decree No. 7/93 (4/14/93) in Diario da Republica

Table 11. Mozambique: Growth of Global Social Product*

	1981	1982	1983	1984	1985	1986	1987	1988	1989
				10^9 meticais at 1985 prices					
Agriculture	89.6	88.8	69.1	70.2	70.8	70.4	75.2	78.7	80.3
Industry and Commerce	43.6	37.6	30.1	23.8	19.4	18.6	19.7	20.7	22.1
Construction	6.8	7.1	7.2	6.5	6.2	9.0	7.5	7.5	7.5
Transportation and Communications	23.0	21.1	16.8	13.0	11.5	12.2	11.7	12.1	12.6
Commerce and Other	25.2	25.2	23.8	25.5	23.8	23.8	24.4	25.1	26.0
Total	**188.2**	**179.8**	**147.0**	**139.0**	**131.6**	**133.7**	**138.4**	**144.1**	**149.0**

Source: CNP

* Gross Social Product is the income aggregate used by Mozambican authorities. Though used on physical outputs and not on convention income accounting methods, the rate and composition of growth of GSP is close to that estimate for GDP.

Table 12. Mozambique: 1988 population[1]

	millions
Urban	2.6
Rural	12.6
Dislocated[2]	1.7
Affected[3]	2.8
Other	8.0
Refugees Abroad	1.2
Employed Abroad	0.1
Total	**16.5**

Source: Ministry of Commerce
[1] Totals may not add due to rounding
[2] Internal refugees
[3] Approximately 40% self-sufficient in food production

Table 13. Mozambique: Land use, 1983

	Area	Marketed Production	Agricultural Exports
	thousand ha	percent	percent
Family	1,929.7	51.2	19.4
State	118.6	43.4	65.6
Cooperatives	7.9	1.5	0.1
Private	41.2	3.8	14.9
Total	**2,097.5**	**100.0**	**100.0**

Source: Kyle, 1991

Table 14. Mozambique: Marketed Agricultural Production

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					10^3 metric tons					
Food Crops										
Maize	65.0	78.3	89.2	55.8	82.6	58.6	21.5	27.3	44.6	79.8
Rice	43.6	28.9	41.5	17.3	19.1	17.9	19.0	31.5	31.7	21.1
Sorghum	0.6	1.0	1.6	1.3	2.1	1.8	0.6	0.5	0.9	2.2
Beans	9.6	14.9	6.9	4.8	3.5	4.6	4.0	9.2	7.1	13.1
Cassava	8.8	10.9	9.5	8.5	6.9	6.4	6.0	7.3	12.3	11.8
Groundnuts	6.3	5.0	1.5	0.7	2.0	2.0	0.9	2.1	1.8	2.1
Vegetables	6.4	6.8	5.6	7.9	20.0	33.9	23.9	20.7	33.1	n.a.
Export Crops										
Cashew	87.6	90.1	57.0	18.1	25.3	30.4	40.1	37.5	43.6	51.3
Copra	37.1	54.4	36.6	30.7	24.8	24.0	28.6	25.5	22.8	13.3
Cottonseed	64.9	73.7	60.7	24.7	19.7	5.7	10.8	27.3	33.3	n.a.
Sisal	298.0	233.8	139.9	122.4	136.6	78.8	22.4	4.4	4.6	n.a.
Tea	90.2	99.2	109.7	51.1	59.8	25.0	6.4	1.8	0.0	n.a.
Other Crops										
Sunflower	11.8	12.1	10.8	7.3	5.0	5.7	1.0	1.1	1.0	1.0
Sesame	0.0	0.5	0.9	0.3	0.3	0.3	0.1	0.3	0.4	0.3
Mafurra	0.0	3.8	6.4	5.7	5.3	2.6	2.2	9.3	1.9	7.9
Tobacco	1.4	0.8	0.9	0.7	0.8	0.3	0.4	0.1	0.1	n.a.
Tomato	6.4	2.1	6.0	3.4	16.6	13.4	23.6	8.0	17.9	n.a.

Source: Informação Estatistica, CNP: 1980-87, Ministry of Agriculture, 1988-1989

Table 15. Mozambique: Nominal and Real Producer Prices, 1976-92

	Maize		Rice		Beans		Groundnuts		Cashews		Sunflower		Cotton		Copra	
	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real	Nominal	Real
1976	2.5	2.6	5.0	5.3	6.5	6.9	8.5	9.0	3.5	3.7	7.0	7.4	6.5	6.9	3.2	3.4
1977	3.2	3.3	6.2	6.4	10.0	10.4	10.0	10.4	3.5	3.6	8.5	8.8	6.5	6.8	4.7	4.9
1978	3.2	3.3	6.2	6.4	10.0	10.3	10.0	10.3	3.5	3.6	8.5	8.7	6.5	6.7	4.8	4.9
1979	3.2	3.2	6.2	6.3	11.0	11.1	10.0	10.1	3.5	3.5	8.5	8.6	6.5	6.6	4.9	4.9
1980	4.0	4.0	6.2	6.2	15.0	15.0	10.0	10.0	5.0	5.0	8.5	8.5	11.0	11.0	5.0	5.0
1981	4.0	3.9	6.2	6.0	15.0	14.5	13.5	13.0	5.0	4.8	8.5	8.2	11.0	10.6	5.0	4.8
1982	6.0	4.9	10.0	8.2	15.0	12.3	15.0	12.3	5.0	4.1	10.5	8.6	11.0	9.0	5.0	4.1
1983	6.0	4.4	10.0	7.3	15.0	11.0	15.0	11.0	5.0	3.7	10.5	7.7	12.5	9.1	5.0	3.7
1984	6.0	3.8	10.0	6.4	15.0	9.5	15.0	9.5	10.0	6.4	10.5	6.7	12.5	8.0	5.5	3.5
1985	13.0	5.6	16.0	6.9	23.5	10.1	20.0	8.6	10.0	4.3	15.0	6.5	16.0	6.9	5.5	2.4
1986	13.0	4.0	16.0	5.0	23.5	7.3	20.0	6.2	10.0	3.1	15.0	4.7	16.0	5.0	5.5	1.7
1987	40.0	4.7	48.0	5.7	100.0	11.8	100.0	11.8	60.0	7.1	50.0	5.9	65.0	7.7	18.0	2.1
1988	65.0	5.1	75.0	5.9	150.0	11.8	150.0	11.8	105.0	8.3	75.0	5.9	104.0	8.2	30.0	2.4
1989	110.0	6.2	145.0	8.1	230.0	12.9	255.0	14.3	165.0	9.3	130.0	7.3	175.0	9.0	100.0	5.6
1990	126.0	4.8	167.0	6.4	264.0	10.1	295.0	11.3	200.0	7.6	150.0	5.7	201.0	7.7	115.0	4.4
1991	190.0	5.4	256.0	7.2	400.0	11.3	440.0	12.4	380.0	10.7	250.0	7.1	320.0	9.0	165.0	4.7
1992	275.0	6.1	375.0	8.3	680.0	15.1	640.0	14.2	460.0	10.2	348.0	7.7	478.0	10.6	210.0	4.6

Source: Dorosh, Paul A. and R. Bernier, *Agricultural and Food Policy Issues in Mozambique: A Multi-Market Analysis*, CFNPP Working Paper No.

Table 16. Mozambique: Net Disbursement of Official Development Assistance

	1983	1984	1985	1986	1987	1988	1989	Per Capita Dollars, 1989	As % of GNP, 1989
Total	211	259	300	422	651	893	759	49.4	59.2
World Bank (IDA)	0	0	5	30	87	127	176		

Source: World Bank, *World Development Report 1991*, Washington, DC

Table 17. Mozambique: Growth Rates for the Agricultural Sector, 1989-95[a]

	1989	1990	1991	1992	1993	1994	1995[e]
				percentages			
Crops	15.9	-5.2	-0.1	-7.3	20.9	4.2	10.2
Livestock	9.5	-24.9	1.7	-34.0	-5.6	21.9	10.7
Sector	4.0	1.1	-4.0	-11.3	21.4	5.0	10.6

Source: National Plan Commission, Revised February 2, 1995.
[a] Production of the commercial sector plus marketed production of the family sector
[e] Estimated

Table 18. Mozambique: Commodity Composition of Exports, 1989-94

	1989	1990	1991	1992	1993	1994
			millions of U.S. dollars			
Total exports, f.o.b.	105.0	126.5	162.5	139.3	131.9	148.5
Prawns	39.3	43.4	60.8	54.5	88.8	82.7
Cashew nuts	20.1	14.3	16.0	17.6	8.2	3.3
Cotton	7.5	8.7	8.8	10.8	11.1	18.9
Tea	0.1	0.5	0.8	0.2	0.0	0.4
Sugar	5.3	7.9	9.8	6.7	0.0	11.0
Copra	1.9	2.6	4.7	4.2	2.5	3.4
Citrus	3.3	1.9	1.9	1.1	0.9	1.3
Petroleum	9.5	10.2	7.2	4.4	6.7	13.8
Coal	0.4	0.4	0.2	0.1	0.0	0.2
Miscellaneous	17.5	36.6	52.4	39.7	33.6	33.4

Source: Bank of Mozambique, Ministry of Commerce, Planning Commission, January 1995

Table 19. Mozambique: Real Gross Output Trends, 1981-94

	1987-89	1990	1991	1992	1993	1994
			percentages			
Agriculture	6.2	1.1	1.9	-7.5	21.3	5.0
Industry and Fishing	7.6	-8.3	-0.5	-1.5	-6.7	-3.3
Construction	-4.5	1.5	3.0	-1.8	7.0	7.5
Transport	2.1	19.3	13.2	13.6	16.7	5.8
Commerce	3.5	2.5	2.0	4.0	16.7	5.8
Gross Output[a]	**5.4**	**0.9**	**2.7**	**-2.7**	**14.3**	**7.7**

Source: World Bank
[a] Includes inputs (value added by sector not available)

Table 20. Mozambique: Price Regime of Major Agricultural Commodities, 1993

Minimum Producer Price	Maximum Consumer Price	Conditioned Price
Beans	Yellow maize	Rice
Groundnuts	Yellow maize flour	Milk
Sunflower	Wheat flour	Sugar
Cashew nuts	Bread	Beef
Cotton	Whole rice	Cooking oil
Mafurra		Tea
Paddy		Frozen fish
Tobacco		Fertilizers
White maize		Pesticides
		Agricultural implements

Source: Kyle, 1991
Note: Conditioned prices are set by firms on a cost basis and subject to ex-post review and approval.

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