Financial Times Survey

ANGOLA AND MOZAMBIQUE

Strict Lisbon control meets with active hostility

By BRIDGET BLOOM, Africa Correspondent

Two years have passed since the Financial Times last published a special survey on the Portuguese African territories of Angola and Mozambique, and the general observer of the African scene could well be forgiven if he thought that little had changed since then. In the two countries—as in the third colony of Guiné-Bissau—the war which started in Angola against African guerillas a decade ago is still being waged.

While neither Portugal nor the Africans have been able to win the war, Portugal is still apparently determined to fight, and the Africans are equally determined not to give up. Portugal remains in control of the greater part of each territory, while economically some progress, however slow, is still being made.

Neither does much appear to have changed in the relationships of the two "sides" with the outside world. Portugal remains a member of NATO but its policies continue to attract public opportunism. The Africans are still supported—albeit in an often desultory way—by the majority of independent African states, most other countries in the third world, and by the Soviet bloc and China. But is the picture of "no change" the true one?

Portugal's African wars—even though in great areas of each territory there is absolutely no sign of them—are central to an understanding of Angola and Mozambique; and in the wars, in the past two years, there has been little change. Portugal's commitment to the wars, in terms of men and of money, remains as great as ever: there are roughly 160,000 men under arms, and African defence takes roughly 45 per cent. of the budget — some £130m. — each year. It is true that there has probably been more local recruitment recently and that the territories themselves, or at least Angola, the richest of them, are contributing more from their own resources to the defence budget. But, despite recent claims to the contrary by Portuguese commanders in Mozambique in particular, it still cannot be said that Portugal is any nearer to "victory" than it was two or, for that matter, ten years ago.

Guerilla war

The claims of either side in what is essentially a guerilla war are virtually impossible to verify. The Portuguese army command in Mozambique, for example, has claimed over the past year, probably with justification, to have cleared many of the bases along the Tanzanian border of the largest Mozambique guerilla movement, Frelimo. But in the past few months guerilla activity has become serious enough in Tete province, site of the Cabora Bassa dam, for travel to take place only in convoy and for the Portuguese to have put the region under full military administration. In Angola there is a similar picture, in that the northern areas where fighting began in 1961 have remained quiet in the past two years. The greater threat is now—as it was two years ago—in the east.

It is difficult, at least from a military point of view, to see how this situation will change in the foreseeable future. There is little sign that the African movements are any more (or much less) divided than they have been in the past, while their external support would appear to be no greater than it was a couple of years ago. In Guiné, Amilcar Cabral's PAIGC is the only serious freedom movement and has recently made rocket attacks on the capital, Bissau, which might suggest increased external arms supplies (it is of interest here to note the statement made by Nigeria's General Gowon at the recent OAU summit to the effect that Nigeria would ensure that at least one Portuguese territory got its independence in the next two or three years).

But in Mozambique Frelimo and Coremo (much the smaller movement but possibly currently the most active) show no sign of uniting, indeed Frelimo has still not fully recovered from the death by bomb attack two years ago of its leader Edouardo Mondlane. There are still three, quite separate, movements in Angola.

On the other hand, the Portuguese administration's attempt to win over the African populations in disaffected areas has met with only sketchy success, while such is the nature of all three wars that the guerillas can, with only small numbers of men, continue to keep the much larger, more formally organised Portuguese forces fully occupied.

Better progress

The economies of both Angola and Mozambique are dealt with fully in the pages that follow. There is no doubt that the war has been important in both territories as a catalyst for economic development. Though still leaving a great deal to be desired, particularly in Mozambique, communications are infinitely better now than they were a decade ago, while considerable efforts to encourage agricultural development have been made, albeit primarily on a plantation or settlement basis which has not sufficiently benefited the ordinary African.

In the last few years Angola in particular, which is so much better endowed than Mozambique, has made considerable economic progress. Exports, largely due to increased shipments of oil and iron ore, have increased by more than 50 per cent. since 1968 and having run a trade deficit since 1966, Angola's trade last year went once more into surplus. Industry, though still on a fairly simple import substitution basis, has continued to grow and has benefited in both territories from the injection of foreign capital.

In Mozambique, the picture is less bright. The long sliver of territory, though much smaller than Angola, is difficult to administer and has twice Angola's population. There are few minerals, and the search for oil has so far produced nothing. A great deal of hope for future development is being placed on the effects of the giant Cabora Bassa dam, to the probable detriment of smaller schemes which could have a much more immediate effect on raising living standards.

It seems probable that Angola's growth rate will even out, at least in the immediate future, as iron ore shipments reach their peak and other schemes await realisation. But the economic prospects for both territories remain, in African terms, reasonably good.

What of their political prospects? It is in this direction that the last two years have produced—or at least have produced the potential for—the greatest change. It is now over three years since Dr. Caetano, with a reputation for being much more liberal, took over the Portuguese premiership from the autocratic Dr. Salazar. Last year, following Salazar's death, Dr. Caetano introduced his long-awaited changes in the constitutional status of Angola and Mozambique, which under the Salazarist regime had been considered and administered as integral parts of European Portugal.

It is still too early to judge the effects of these changes. As an article on page X makes clear, although the outline of the changes has been published (and has just received the approval of the National Assembly) the precise and all-important details will not appear for six months. The changes appear designed both to give the overseas provinces (now allowed to call themselves "states") greater representation in Lisbon as well as to increase the degree of local autonomy which they can enjoy. Provision is to be made, for example, for direct elections to the local legislatures, for increased control of local administration, and for greater local control of economic resources.

Basic concept

There has, as our Lisbon correspondent points out, been a great deal of hostility to the proposals from the Portuguese right-wing *ultras* and in defence of his changes Dr. Caetano has been at pains to emphasise that they will in no way affect the basic "Salazarist" concept of the unity of the (metropolitan and overseas) nation. It should be noted too that Lisbon is to retain control of defence, foreign affairs and matters of common interest and that it is given, in effect, the final say in all matters.

While, therefore, in the Portuguese context, Dr. Caetano might be considered to have moved a long way, to the critics of Portugal's policies in Africa he will no doubt be seen to have moved hardly at all. It is indeed difficult to see, even given a liberal interpretation of the changes, how they will radically alter the status of the majority of the African people in the three territories.

Portugal retains its insistence on multi-racialism; there are no, nor will there be, separate electoral rolls for black and white, and a few more Africans will no doubt qualify for the vote. This—and in these days of racialism in Southern Africa it is something—marks out the Portuguese from the Rhodesians or South Africans. But in practice both Angola and Mozambique are ruled by white minorities and the new proposals seem unlikely to alter this fact.

Neither do they seem likely to promote a situation where there could be a negotiated end to the wars. There are undoubtedly some Portuguese who would countenance negotiations. There is an increasing number of educated Portuguese, and even members of the Government, who see the country's future in Europe, and who would thus like the connection with Africa weakened to the point, for example, of a negotiated settlement between Portugal and Cabral's PAIGC in Guiné, a territory which is of little economic importance to Portugal and is costly to maintain. But there are others, and they are certainly still in the majority, who believe strongly in the domino theory and fear that if Guiné went, pressures for an independent Angola and Mozambique would become irresistible.

Whatever happens, the political future of Angola and Mozambique will be decided primarily in Portugal, although, as the two African territories are inevitably drawn closer to South Africa, the possibility of peaceful change recedes. The tragedy is that the Portuguese, who individual for individual are probably the least racially prejudiced of all Europeans, are unable or unwilling to use this rare quality to build genuinely multi-racial and free states.

BASIC STATISTICS

ANGOLA	
Area	481,351 sq. miles
Population (est.)	5.4m.
TRADE (1970)	
Imports	£153m.
Exports	£176m.
Imports from U.K.	£13.8m.
Exports to U.K.	£0.9m.
Currency	£1=69 escudos $1=28.8 escudos
MOZAMBIQUE	
Area	302,250 sq. miles
Population (est.)	8.0m.
TRADE (1970)	
Imports	£136m.
Exports	£65m.
Imports from U.K.	£13.1m.
Exports to U.K.	£5.9m.
Currency	£1=69 escudos $1=28.8 escudos

ANGOLA AND MOZAMBIQUE II

An impressive growth in mineral production during the past decade has helped Angola's economy to reduce its reliance on agriculture, writes TONY HAWKINS. He predicts a slight slowdown in the near future but long-term prospects remain good.

Angolan money on a tight rein

Exceptionally rapid export expansion — especially of mineral products—coupled with the general rise in spending, at least partly attributable to the war against the African insurgents, account for the remarkable decade of economic growth experienced by Angola during the 1960s. There are no up-to-date figures showing the growth of GNP, but the Bank of Angola estimated a few years ago that the province grew at an annual average rate of 3½ per cent. a year (current prices) between 1953 and 1963. Since then, the growth rate has stepped up considerably, averaging more than 8½ per cent. a year between 1966 and 1968.

If the export data are any guide—as they must surely be—growth in the last two years is unlikely to have slowed, but if anything to have risen still further. Exports increased 56 per cent. in the last two years and, in fact, more than doubled in the latter half of the 1960s.

As recently as 1967, coffee was still responsible for more than half of the province's total export earnings, while diamonds were responsible for close on 20 per cent. But by last year the emergence of oil and iron ore as major export commodities had reduced the role of coffee to providing less than one-third of the total, although coffee exports at £57m. were still some £4m. higher in 1970 than in 1967.

The value of diamond exports doubled over the same three-year period to £35m., but the really impressive expansion came from the mining sector, with oil exports rising from less than £1.7m. in 1967 to £20m. last year. Similarly, iron ore exports increased from less than £3.5m. in 1967 to £23m. last year.

Despite this impressive growth of mineral exports (by 1970 iron ore, oil and diamonds between them accounted for more foreign currency earnings than coffee), agriculture has not been neglected as a foreign exchange earner. Thus, cotton exports rose from £1.5m. in 1967 to over £6m. last year, and timber exports have almost doubled in the past few years. Other increases have been shown by products such as bananas and fish meal.

Capacity reached

The expansion of iron ore exports is expected to fall away in the immediate future (subject to price considerations) as capacity has been reached on the Mocamedes Railway along which the ore is exported. But oil exports are expected to increase this year and next before capacity is reached, on the basis of known oil deposits currently being exploited.

From 1961 until 1966, Angola ran a trade surplus, but heavy capital imports (required for infrastructural investment and capital equipment) led to significant deficits in the next two years. However, the upsurge in exports in the past two years has resulted in a return to a surplus situation — the 1970 trade surplus being easily the largest obtained over the past ten years.

Despite the healthy trade balance, Angola still faces an extremely difficult balance of payments situation. This is so because of the heavy deficit on invisibles, which more than outweighed the trade surplus in 1969. Some improvement seems certain to have taken place in 1970 (there are, as yet, no official figures), attributable to faster growth of exports than imports.

Portugal is easily the major trading partner, accounting for about 35 per cent. of both imports and exports. Although Angola has a favourable trade balance with Portugal, payments are in substantial deficit. The costs of the war, the fact that some agricultural exporters are entitled to hold their foreign exchange earnings outside Angola and the added provision whereby some major companies who have special state contracts do not have to repatriate their full foreign currency earnings all help to account for the strained payments position.

This tight foreign currency position, combined with the firm rein that is kept on domestic money supply, has meant that the Angolan escudo is not freely convertible with its Lisbon counterpart at par. Approved (that is normal) trade deals are carried out on the basis of parity between the two currencies, but the private individual wishing to transfer funds from Angola to Portugal has to wait six to nine months, or indulge in semi-black market dealing involving the payment of a premium—formerly as high as 25 per cent. but now nearer 10 per cent.—in order to shift his capital.

The main imports are motor vehicles, heavy capital equipment and iron and steel products, as well as consumer items such as clothing, textiles and wines and spirits.

Towards the end of the last year, the Angolan authorities moved to protect the balance of payments through import restrictions — including restrictions on goods from Portugal. The curbs on textiles and wine are said in Luanda to have had a significant adverse effect on industry in Portugal itself.

While the major growth point has been the rise in both value and volume of exports, two other growth factors have played a significant part. Investment in infrastructure has been stepped up, partly in response to the threat. The Intermediate Development Plan (1965-67) involved investment of £100m. over the three year period, with priority being given to communications, which absorbed 36 per cent. of the total while education's share was 17 per cent. Between 1963 and 1967, paved roads were built at the rate of 345 miles a year, and in the last few years this rate has been increased. The current 1968-73 Development Plan, which envisages spending of nearly £400m., shows something of a switch in objectives, the major aims being to accelerate development of the mining industry, to develop fishing and to improve productivity in agriculture, with particular emphasis being placed upon the cattle ranching aspect.

A third growth point has been the expansion of secondary industry—in part stimulated by export growth and infrastructural investment. Industrial growth has indeed been extremely impressive since early in the 1960s when Angola ceased to be regarded primarily as a private market for Portuguese exports. Industrial expansion averaged a 17 per cent. average growth rate between 1964 and 1969, during which period output of manufacturing industry trebled. As is usually the case in a developing economy, the two main fields of industrial growth have been the processing of agricultural produce and the establishment of import replacement industry, which itself should receive a boost from the measures taken late last year to protect the external payments position.

Much of the stimulus to growth in the 1960s owes its origin to a more liberal policy on the part of the Portuguese authorities to foreign investment. Because of this liberalisation of the foreign investment laws early in the decade, it is now estimated that foreign capital is responsible for about a quarter of Angolan investment. Thus American capital has spearheaded the advance in the oil industry, South African mining houses (De Beers, General Mining, JCI) are involved in the minerals hunt, while applicants for oil concessions in the southern half of the country include several of the world's major oil groups. Similarly, British, German and Japanese groups are interested in the Cassala iron ore project and there has been a certain amount of foreign investment in manufacturing.

Recent years have also seen considerable development of the financial infrastructure. Until 1965 there were only two banks operating in Angola, but since then another three have been established, one of which was a joint venture with the Standard Bank of South Africa. There has been a rapid growth of branches, and in 1969 alone more than 50 new branches were opened in new areas, as well as extra branches in existing centres.

In order to meet the demand for medium-term credit, legislation was recently passed in Portugal whereby banks are allowed to engage in lending other than purely short term. At the same time, the former Post Office Savings Bank has been converted into the Angolan Credit Institute, which will act as a kind of development bank or industrial development agency.

Looking to the immediate future, some slowdown in the rate of growth, especially of exports, seems probable. Oil exports should continue to expand over the next two years, but iron ore has reached capacity for the time being and coffee and diamonds are both subject to the vagaries of world demand and output conditions. Angolan officials hold out high hopes for the future of the cattle industry and further growth in fishing is also confidently expected. There are hopes too of raising foreign currency earnings from tourism, and four major hotel projects are currently under way in Luanda itself, so that within two years the hotel accommodation problem will have been solved. After a time lapse, further major developments—especially in oil and iron ore—are probable, and the growth of secondary industry is likely to be helped by import restrictions.

ANGOLA AND MOZAMBIQUE III

Mozambique's economy still rests fairly firmly on an agricultural base, a state of affairs which is likely to continue unless substantial mineral discoveries are made (as in Angola). The Cabora Bassa project, however, writes TONY HAWKINS, may help the economy to turn the corner. Below, MICHAEL CHAPMAN describes the transport and communications network in the two territories.

Mozambique economy faces an uphill struggle

In comparison with Angola, Mozambique is very much the poor relation economically, though, it too, in recent years, has managed some good growth rates. However, while Angola has, so to speak, turned the economic corner mainly because of the mineral discoveries which supplement agriculture and stimulate industry, Mozambique has still to make this kind of breakthrough. The hope—indeed the plan—is that this will come about mainly as a result of the ambitious Cabora Bassa project and the interrelated development of the Zambesi Valley.

Unless or until Cabora Bassa (or alternatively major mineral discoveries as in Angola) provides the breakthrough, the economy will continue to depend largely on its agriculture, tourism and transport services.

Growth rates in recent years have been impressive. The annual growth rate from 1964 to 1968 averaged 9 per cent. with growth in 1968 falling not far short of 13 per cent. Excluding the subsistence sector, the monetised sector has been expanding at an average rate of 14 per cent. since the middle-sixties.

Primary sector

About 45 per cent. of GDP is derived from the primary sector (essentially agriculture), and manufacturing's contribution is just over 14 per cent., leaving the balance to be provided by the services sector. There are two main aspects of the services sector: tourism—mainly Rhodesians to Beira and South Africans visiting Lourenco Marques—and transport. The ports of Lourenco Marques, Beira and, more recently, Nacala, handle a considerable volume of traffic for the inland territories, especially Swaziland, Rhodesia, Zambia and Malawi.

Like Angola, Mozambique has a payments deficit with Portugal and a surplus with the rest of the world, but unlike its more prosperous counterpart it does not have a healthy trade surplus. Indeed, its visible trade is in deficit both with Portugal and with foreign countries and there appears to be little likelihood of any change for the better—again, unless or until major mineral deposits can be uncovered and exploited.

Both imports and exports doubled between 1960 and 1969 but the visible trade deficit more than doubled in the decade to close on £50m. The pace of deterioration in the trade gap has accelerated in recent years. It widened from £33m. in 1968 to almost £50m. in 1969.

The three major exports are cashew and cashew products, cotton and sugar which between them accounted for more than 50 per cent. of the total in 1969. Indeed, all the major exports are farm products susceptible to unfavourable world price movements on the one hand, and adverse climatic conditions on the other.

Despite this potentially difficult structural situation, exports did surge forward in 1968 (by 26 per cent.) and again in 1970 by 10 per cent. But import growth, necessitated by the growing need for capital equipment, was even greater.

Major imports are capital equipment and machinery plus consumer durables, notably motor cars and petroleum oils. Like Angola, the imports of cotton piece goods and clothing are relatively high.

With this heavy and widening visible trade deficit, the balance of payments position is one of considerable strain. Between 1968 and 1969 the deficit quadrupled, mainly as a consequence of the continuing deterioration in the trade balance. The major increases on the balance of payments are transport, other services and earnings such as remittances by migrant workers employed in neighbouring territories and tourism. Both private transfers and private capital movements are heavily adverse which doesn't help.

The payments deficit for 1970 is estimated at £23m. (against £19m. in 1969) and in the first quarter of 1971, there was, if anything, a further deterioration.

Since 1966 service earnings have been adversely affected by the sanctions campaign against Rhodesia which has reduced Rhodesian and Zambian traffic passing through Beira and Lourenco Marques, and closure of the oil pipeline from Beira to Umtali, as a consequence of the oil embargo against Rhodesia.

Tourism has however been an important growth point so far as the external payments position is concerned. Tourist revenues have been rising at an annual average rate of about 12 per cent. a year and are expected to be further boosted once the all-weather road from Lourenço Marques to Beira is completed.

Payments deficit

The severe external payments deficit with Portugal (from whom Mozambique obtains about one-third of its imports) has led to long delays in payments to Portuguese suppliers. Portuguese exporters have to wait a year and more to get payment for goods supplied to Mozambique, though recent changes on the banking side and also the introduction of quotas on some imports should both help curb the payments deficit and speed up the transfer of money to Portugal.

Major trading partners are Portugal itself, responsible for about one-third of total imports and buying more than 38 per cent. of exports, South Africa and the United States. South Africa supplies more than 15 per cent. of imports and takes about 10 per cent. of Mozambique exports while the U.S. supplies just under 10 per cent. of imports and has a 9 per cent. share of the export market.

Britain has a heavily favourable trade balance with Mozambique supplying more than 10 per cent. of imports last year worth £12m. and buying less than 10 per cent. of exports for less than £5.9m. British motor manufacturers are by far the largest suppliers of commercial vehicles to the territory and one of the major suppliers of passenger vehicles. In recent years, transport equipment and machinery imports from Britain have grown rapidly.

In terms of the Third Development Plan (1968-73) spending in Mozambique will total about £220m. (excluding Cabora Bassa). Transport followed by industry (including mining) with 34 per cent. and agriculture (14 per cent.) are the main sectors. However, the planned industrial development is dependent on the private sector supplying the necessary capital.

Heavy strain

In recent years, there has been a growing inflow of capital with South African mining houses such as Anglo-American, Johannesburg Consolidated Investments and Messina Transvaal obtaining concessions. The availability of cheap power from Cabora Bassa in the later 1970s raises the hope that it will prove possible to develop the mineral potential of the province. With Cabora Bassa expected to supply some of the cheapest power in the world, known mineral deposits will become viable for exploitation and there could also be opportunities for processing of ores at source.

In the immediate future the massive investment in Cabora Bassa is going to impose a heavy strain on an already extremely unsatisfactory balance of payments situation. Import restrictions announced towards the end of last year should help to curb the deficit by cutting back consumer imports. At the same time, these restrictions should give a shot-in-the-arm to local manufacturing industry.

As conditions are at present, it looks as though Mozambique is going to have to rely on Portugal for some time to come to help out with external payments.

An end to the sanctions war against Rhodesia would help improve transport earnings and the province is actively fostering tourism in an effort to boost foreign currency earnings from this quarter. As it is, tourist traffic has already trebled over the past five years and once the tarred road is through from Lourenço Marques to Beira the hope is that South African, Rhodesian, Malawian and Zambian tourists will consider making round trips by car visiting the principal game reserve at Gorongosa as well as the holiday resorts at Beira and Lourenco Marques and between these two major centres. Hotel expansion is under way both at Beira and Lourenço Marques with South African capital being involved in one major project at L.M.

But pending the breakthrough on the mining front which it is hoped will flow from the Cabora-Bassa development, Mozambique seems set for much more of an uphill struggle along the road to economic maturity than Angola for whom the immediate future looks comfortably encouraging.

Transport a vital money earner

When the Treaty of Berlin in 1885 split up the African continent between the colonial powers, Portugal lost the chance of realising her ambition to control a strip of Africa between the Atlantic and Indian Oceans. However, both Angola and Mozambique were left in a good position, as they retained on both sides a coastline which controlled access to central Africa, and with this coastline some of the best African harbours.

To-day, Zambia, Malawi, Rhodesia, Swaziland, South Africa and the Congo still rely on Beira, Lourenço Marques and Nacala in Mozambique, and on Lobito in Angola, to export their production. While the situation will obviously change in the near future, with the Chinese building the Tan-Zam line from the Zambian copper belt to Dar-es-Salaam, this does not mean that overnight the Zambians will be able to do without the Portuguese ports. By the time the Tan-Zam is completely ready, Zambia's needs may already exceed the line's capacity, and it would be foolish for the Kuanda Government to rely exclusively on one single route for the country's imports and exports. Katanga will still need the port of Lobito, Swaziland, Rhodesia and South Africa will still need Lourenço Marques, Rhodesia and Malawi will still need Beira and, as Malawi develops, so it will rely more and more on the new harbour at Nacala.

Rail systems

Mozambique's ports and railways have been the territory's biggest revenue earners since the days when the ports of Lourenço Marques and Beira, and their rail systems, were operated by British-financed companies. Lourenço Marques in 1970 handled over 13m. tons of cargo, including nearly 50 per cent. of the traffic to and from the Transvaal, as well as the whole of Swaziland's iron ore and sugar, not to mention a good proportion of the traffic to and from Rhodesia. However, the Rhodesian situation has had a disastrous effect on the Mozambique economy, and particularly on the port of Beira, which is still blockaded by the Royal Navy. In fact, Beira has probably suffered more than Rhodesia itself. While the Rhodesian economy has been able to diversify considerably in the years since UDI and the start of the blockade, Beira has seen the tonnage handled by the harbour drop from over 4.5m. tons in 1965 to only just over 3m. tons in 1970.

TONNAGES HANDLED AT BEIRA

1964	3,731,000
1965	4,630,000
1966	3,485,000
1967	3,748,000
1968	3,779,000
1969	3,148,000
1970	3,020,000

Mozambicans are understandably bitter about the blockade—Rhodesia is still able to get virtually everything it needs, including the petrol which was the original object of the blockade, while Mozambique really suffers the effects of the sanctions without being able to find alternative sources of revenue.

The Mozambique Railways are all Government-owned, and the map shows that they were built to serve the inland neighbours—there is no north-south link. However, there is a chance that Beira will recapture some of its lost tonnage as a result of the development which will follow in the wake of the Cabora Bassa project, mainly minerals. Much faith is placed in the future of Nacala. The railway running inland to Nampula and Vila Cabral will do much to open up and develop the hitherto dormant regions of northern Mozambique and the link to Malawi, finished last year, can easily be extended through Malawi and the Cabora Bassa area, while a further link through Lilongwe in Malawi could have been built through to Zambia's copper belt more cheaply than the Tan-Zam line, but political considerations intervened.

Shortest routes

The port of Lobito on the Atlantic coast is still the shortest route from central Africa to the European or American markets. Manganese and zinc come along the Benguela railway from Katanga, but the richest freight from Katanga, copper, travels by the arduous 'route nationale' from Katanga to Port Franqui by rail, then by barge to Kinshasa where it is again trans-shipped to the railway to Matadi, the Congo's deep-water port on the Congo river.

The Benguela Railway, a private Portuguese company financed by Tanganyika concessions, is Angola's most important line—so important that the Zambian Government expelled the leader of one of the Angolan terrorist movements whose speciality was to attack the line. As a result, there have been no incidents along the line for two years. Since UDI the line has carried between 20 per cent. and 30 per cent. of Zambia's copper for shipment from Lobito, and has also carried much of Zambia's imports of general cargo, especially coal. Despite the threat of the Tan-Zam line, the company is engaged on a £10m. project, the Cubal Variant, to build a new line from the coast up the Angolan escarpment.

The new line, with lower gradients and wider curves, will double the line's capacity. The new project will, however, diminish some of the romantic aura that surrounds this pioneering route into Central Africa—diesel locomotives will be used on the new section instead of the traditional wood-burning Beyer-Garrats and mountain class engines. Not only is the Benguela Railway unusual in that it uses wood for fuel—it also actually makes money for the shareholders of tanks.

In addition to the narrow gauge line between Gabela and Porto Amboim, serving a rich coffee area, also privately-owned, Angola has two other lines, run by the Ports and Railways Administration. The line from Luanda to Malanje serves a mainly agricultural area and carries small quantities of iron ore. It may be developed in the near future if the Mount Cassala iron ore project goes ahead. The port of Luanda ships most of the Angolan coffee crop and is the port of entry for most imports. In the south, the Mossamedes line is Angola's busiest. Originally built to serve the agricultural region around Sa da Bandeira and to open up the south east of Angola, around Serpa Pinto, it now carries over 6m. tons of iron ore a year from the Cassinga mines to the port of Mossamedes, which has facilities to load the ore at a rate of over 4,000 tons an hour and can handle ore ships of up to 200,000 tons. The port facilities, locomotives and rolling stock and improvements to the line represent the greatest part of the £25m. to £30m. invested in the Cassinga project.

The remaining Angolan ports handle mainly coastal traffic, except for Cabinda, which this year will ship around 5m. tons of crude oil from Gulf's offshore fields. The tankers tie up at a loading point eight miles offshore, while the harbour at Cabinda itself, because of the shallow water, is only a lighterage port. However, plans are in hand to built a sea wall and a deep-water port.

In 1960, Angola had 310 kilometres of paved highway; there are now over 5,000 km. The roads do not merely have a strategic importance but have been the most important single factor in Angola's internal development. Distribution and marketing systems which were previously impossible are now a reality, trips which previously

Continued on next page.

ANGOLA AND MOZAMBIQUE IV

Agriculture remains the basis of Angola's economy and is still responsible for most of the country's exports, writes TONY HAWKINS. Current expansion is mainly aimed at increasing the size and quality of the livestock sector.

Agriculture needs more capital

Despite the recent rapid expansion of the mining industry agriculture is still easily the major economic activity, with an estimated 90 per cent. of the population involved in some form of agricultural activity, predominantly subsistence farming. Agriculture is still responsible for more than half the territory's exports and coffee remains the largest single export by a comfortable margin.

By world, and even by African, standards, the territory is under-populated. Although bigger in area than South Africa it supports a population of less than 6m. compared with more than 20m. in the Republic. This low population density, especially in the south and east where there are high hopes of developing a major cattle ranching industry, means that the land tenure problem is virtually non-existent, and, more important, that there is scope for considerable development by way of settler schemes.

Angola is the world's third largest coffee producer, almost all of its output being of the Robusta type (an estimated 98 per cent. of total coffee production). In terms of the International Coffee Agreement further plantings of robusta are restricted, but expansion is still taking place through the planting of Arabica on higher ground. In 1967, just over 225,000 tons of coffee were produced, but the subsequent introduction of quotas in line with international agreements has seen production stabilise around the 200,000 tons level.

Large plantations

The major part of the crop is produced by the large and medium sized plantations owned by companies (some 2,350 company coffee plantations exist) and individuals. However, a large part of production is still in the hands of peasant farmers and there are an estimated 58,000 smallholdings.

The main coffee-growing plantations are in the north around Carmona, which was the scene of the 1961 terrorist outbreak. Terrorist activity has been singularly unsuccessful in adversely affecting output, which rose 36 per cent. between 1963 and 1966.

The U.S. is the main buyer of Angolan coffee, taking 41 per cent. in 1968, although this dropped sharply in the subsequent year, but it has since recovered. The Netherlands takes more than one fifth of the crop and Angola supplies about two-thirds of South Africa's coffee requirements.

Sisal was for many years the territory's third export—after coffee and diamonds—but it has been overtaken not only by mineral products but also by cotton, fish meal, timber and maize.

The main reason for this is the steady decline in prices, which by the end of the 1960s were as low as in the depression days of the early 1930s. Once again exports are limited by international quota, and although the decline in the volume of output has not been too severe—62,000 tons in 1963 to 50,000 in 1961—growers say that they have been selling at cost price, if not lower. As a result, the value of exports has declined sharply to U.S.$6.5m. in 1969 and growers have been switching to other crops such as cotton, pineapples, sunflower, and so on.

Three levels

As in most African territories, agriculture operates at three distinct levels. One the one hand there are the major plantations, such as the 40,000 acre coffee plantation (probably the world's largest) owned by companies and individuals. At the other extreme, there is the subsistence cultivator who relies on cassava in the north and east, maize in the central highlands and cattle products in the south. In the middle there are the Government-sponsored settlement schemes—the Colonatos—some of which have attracted ex-servicemen and immigrants from Portugal. More than 50 such schemes are either planned or in operation. Land is provided free to those who can manage improvements within a five-year period. The pilot scheme at Cela, concentrating on dairying and market gardening, has worked extremely well.

As the importance of sisal has diminished, so that of cotton has grown, with the result that exports virtually doubled in 1969 to £5m. The number of areas in which the crop is being produced has grown and the tonnage of unginned cotton trebled between 1965 and 1969. Traditional African cotton production declined during the 1960s, so that the rise in output is attributable to the so-called "organised producers" who are responsible for some 80 per cent. of the total. The entire crop is sold to Portugal, except for the offtake by the Angolan textile industry.

The build-up of agricultural infrastructure (roads, silos, milling plants, etc.) the provision of technical extension services to farmers and the switching-out of sisal production has significantly boosted maize output in recent years. Higher prices were paid for the 1969 crop as an incentive to farmers to grow more. Output and exports vary with climatic conditions, but the 1969 crop of 196,000 tons sold to the Maize Association was easily the largest in recent years and represented an increase of 37 per cent. over the average for the previous five years. For parts of the country, especially in the Central Highlands, it is the staple crop. After the good season in 1968-69 maize exports were an important contributor to foreign exchange earnings worth about £4.7m.

Minor crops

Apart from these four major crops there is a host of minor crops, some of which are growing in importance quite rapidly. For instance, a growing output of bananas is being exported. Just over 3,000 tons were exported in 1964, but by 1969 this had increased more than sixfold to over 21,000 tons, despite transport and marketing problems.

Although, at present, the size of the livestock sector is still small, the hope (and indeed the plan) is for a massive expansion in beef output, which would take it to second place behind coffee as an agricultural export. In 1960, the national herd was put at 2.5m. head, though a very large number (about 80 per cent.) of these were owned mainly by semi-nomadic peasants in the south of Angola. Unfortunately, most of these cattle are low-breed, low-quality beasts, though a few progressive Portuguese farmers with large estates have managed to secure some improvement in the African stock.

A recent BNEC mission to Angola reported that it was convinced that there was a "tremendous potential" for beef production, both for internal consumption and export. There is an assured market based on existing outlets, but in the longer term new export opportunities will have to be sought.

Steps to boost beef output include the construction of a second abattoir at Nova Lisboa (there is also one at Sa da Bandeira) which, at present rates of beef industry expansion, would provide excess capacity for some time to come.

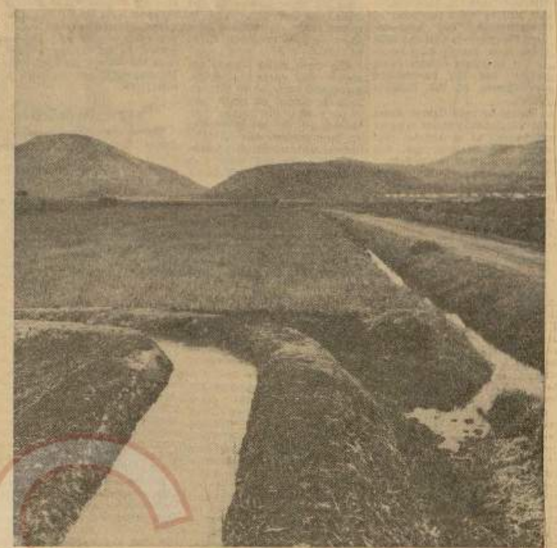
There is also scope for expanding milk and dairy products output. Milk output has already risen substantially from less than 10m. tons in 1966 to 16.5m. tons in 1969, but local production still falls short of domestic consumption so that powdered milk is used. About 60 per cent. of the milk output comes from the settlement scheme at Cela, where a Government-built dairy has been taken over by private enterprise, while a further dairy is also being built at Nova Lisboa.

Short supply

The essential problem in the livestock industry as a whole, is that, while land is readily available, the other inputs—capital and know-how—are in short supply and there is not an adequate system of incentives necessary to ensure improvement.

Just over 8 per cent. of the Third Development Plan (1968-73) is devoted to agriculture, representing spending of some £30m., more than half of which is earmarked for irrigation and resettlement schemes.

Agriculture's importance in Angola is already on the decline as the economy becomes more sophisticated. Between 1964 and 1969, the share of farm products in total exports fell from 60 to 51 per cent. reflecting the growing importance of mineral exports. Despite this, agriculture will still continue to play a major role, especially if the cattle industry develops as is hoped.



RIGHT
A coffee plantation in Loje
BELOW
Rice fields near Cela

Transport — (Cont'd.)

Continued from previous page

took days now take hours, and by the end of this year all the district capitals will be interconnected. Already the road to the South-West African border is open, and the roadbuilding programme continues at a rate of about 1,000 km a year. In Mozambique the picture is different but improving. Like the railways, the roads tend to run inland from the coast, from the main ports. Work started on the main north-south link (Lourenço Marques — Beira — Nampula) only a few years ago when such a link became a pressing need. The road bridges over the Limpopo and Save rivers are ready, and the entire 1,200 km between Lourenço Marques and Beira will be paved by the end of this year. The road from Beira to Tete and on to the Cabora Bassa site is almost ready and paved, and work has started to join Nampula to the road from Beira to the Rhodesian border.

Although Angola's road building programme is ahead of Mozambique, then Mozambique is certainly ahead in terms of internal air transport. The local airline, Deta, has two Boeing 737s, with another on order, and these now serve not only the main trunk routes (Lourenço Marques-Beira-Nampula) and the main tourist routes (Johannesburg, Durban and Salisbury), but also some of the smaller towns in the north, such as Porto Amelia, Vila Cabral, Nacala and Tete. Fokker F-27s are used for the subsidiary routes, and the air companies also operate feeder services, as in Angola. Angola does not attract as many tourists as Mozambique, and the traffic pattern is also different. Instead of having one main trunk route, the Angolan airline's services radiate from the two main centres, Luanda and Nova Lisboa, over shorter routes which require a greater density of services rather than a large capacity. Consequently, the Angolan line is increasing its fleet of F-27s although it will probably have to buy jets in the not too distant future for its maximum density routes. Both the territories are well served by air charter operators in the main centres.

The Portuguese airline, TAP, started jet services to Luanda and Beira seven years ago, with two services a week. At the height of the summer season this year the line has been running 22 flights from Lisbon, eight of which go on to Mozambique and three to Johannesburg.

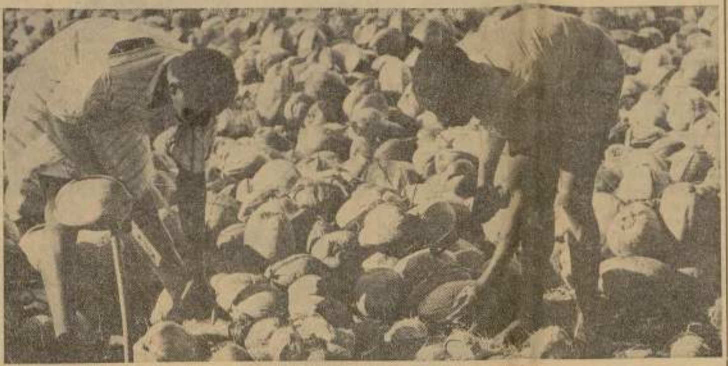
Both territories have their own coastal shipping companies. One of the Angolan companies is soon to start operating services to Lisbon and later to Mozambique. Portuguese merchant navy maintains efficient services from Lisbon and other European ports, and most of the companies are purchasing new ships, especially freighters with cold storage facilities to handle the territories' increasing exports of fish, fruit and meat.

There is no doubt that the intensive improvements over the past ten years to the internal communications systems have done a great deal to help the general development of both territories, and if Angola is at present ahead of Mozambique in terms of economic development, the fact that Angola got its programme under way a few years earlier has much to do with it.

ANGOLA AND MOZAMBIQUE V

On this page TONY HAWKINS discusses the performance and potential of Mozambique's agriculture and nascent industrial sector.

Scope for massive growth in agricultural output



Removing the outer husks from coconuts on the Boror Estate in Mozambique.

With little mineral production as yet, and with manufacturing contributing only about 4 per cent. of GDP, Mozambique is heavily, indeed excessively, dependent upon agriculture. The importance of agriculture lies not only in the fact that about 88 per cent. of the population is dependent upon farming but also in the tendency to produce industrial raw materials which require further processing and thereby create opportunities for forward linkage. Furthermore, the major exports are agricultural products, which account for more than two-thirds of export earnings.

As with all the economies of southern Africa, the agricultural sector is essentially dualistic. It is estimated that about 40 per cent. of the area under cultivation or livestock is in the hands of the traditional subsistence farmers who concentrate on the production of cassava, maize, cotton, cashew nuts, sorghum and groundnuts, while the remaining 60 per cent. is held by larger-scale (almost entirely European-owned) farm units producing plantation crops like sugar, rice, copra (also produced in the traditional sector), sisal and tea.

Small plots

There is a marked difference in techniques and scale of operations between the two sectors. The 1½m. peasant African undertakings own plots with an average size of just under 1.5 hectares, while the 4,000 larger-scale European-type operations have an average size of 570 hectares.

Cotton and cashew are the main foreign currency earners, responsible between them for not far short of 40 per cent. of exports. Cashew production last year was valued at £14m.—an increase of 41 per cent. over the past five years. Most of this was exported, with the U.S. being the main market. Cashew nuts grow wild in the coastal zone, and planned husbandry could lead to a 40 per cent. rise in output.

Cotton is predominantly a peasant crop grown by an estimated 530,000 farmers, who produced 139,000 tons last year compared with less than 90,000 tons five years earlier. It is mainly grown for export.

A major growth point in recent years has been sugar production, which in value terms is now the most important crop; 1970 output is valued at over £14½m., compared with £14m. for cashew. Output of 286,000 tons last year is expected to rise steadily to the 350,000 mark by 1974. Last year about 180,000 tons were exported, valued at £8m., almost all of it to Portugal for refining. As such it is the province's third largest export. The sugar terminal at Lourenço Marques can handle 2.4m. tons of sugar a year and handles Swazi and Rhodesian production as well.

Since 1966, Mozambique has been a maize exporter in normal years, only having to call upon imports after a drought season. In a good year about a quarter of the production made available stems from commercial agriculture with the bulk being produced in the traditional economy.

As in Angola, sisal production is on the decline, but tea, rice and copra are expanding crops, as is tobacco though it is still in its relative infancy by Central African standards. Tea normally holds fourth or fifth place in the province's exports and in the last five years output has risen 60 per cent.

The fact that the province produces a fair range of agricultural exports does help to stabilise export earnings, but it is still clearly vulnerable to the twin dangers of adverse climatic conditions and unfavourable world commodity price trends.

Scope for expansion

With only about 6 per cent. of the land area currently under crops, livestock or forestry, there is scope for massive expansion of output, and one obvious hope is that the river control flowing from the Cabora project will lead to a tremendous upsurge in production in the Zambezi valley. The overall Cabora Bassa plan also provides for the building of irrigation dams on tributaries of the Zambezi. A total of some 3.7m. acres will be irrigated and massive forestry projects should also develop in the area.

In the three northern districts of the province the population is thinly spread, and in recent years the authorities have been carrying out an agricultural regrouping scheme so that the inhabitants have access to better school and health facilities and agricultural extension services. In the south different types of settlement schemes are required because of the need for irrigation.

A major agricultural development project in the south is the Massingir dam on the Elephant river in the Limpopo valley not far from the South African border. The dam is due for completion towards the end of 1975, and it has been estimated by the Banco Nacional Ultramarino that it will mean a rise in gross output at present prices of some £10m.

The national herd consists mainly of African-owned cattle, but the Government has established breeding centres aimed at improving the quality of meat available for slaughter. About 40 per cent. of the cattle are, in fact, owned by the commercial farmers, and the growth here has been relatively rapid against the background of stagnation of the traditionally owned herd. Since 1965, the advanced sector has increased its cattle by more than 20 per cent. compared with only 4 per cent. in the subsistence sector.

The country is, in several respects, ideal for cattle ranching, but the principal drawbacks are that over large areas of the country tsetse prohibits the rearing of domestic cattle and—as in Angola—the low meat price is a disincentive to investment in expensive high-quality stock. However, in the southern districts, free of tsetse, an important meat exporting industry could develop, and some estimates suggest that the national herd could increase tenfold to some 12m. head, given favourable conditions.

Weaving in the Soalpo mills in Vila Perry, Mozambique

Rapid industrial development

With agriculture producing industrial raw materials—copra, cotton, cashew nuts—the major role of the manufacturing sector is the processing of these products for export. More than half the industrial labour force of about 70,000 people is involved in these export-orientated industries. These industries are responsible for 50 per cent. of total industrial output, valued at over £100m. in 1969, exporting an estimated three-quarters of their total production. The other half of industrial production is intended for domestic consumption.

The main industries in the first group of exporters are those involved in the processing and refining of sugar, vegetable oils, tea, cashew nuts, cotton, sisal and timber. The value of agricultural inputs amount to about 45 per cent. of the gross value of industrial production by this export-orientated group of industries.

Inevitably, the main sector is food manufacturing, which in 1969 was responsible for 37 per cent. of total output. Sugar plays the dominant role, accounting for about one-third of output, followed by cashew nut kernels (13 per cent.) and tea (12 per cent.).

Textile output

Textiles, contributing 19 per cent. to total output in 1969, follow the food sector, and the third major industrial activity is oil refining. The Sonarep refinery at Lourenço Marques has a capacity of 800,000 tons a year, and oil products are exported to Portugal, South Africa and Rhodesia. What the Banco Nacional Ultramarino calls "a remarkable increase" in production capacity is planned, and the industry will be in a position to exploit local raw materials.

Although the industrial sector is still small—contributing about 14 per cent. to GDP—the rate of expansion has been extremely impressive. By 1969, industrial output had trebled from its 1961 level primarily because of the expansion in the food and textiles sectors, which has been particularly rapid in the last few years. Last year 283 new manufacturing industries came on stream compared with 223 the year before and 173 in 1968.

New brewery

Recent industrial investment includes a new brewery at Nampula the fourth in the province—the establishment of a new fruit and vegetable canning plant near Beira; a plant to product razor blades; and a new textile plant near Lourenço Marques representing an investment of £4m., which involves French technical assistance.

Plans are in hand to establish a motor-assembly plant (for Fiats) at Beira, and output of construction materials, such as cement, is being given a tremendous boost by the Cabora Bassa project.

The fishing industry remains underdeveloped, and together with import substitution and those industries supplying inputs to Cabora Bassa offers a major growth point for the future. Mozambique is still not able to supply its own fish requirements, and in 1968 more than 11,000 tons of fresh and preserved fish were imported. Expansion has been taking place, however, in recent years and between 1967 and 1969 the total tunnage was up by 50 per cent. Crustaceans and molluscs are exported to several countries, the U.S. and South Africa being the major markets.

A recent BNEC mission pointed to "considerable untapped potential" in the three main shrimp-fishing shallow coastal strips—one around Quelimane, one stretching 100 miles to the south from Beira and one north of Lourenço Marques.

The mission estimated that there was a need for 50 to 100 boats (of about 23 metres) over the next three to five years compared with 20 operating at present. At the same time investment in shore refrigeration facilities would be required, especially as it is thought that much of the harvest would be exported to the U.S. The mission also recommended that Mozambique investigated developing its own boat-building industry to meet this demand and also to save foreign currency and provide extra employment.

ANGOLA AND MOZAMBIQUE VI

Cambembe Dam.

Industrial development in Angola has passed its classical "take-off". TONY HAWKINS here describes its progress as a processor of agricultural products and producer of import substitutes.

Strong growth in Angola's industry

Reduced protection of Portuguese industry, rapid growth of the mining sector and the general rise in public spending on infrastructure arising from the war have all played an important part in stimulating an extremely rapid expansion of industrial activity in Angola. Output trebled between 1962 and 1969—described as the period of "take-off" for Angolan industry—growing at an average annual rate of 17 per cent.

As in most developing economies, the prime stimulus comes from a combination of the further processing of agricultural produce on the one hand and import substitution on the other. At the present time, there is a little export of manufactures.

Investment in manufacturing since 1964 has totalled some £30m., and in 1968 and 1969 more than 400 authorisations were granted for the installation and alteration of manufacturing activities. Foodstuffs are the largest sector in manufacturing responsible for some 30 per cent. of 1969 output. The major activities here include meat and fish canning, dairying, flour milling, sugar refining, the production of vegetabe oils, and so on.

Whisky production

Beverages are responsible for more than 11 per cent. of the total with the territory breweries producing more than 60m. litres of beer in 1969 against only 1m. in 1952. There is growing production of Angolan whisky by a concern with Scottish interests, and the fact that wine imports are now being restricted suggests scope for growth here too.

Rather surprisingly for a developing country, the textile industry only fills fourth place (after chemicals) and the growth rate of this industry has been significantly slower than that of other sectors. With textiles the fourth largest import accounting for 13 per cent. of the total (some are even brought by road right across the continent from Mozambique) there are obvious import replacement opportunities here.

For the economy as a whole, imports of non-durable consumer goods were responsible for more than 36 per cent. of the total in 1969, while durable consumer goods — especially vehicles—were responsible for another 9 per cent. It is no wonder then the outlook for further import replacement industry is extremely encouraging.

However, a recent report on industrial strategy published by the Centre of Economic Studies of the Provincial Secretariat for Economic Affairs says that the free exchange of commodities between the national territories of Portugal is the chief hindrance to industrial development in the province. The lack of quantitative restrictions (import controls) on imports from Portugal and Mozambique has both hindered the initiative of new industries in Angola and created serious difficulties for existing ones, the report warns.

However, the import restrictions introduced at the end of last year aimed at reducing the payments imbalance with Portugal extends protection to certain local industries for a five-year period and this could well provide a healthy boost to industrialisation and should benefit the textile sector, in particular. In addition, proposals submitted to the Ministry of Overseas in Lisbon suggest import quotas for various commodities for a ten-year period so that the economic development of Angola can approach that of Portugal. The report on industrial strategy stresses that import quotas are considered the most effective means of protecting Angolan industry, thereby leaving Customs duties to perform the revenue-raising fiscal function.

Import replacement

From the import replacement viewpoint, the report draws up a list of products currently imported which could be produced domestically and, not neglecting the export side, it mentions a range of activities—from timber processing and fisheries to the processing of mining products—which could profitably be developed.

In addition to this broad strategy of pushing forward on the import replacement and export-processing fronts, the report calls for emphasis on labour-intensive industry and also for the achievement of better balance in industrial growth. Thus, it established industrial development "poles" with first priority being given to five centres—Sa da Bandeira, Silva Porto, Cela, Carmona and Malanje. Different scales of incentives would be given to induce industry to locate itself at these points thereby securing better regional balance in industrialisation.

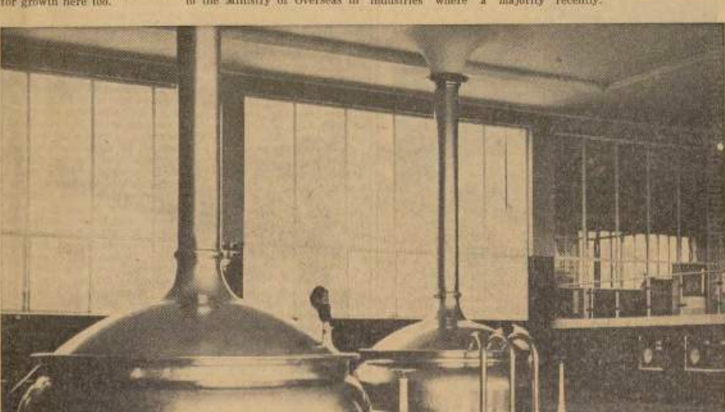
The report's call for the elimination of "excess bureaucracy" reflects the need that is felt to do all possible to encourage foreign investment. The scope for such investment has increased with recent years as to-day there are very few industries where a majority Portuguese participation is required, and the foreign investor also has some priority in the transfer out of the province of profits and dividends. The range of incentives includes tax holidays for periods as long as 18 years and incentives are being extended to existing industry to try stimulate the ploughback of profits.

Major growth points for the years ahead point to continuing rapid expansion of secondary industry. Cattle and fishing are two obvious areas where expansion is anticipated and where manufacturing will play an increasingly significant role in processing. The same argument applies to the development of the pulp industry, and to the plans for a small scale metallurgical iron and steel plant.

In the last few years there has been evidence of a great resurgence of interest in the fishing industry. Between 1957 and 1968 the size of the fishing catch actually fell but in 1969 it increased 42 per cent. to close on 420,000 tons. In the years that lie ahead there are possibilities for developing large-scale fish and fish-product exports.

The paper and pulp industry has shown rapid growth recently, though it is still small in relation to industrial output as a whole. Paper pulp output rose by more than 40 per cent. during 1969.

Although the main emphasis in manufacturing in the years that lie immediately ahead will be on import replacement, the need to develop exports of manufactures is not being neglected, and to this end a department of export trade promotion was established recently.



Brewing vats at the Cuca Brewery in Nova Lisboa.

Work in progress on one of the DIAMANG mines in Angola.

The port of Lourenço Marques showing the ore, timber and petroleum wharves.

In the 1960s Angola's economic expansion was largely due to the exploitation of the country's mineral resources. But in Mozambique it is a very different story. TONY HAWKINS describes the mining industry in both countries.

Contrasting picture in mining

In the mining sector, the contrast between Angola and Mozambique is complete. Angola's economic take-off in the late 1960s is attributable primarily to the exploitation of her mineral resources, and the value of mineral exports has doubled over the last five years to total £170m. last year. But the picture in Mozambique is very different. Although a number of mineral deposits are known to exist, the sector's current contribution to the GDP is negligible.

Apart from oil, the main minerals produced in Angola are diamonds, which have traditionally been the second major export after coffee, and iron ore, whose exploitation is of relatively recent origin. With oil and iron ore coming increasingly on stream in recent years, mining output has surged ahead and in 1969 increased more than 66 per cent. in value following the 40 per cent. rise achieved the previous year.

Indeed, during the 1960s the gross production of the Angolan mining industry increased five-fold at an average annual growth rate of 20 per cent.

Diamond exports have doubled over the last three years to total £35m. last year, meaning that the stones still rank well ahead of iron ore (£23m.) and oil (£2½m.) in terms of foreign exchange earnings.

The sole producer to date has been DIAMANG (the Companhia de Diamantes de Angola), which was originally given exclusive rights to mine diamonds over some 90 per cent. of the territory as well as the exclusive right to trade in diamonds. This contract expired recently and a new one has been signed as a result of which the area of the Diamang concession is considerably reduced, thereby liberating areas to be explored by other companies. The Angolan company has recently established a consortium with the De Beers group in terms of which some £3½m. has to be spent between now and 1973. The State has a 10 per cent. stake in this consortium with the option of increasing its interest later to 25 per cent.

During the last two years, four new diamond concessions were granted in potentially rich areas—two to companies with U.S. links and one with South African links.

DIAMANG's production is 80 per cent. gems and the balance industrial stones. Output used to be sold directly to De Beers, but now stones are cut and polished in Lisbon by a Portuguese company and then exported, mainly to London.

The rapid growth of iron ore production and exports is attributable to the development of the Cassinga complex in the south of the province. In 1966 less than 800,000 tons of iron ore were produced, but by 1970 some 6m. tons were being exported, though at this level of output the project is working to the full capacity of the Mocamedes railway, the port through which the ore is exported, mainly to West Germany and Japan.

High grade ore

The Cassinga deposits have been estimated at some 90m. tons of high grade ore as well as 400m. tons of lower grade ores. By 1973, output is expected to have reached 7.3m. tons a year, and by the early-1980s the expectation is that the high grade ore reserves will have been exhausted.

Consequently, a second phase is planned involving the construction of a pelletising plant which would then make it economic to extract the lower grade ore reserves.

The ore-loading port at Mocamedes can take super-tankers (200,000 tons) loading at the rate of 3,000 tons an hour.

In addition to the plans for a pelletisation plant as part of the Cassinga complex, finance is currently being sought for the exploitation of the Cassala-Quitunge deposits. Recognised medium-grade ore reserves here—between Luanda and Salazar—provide for an annual rate of production of 1.8m. tons for a minimum period of 15 years. It is believed that the life of the deposits may well be extended since about two-thirds of the Quitunge outcrop still has to be prospected.

The entire project involves developing the mines themselves, establishing a pelletisation plant and major improvements to the transport and power infrastructure to service the scheme. West German, Japanese and British interests are reportedly interested in developing the complex, which would be in full production by the middle 1970s. Investment involved would be of the order of £30m.

Apart from these major projects numerous other minerals have been found in the province. With the geochemical mapping survey having covered only about one-fifth of the vast territory by 1969, it seems fair to assume that so far the surface has only been scratched and other major developments could well be on the way.

Copper deposits

There are indications of copper throughout the territory, and the Anglo American group is prospecting in eastern Angola where there may be some extension of the Zambian copper-belt and Katanga deposits. An Angolan company, Mineira do Lobito, has found copper deposits around Mocamedes. There are two sulphur projects under way being investigated by Tenneco and JCI and a company with American links is investigating the phosphate deposits near Benguela. If development goes ahead these deposits could form the basis of a chemical fertiliser industry. Angola also produces some 30,000 tons of manganese a year.

Across the continent in Mozambique, it is a matter of expectations rather than a story of achievement and potential as in Angola. A handful of minerals are produced but on a tiny scale, and only in the case of coal does production rise above the 10,000 tons a year level. Coal is mined at Moatize near Tete at the rate of between 250,000 and 300,000 tons a year. About two-thirds of this being consumed domestically by the railways and the cement industry, while the balance is exported to Malawi, Kenya and Japan. Reserves have been estimated at 100m. tons and the only obvious limitation to a major increase in output would seem to be transport. It is believed that Japan would purchase up to 2m. tons a year from Mozambique over a 20-year period. Plans are under way to establish a pilot open-cast project with an output of about 30,000 tons a year.

Copper is exported on a small scale to Japan and it is estimated that this trade could soon be worth £250,000 a year, and a South African company is investing about £800,000 in the copper-mining industry. Baz Bauxite is also produced on a small scale and exported to Rhodesia.

There are, however, good reasons for believing that the mining industry will assume much greater importance in the later 1970s. Main hopes are centred on the development of mineral resources in the Zambezi valley, where deposits of a wide range of minerals—asbestos, chrome nickel, silver, gold, platinum, copper and iron ore—are known to exist. The plan is that the availability of cheap Cabora Bassa power, combined with the general improvement in basic transport services in the area, will create the environment for large-scale exploitation of these minerals.

Substantial copper deposits exist north-east of Tete, and there have been relatively encouraging results obtained from preliminary drilling. There have been claims—as yet unproven—that the Zambian copper-belt extends eastwards into Mozambique, and, if this were the case, there would be prospects for a major copper-mining industry located close to the seaboard.

Coking coal

The existence of a deposit of 200m. tons of iron ore has been established east of Tete and there are also further substantial deposits west of Tete. These deposits could form the basis of an iron and steel industry given the existence of adequate supplies of coking coal and limestone. The Companhia Unranio de Moçambique has been given a licence to establish a steel plant. In the north this company is prospecting for iron ore near the port of Nacala with the Japanese Sumitomo group. Preliminary results have suggested ore reserves of between 100,000 and 200,000 tons.

The Anglo American Corporation of South Africa has a 40 per cent. interest in a company formed by JCI to prospect for base metals in the Tete district, and field parties are actively engaged in mapping and preliminary exploration. Prospecting rights will last for five years with the option to renew for a further four, and the mining lease which accompanies the prospecting rights is guaranteed for 60 years. Another South African mining group active in Mozambique exploration is Messina Transvaal, which is also working in the Tete area. Five groups are reported to have applied for a concession to explore for fluorite deposits, which are known to exist—again around Tete.

Still seemingly in the speculative field is the suggestion that an aluminium plant be established close to the Malawian border. The idea is that Cabora Bassa power be used to service a smelter which would use bauxite mined on the Malawi side of the border at Mlanje, where the Lonrho group, with a small Portuguese participation, is investigating the bauxite deposits.

ANGOLA AND MOZAMBIQUE VIII

Oil prospecting in Angola has been widespread in recent years and has met with considerable success. Exploration in Mozambique, however, has not progressed far, BRUCE LOUDON outlines the current position. Below, GRAHAM HATTON reports on the giant Cabora Bassa hydroelectric project in Mozambique and MICHAEL CHAPMAN writes about the harnessing of the Cunene river in Angola

Cabinda successes encourage further oil exploration

A map of Southern Africa, including both Angola and Mozambique, published recently in Lisbon showed clearly the extent of oil prospection in the area.

Stretching from Cabinda, the tiny Portuguese enclave just north of Angola (but administratively part of it), around the Cape to Mozambique's frontier, markers indicated the proliferation of prospecting concessions both onshore and offshore. Many of these were in South Africa and South-West Africa, but most were in the two sprawling Portuguese territories.

In Angola, alone, there are now more than 30 companies with concessions, or on the point of receiving them. In Mozambique there are more than 10, some of which were granted before World War II and have not yet borne fruit.

Major find

Runaway enthusiasm that began in 1967 when the Gulf Oil Company of Pittsburgh announced a major oil find offshore in Cabinda has continued, it seems, despite the comparative lack of success of other prospections. Even persistent reports that the Cabinda strike, while maintaining forecast levels of production, has proved to be of a lower grade than was predicted has not dampened this enthusiasm and it is likely that oil prospecting in both Angola and Mozambique will continue to prove a source of major foreign interest for the time being.

Angola, of course, far outstrips the East African territory in this connection. Here, the focus remains on Cabinda, the tiny and exposed enclave to the north, from which Gulf Oil's offshore rigs export onto the international market on a growing scale.

By all accounts in Lisbon, Gulf is well-pleased with the results of its first four years of exporting from Cabinda—although, curiously, the company seeks to hide behind a cloak of secrecy about its activities in the enclave. Even accurate production figures are hard to come by in Lisbon, which is, theoretically, the seat of the Cabinda Gulf Oil subsidiary.

When it disclosed the find in 1967 as one of the most important in Africa, Gulf set an export target of 150,000 barrels a day by 1970 (that is, 7½m. tons), and non-Gulf sources in Lisbon claim this has been achieved.

But there are persistent reports from Cabinda that the quality of the deposits off Cabinda have been found to be of a lower grade than anticipated, especially in regard to the sulphur content. It has proved impossible to confirm this in Lisbon, and, instead, Government officials point to the opening of new wells by Gulf in Cabinda's Atlantic shelf as proof of the extraordinary success of the development.

Certainly, Gulf's apparent confidence in the Cabinda strike does not appear to have in any way diminished, and the £50m. the company had spent on prospecting work by 1967 has been far outstripped, with the oilmen leading social development in the enclave.

Once a sleepy backwater dependant almost entirely on wood exports from the dense equatorial forests which cover its 25,000-square-mile area, Cabinda has gone ahead by leaps and bounds. In 1961, when guerilla insurgency began on a major scale in Angola, Cabinda was perhaps the most exposed of all Portugal's Overseas Territories. Infiltration from both Congo (Kinshasa) and Congo (Brazzaville) was an easy matter, and the insurgents lost no opportunity to strike against the Portuguese presence.

The boom brought by Gulf changed even this, and to-day Cabinda is seldom the target of rebel attacks. Dating back to the time of Gulf's formal announcement of success, insurgency in Cabinda has been limited, and, instead, the highly sophisticated (and unrebellious) Cabindan tribesmen and their Portuguese administrators have been able to concentrate on developing their eldorado into what could become one of overseas Portugal's biggest moneyspinners.

Gulf's success in Cabinda has acted as a spur for other prospectors, and latest reports in Lisbon list a host of companies either currently searching for oil onshore or offshore in Angola, or with bids in for new concessions. Among them, in addition to Gulf, are the following: Companhia de Petróleos de Angola, Sociedade Portuguesa de Exploração de Petróleos (Angol), Petrangol - Angol - Texaco, and Angol-Total, CAP.

Others, with interests mainly in the southern areas of Benguela and Mossamades, include: Societé Nationale des Petroles d'Aquitaine, SACOR-Sonap, Batsape Petroleum Maatschppij, Reinaldo Marques Pedrosa, Compnahia Mineira do Lobito, Teesh Beleggings (Edms.), Bpk. Texaco, Sociedade Portuguess de Exploração de Petróleos, Place Gas Company, Ultramar Company, Standard Oil, Companhia de Investimentos no Sul de Angola (Petrosul), Gibraltar Angola Minerals Company, Diversa Internacional, Etosha Petroleum Company, Union Carbide Petroleum Corporation, Ferjoma Imp. Exp., Sociedade Planet Angola Oil Corporation, Shell Portuguesa, Vitor Manuel Roque Vilhena Rebelo, BP Petroleum Development, Ltd., Tenneco-Angola Inc., Imperial Oil and Gas Ltd., Oceanic Exploration Company, and Mobil.

More than one-fifth of Angola's total land mass and offshore area is now reported under oil prospection.

Meanwhile, the Petrangol refinery in Luanda, Angola's capital, is scheduled to increase its capacity, the contract for the construction work having been awarded to the Portuguese firm Profabril in collaboration with Foster Wheeler, Italy. The extension is expected to cost in the region of £3.7m.

Initial capacity

The construction of the Petrangol refinery followed the discovery in 1955 of the first commercial quantities of oil in the Luanda area. Although authorised for an initial capacity of between 500,000 and 1m. tons a year, economic circumstances and the extent of the strike meant that, in the beginning, the refinery was limited in capacity to 100,000 tons. This was increased in 1960 to 220,000 tons, in 1962 to 600,000 tons, and the plan now is to eleyate it to 1m. tons annually.

A second Angolan refinery is on the drawing boards for the important southern port of Lobito, at the railhead of the vital Benguela Railway which snakes through the hinterland, Congo (Kinshasa), and on to Zambia. Much of the current prospection for oil is being carried out in this southern part of Angola, and plans for the refinery are being promoted by Angol. Reports in Lisbon suggest that Petrangol is casting an anxious eye towards the development—suggesting that the Luanda extension will be more than sufficient for Angola's foreseeable civilian and military needs.

By contrast with Angola, exploration in Mozambique is still at an early stage, although the search for oil in the giant east African territory has been going on since before World War II. "Optimism (and reserve) among the companies seeking petroleum in Mozambique," was the headline given to the subject recently by the Lisbon *Diario Popular*, and that about sums up the situation.

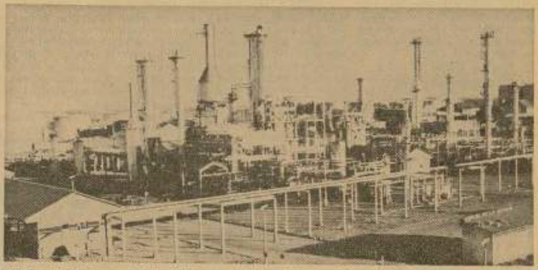
A flag map pinpoints a whole train of prospectors at work along Mozambique's coastline, stretching from the frontier with Zululand to the far north and hostile district of Niassa, near the border with insurgent-supporting Tanzania. The Tenneco group is at work. So, too, is the Sunray Mozambique Oil Company, which has begun prospecting underwater between Bartolemeu Dias and the southern frontier of the colony in conjunction with the Clark Mozambique Oil Company and the Skelly Mozambique Oil Company. They are scheduled to invest some 100m. escudos during the first three years of prospection.

South of the port of Beira, the Mozambique Gulf Oil Company, sister of the successful Cabinda prospectors, is at work. So, too, is the Aquitaine group.

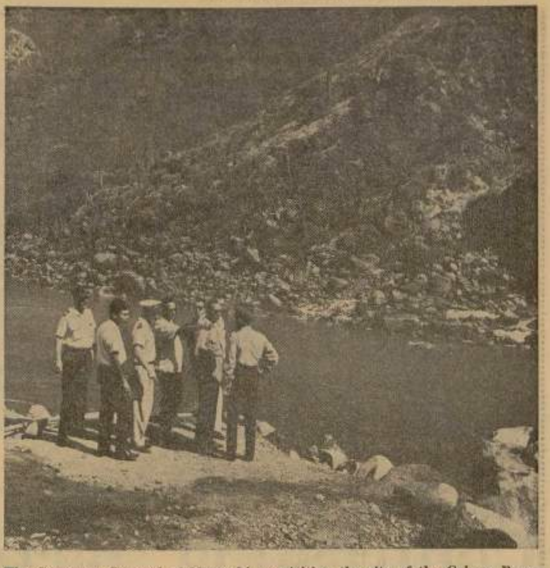
North of Beira, where, it is reported, the most encouraging signs of possible petroleum deposits have been found to date, the Hunt Group, Gétecnica e Minas, and Texaco are at work.

But exploration work in Mozambique is still very much in its infancy. About the most fascinating aspect of it is the considerable South African interest, obviously based on the assumption that any possible oil find could prove critical for that country, which is regularly under threat of international boycott or sanction.

For the time being, however, these will have to remain questions for the future, just as will most of the prospection in both territories. Indeed, many in Lisbon believe *Diario Popular* headline—"Optimism (and reserve)—about sums up the situation in both Angola and Mozambique.



Oil installations at Vila Salazar, Matola, Mozambique.



The Governor General of Mozambique visiting the site of the Cabora Bassa project on the Zambesi.

Guerilla threat to Cabora Bassa

Electricity from Cabora Bassa is due to be delivered in Pretoria in a little less than four years. Zambeze Conscorcio Hidro-Electrico (Zamco) are determined to meet their April 1975 deadline. Frelimo and friends are equally determined they will not. It remains to be seen which side will triumph, but judging by the completion a few weeks ago of a 250 metre long diversion tunnel to dry up the Zambesi River bed for foundation laying, it looks as if members of the consortium have had little difficulty surmounting the various obstacles so far placed in their path.

Small bands

The most dangerous, of course, has been the ever present threat of guerilla attack. The commander-in-chief of the Portuguese forces in Mozambique, General Kaulza de Arriaga, claimed as recently as March that the guerillas were having the worst of the conflict, and posed no threat to the dam. They were showing signs of using third-rate soldiers, and were displaying complete ignorance of ethnic loyalties; and the nearest they had come to Cabora was 60km, and then only in small bands of a dozen men, he added. There had been about 15 known attempts to infiltrate the area and in each case most of the guerillas had been killed.

Later reports have been less complacent, and a few weeks ago it was announced that the whole of the Tete district, in which Cabora is situated, would be put under army rule, with a military governor taking over the merged functions of military commander and civil administrator. Travel from Tete on the Zambesi to the dam site further upstream is now in convoy and many roads and paths in the area have been landmined. Officials working on African resettlement have refused to venture into the bush without armed escort. Last year, movement in the area was unhindered.

Increased guerilla activity was again reported recently, this time with mention that thousands of Africans were fleeing their forest homes. In the Tete district where the plan for regrouping the African population in community development schemes (aldeamentos) has lagged, it was found that widely scattered hamlets in the bush were easy prey to guerilla harassment. It is believed the rebels were mostly from the Coremo insurgent organisation, an offshoot of the Frelimo guerillas based in Zambia.

In the meantime, the recent withdrawal of the United States company, General Electric, from the Cabora scheme was greeted in some quarters as a triumph for the diplomatic arm of the dam-buster forces which have been trying to force the abandonment of the scheme on grounds that it would help perpetuate Portuguese rule in Mozambique. General Electric had hoped to supply electrical equipment for converting the alternating current from the dam's generators into direct current. GE announced its withdrawal after failing to obtain a loan from the U.S. Government's Export-Import Bank.

But, according to a South African member of the Executive Committee of Zamco, the withdrawal will have no affect on the progress of the scheme. "In fact, GE was never a contractor in Cabora Bassa. The company had certainly indicated that it was interested in participating, but it had never been accepted. Its application for a loan from the Export-Import Bank was purely on 'spec' in order to have the necessary finance available if it were given a chance to participate," he added. According to Zamco the equipment is to be supplied by the companies already in the consortium.

Another chapter

Be that as it may, GE's action was yet another chapter in the saga of uncertainty that has marked the Cabora Bassa dam scheme since its inception. It will be recalled that just before the final contract was signed in 1969, the giant Swedish concern, ASEA (Allmanna Svenska Elektriska Aktiebogalet) announced it would not be a member of the Zamco consortium after all. Like GE, ASEA was due to supply equipment for transforming alternating current into the ultra-high tension direct current designed to be fed into the 865-mile long transmission lines to South Africa. ASEA withdrew because it feared its participation would constitute a breach of a Swedish law forbidding trade with Rhodesia.

President Kaunda's anti-dam campaign, on the other hand, seems to have caused a great deal of confusion about who is and who is not still in the consortium, without really hindering the work in hand. Italy's about-turn in its involvement with Cabora Bassa, for instance, was at first regarded in some quarters as a direct result of his campaign. But it later became clear that South Africa was ready to step into the breach left by the withdrawal of the Milan company, Societa Anonima Elettrificazione (SAE). Because it had difficulty raising the necessary finance, SAE was forced to subcontract its £20m. contract to a South African company, Transmission Lines Construction. The contract is for the erection of transmission lines from the dam to the Limpopo River, South Africa's northern boundary.

Extensive interests

It is understood that the Italian Government became hostile towards Cabora after President Kaunda had made thinly veiled threats of reprisals. Italy has extensive interests in Zambia: the Italian Air Force has a contract to train Zambian pilots; the ENI oil corporation, controlled by the Government, built the pipeline from Dar-es-Salaam to the copper-belt as well as being involved with the Ndola refinery; and Alitalia has a contract to supply personnel and to train and advise Zambia Airways. Fiat is also active in the country.

President Kaunda was less successful in France and Germany. None of the original eight French and German consortium members (among them Compagnie de Constructions Internationales, Compagnie General d'Enterprises Electriques, Hochtief, and Siemens) has submitted to pressure to withdraw, and the French and German Governments have maintained their support.

And needless to say, South African involvement through its consortium member LTA and non-consortium contractors Shaft Sinkers, VPC, Powerlines, and now Transmission Lines Construction as well, is even heavier than it was at the beginning. This is naturally not surprising, since the Republic has planned its future electricity supply network on the assumption that Cabora power will be fed into the South African grid from the first half of 1975. The power station at Cabora has been designed to deliver a firm supply of 680 MW to South Africa from 1975, 1,070 MW from 1977, and 1,470 MW from 1979.

The South African Electricity Supply Commission (Escom) has undertaken to buy the electricity at a tariff of 0.3 cents (South African) a unit for 80 per cent. of the firm supply. The agreement is that the tariff will remain in force for 20 years unless very exceptional circumstances arise. By that time it is expected that the capital costs of the water works and the power station will have been redeemed and that the tariff will be reduced to either 0.2 or 0.175 cents per unit, depending on the quantity of power supplied at that time. Escom in its turn will supply electricity to Lourenco Marques.

This power was once described by South Africa's top public sector industrialist, the late Dr. van Eck, as "just about the cheapest electricity in the world." So, for Pretoria, it is important that the scheme should go ahead; how far it would go to prevent its disruption is another matter.

Vast potential of the Cunene scheme

The Cunene River rises in the central highlands of Angola near Nova Lisboa, and flows south for nearly 300 miles before making a sharp turn to the west and to the Atlantic Ocean. From the point where the river bends, near the Ruacana Falls, it forms the border between Angola and South-West Africa. It flows through dry and arid country for the greater part of its course, where the population density is low and where the majority of the inhabitants are nomadic or semi-nomadic cattle-herders. On the South-West Africa side lies the Ovamboland Bantustan, and the areas on both sides of the border have suffered in the past because of lack of water. The harnessing of the Cunene will do much to overcome the backwardness of the region and develop its potential, particularly for cattle breeding.

Early agreements

Portugal and South Africa have been negotiating since 1927 on the joint development of the Cunene, and if the scheme to-day has been put into the shade by the considerably bigger, costlier and more dramatic Cabora Bassa project in Mozambique, the fact that the Cunene project has received much less attention does not necessarily make it Cabora Bassa's poor relation. Early agreements between Portugal and South Africa aimed at sharing the waters of the Cunene. The six years of talks between 1962 and January, 1969, when a formal agreement was signed between the two governments, went considerably further and established a plan for the production of electricity as well as for regulating the flow of water.

The Matala Dam on a site in the middle Cunene was completed in 1958 with an installed capacity of 51 MW. A high tension line was built from the Poser station at Matala to the towns of Sa Da Bandeira and Mossamedes, leaving a space for a further generator in the power station when the need should arise. Since then the Cassinga iron ore project has come into being and a line is being run eastwards to the mines. Matala was also seen as a potential source of immediate hydro-electric power for Ovamboland and the Tsumeb Mines in South West Africa.

At the time that the Matala Dam was complete, an "olonato" or peasant settlement project was established in the area, which showed that the area had a rich agricultural potential once irrigation was forthcoming, and plans for the development of the middle Cunene include an extension of this project. For the moment, however, the Cunene plan is concentrating on two undertakings.

In the upper reaches of the river, some 60 miles to the south of Nova Lisboa, the Gove Dam in being built to regulate the flow of the river. This is an earth-wall dam, 58 metres high, which will create a lake holding 2.6 billion cubic metres of water, the largest in Portuguese territory. Construction is already well under way and the £4m. that the dam will cost is to be shared on a 50-50 basis with South Africa. The dam will be ready in 1973 and will greatly increase the production capacity of the Matala power station.

Two projects

Where the river joins the South West African border, near the Ruacana Falls, two projects are planned for the early phases of the river's development: first, the Calueque scheme, involving the construction of an eight-mile canal from a pumping station at Calueque to divert some 41 billion gallons a year across the South West African border and the building of a road parallel to the canal itself. Second, this site will also act as a "back-up" for the biggest future development on the Cunene, the power station at the Ruacana Falls.

Eventually the Ruacana Power Station, which will produce power for South West Africa and the upper and middle Cunene basin could have an overall potential of more than 300MW, but it will be a long time before so much power is needed. Perhaps more important for the short- and medium-term development of the Cunene Basin within Angola is that the project will make it possible to irrigate over 300,000 acres of agricultural land close to the river itself, and over 700,000 acres of ranchlands.

For a long time it has been felt that the Cunene Basin, hitherto subject to intense seasonal variation, is a potentially rich area for cattle ranching. The area already holds some 1.5m. head of cattle, mainly in the hands of semi-nomadic African pastoralists. Since large tracts are so "occupied," this together with the lack of water, has meant that it has been impossible until now to make large portions of this area available for ranching on a commercial scale. There is, however, every hope that once water becomes available, the "traditional" cattle herders will in time abandon their nomadic existence, once the need for it disappears. Successful experiments have already been made in crossing the hardy African cattle with such breeds as Charollais, Brahmin and other good beef strains.

At the same time, efforts have been made on a small scale to install one or two slaughter-houses and freezing plants in Sa Da Bandeira and Mossamedes, but these at present have a battle with poor quality carcases which the conservative local herders are willing to sell—they do not like to get rid of their better animals. The development of the Cunene will not change the face of southern Angola overnight, but it will enable a start to be made. New cattle breeders will break down the barriers holding back the conservative African herders and improve their strains. Irrigated land will become available for developments on a larger scale, enabling the regions potential to be better realised.

ANGOLA AND MOZAMBIQUE

THE THREE PRINCIPAL PORTS OF THE PROVINCE OF ANGOLA

Constituting the termini of the three main railway networks which serve the major commercial and industrial centres of Angola, are the main ports of Luanda, Lobito and Moçamedes.

LUANDA

The bay of Luanda is protected from the inclemencies of the weather by exceptional natural conditions. The bay is formed by an escarpment; the island of Nossa Senhora do Cabo and by the Dondo peninsula. There is anchorage at certain points of more than 30 metres deep and extending over an area of some 800 hectares. It is a safe and sheltered harbour providing ample room and amenities and is the principal port on the South-West coast of Africa.

The Port has a spur 300 metres long and 160 metres wide and is bounded on the West by a dock wall of 100 metres. The total length available for anchorage is 860 metres. There are ten large warehouses, a fully mechanised harbour station, pipes for combustible liquids, installations and equipment for loading minerals, a water distribution network, electricity and telephones. The economic results of the plans carried out in the Second International Development Plan for the zone of the Port of Luanda are undoubtedly reflected in the appreciable increase of dock movement.

Work was carried out at the Port between 1941 and 1945 and provided the main dock installations. The handling at the docks has already reached 650 tons per metre of wharf per annum. On current figures it will reach full capacity in another two or three years' time. It is for this reason that the Second Development Plan has provided Esc. 130m. for the construction of a new coastal wharf for large vessels. Its positioning was chosen so that the construction could be carried out easily and quickly without interfering with the general design of the Port. The chosen location allows for easy interconnection with the existing facilities by simple modifications. When this plan is completed the immediate necessities will have been met and will also allow for further expansion of the Port at a later date. Building and traffic showed a remarkable increase compared with the previous year. Although subject to correction, the first figures for traffic in 1964 were as follows: revenue Esc. 111,119,000; number of passengers 82,129; movement of vessels 1,405; and movement of merchandise—exports, 1,167,136 tons, imports 289,836 tons; and berthing 203,573.

Railway terminus at Port of Luanda.

LOBITO

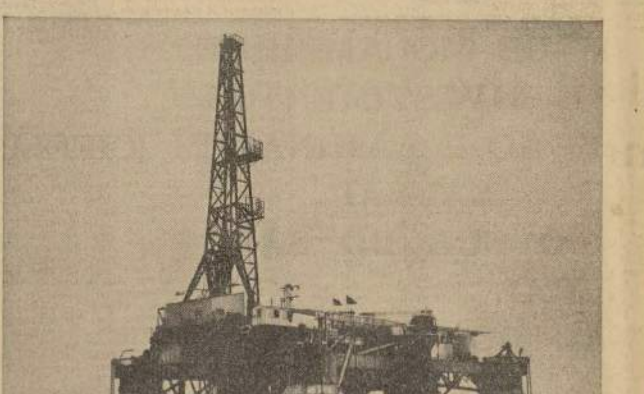
The Port of Lobito is also situated on a fine bay; it has 1,120 metres of coastal wharves grouped in an L-shape, with a depth of 10.5 metres. Beyond is a barrage for small craft of 150 metres long. The covered area for the warehouses is 22,500 square metres and the uncovered area is 70,000 square metres; the area for mineral storage is 25,000 square metres and the area for coal is 30,000 square metres. The Port's capacity is in the order of 3 million metric tons per annum. During 1964, the Port of Lobito registered a revenue of Esc. 93,702,000; the movement of 56,727 passengers, and of 1,156 vessels; exported merchandise totalled 861,241 tons, imported merchandise totalled 185,909 tons and there were 184,334 tons of coastal navigation.

MOÇAMEDES

The area of the Port of Moçamedes extends over 400,000 square kilometres, and includes the rich and fertile regions of the Huila Plateau. Although it already has some installations and sophisticated equipment, it is not yet sufficiently well equipped to satisfy all the needs of the regions which it serves. Plans are therefore being made for the future improvement of the Port.

In 1964 the Port of Moçamedes registered the following movements: revenue, Esc. 12,564,000; passengers 17,572; vessels 483; and merchandise—exports 355,511 tons, imports 15,703 tons and coastal navigation 46,210 tons.

SOME ASPECTS OF ANGOLA'S ECONOMY



Offshore drilling rig in Cabinda.

Those who are interested in the progress achieved by the large Portuguese Province of Angola will see that this has a direct relationship to the wealth of its natural resources.

Until recently the public was unaware of the sudden wealth represented in the Cabinda oil field **(Gulf Oil)**. This was well described in the production plan, by Eng. Veiga Lima: "The production from the oil field, which started in the last quarter of 1968, was between 4,000 and 5,000 tons a day (30,000 barrels a day). It is hoped that this will increase to 7,500,000 tons per annum (150,000 barrels a day).

The prospects for oil from the "Cabinda Concession" are unlimited. It is not only in Cabinda that the Angolan subterranean "Black Gold" is exploited. Oil has been prospected for in the Province since 1915 by **Sinclair**, an American company, but until 1937 without any results. In 1952 the search was renewed by **Petrofina** and oil was at last found on the left bank of the mouth of the River Cuanza—Cape Ledo.

Thereafter the prospects increased with positive results. The most recent find to be announced is the one in the area of Concelho de Viana, near Luanda.

Iron is another natural resource found in Angola. The value of the mineral extraction in the region of Cassinga is well known, where iron forms mountains and hills and continues to an undetermined depth. The iron-ore of Cassinga is so rich that the percentages of iron vary from 60 to 72%. The iron-oxide (haematite) of Cassinga appears to be on an average 62.5% of the ore, which is extracted by open-cast mining. The raw mineral extracted by the **Krupp Group** is so rich and in such abundance that it represents 90% of the pay-load of the Moçâmedes railway.

Diamonds are also a major factor in Angola's growing economic prosperity and one of its greatest assets.

THE SOCIO-ECONOMIC DEVELOPMENT OF THE PROVINCE OF MOZAMBIQUE

The population of the Province, at the most recent census taken in September, 1960, registered a total of 6.6m. inhabitants, i.e. 8.5 inhabitants per sq. km.; this is the highest figure for the whole African continent which averages 8 per sq. km. Compared with the other Southern-African territories, only the South African Republic has a higher density with 12 per sq. km., while Rhodesia has 5, Zambia 2, Malawi 6 and the Republic of the Congo 5. From 1950 to 1960 the native population increased by 15%, while for the non-African populations (whites, Asians and mixed) the increase was 77.4% in the same period.

It is in this human mosaic of the above mentioned characteristics that the socio-economic development of Mozambique must be analysed. In basic terms the main features of the economic structure of the Portuguese Province of Mozambique are listed as follows:

a) Appreciable increase in the population due to improved conditions of hygiene.

b) Important economic assets, particularly in agriculture (tropical products, cereals and fruit), timber, cattle and sheep rearing, fishing, mining and numerous other industries.

c) Progressive expansion of the social and economic infra-structure, especially in the public sector.

d) Appreciable growth of fixed capital, in most areas of activity, increasing the influence of the 'monetary economy.'

e) Domination of the external balance of payments by the trade balance and by the results of the long-term balance of public and private capital.

Therefore, because of the urgent need to promote economic growth, a substantial increase in investments will be necessary. In order to achieve this there must be adequate mobilisation of medium and long-term funds and of short-term bank credit. This increases the use of national, public and private funds, at the same time increasing the interest on foreign funds.

Among the developments helping the socio-economic sector are the settlement areas of Limpopo and Cunene, which were established respectively in 1956 and 1963. The plans for an irrigation dam and development of Limpopo were initiated in 1924, revised in 1951 and completed in 1956; the dam was opened in 1952. On October 31, 1960, merchandise transported by the Limpopo railway amounted to 6,565,347 metric tons. This represents 70% of the total carried. In the First Development Plan Portugal spent Esc. 236,580m. on the construction of the Limpopo dam-bridge and Esc. 744,452m. on the construction of the railway from Limpopo to the border.

The irrigating of Limpopo is aimed at providing work in the Province and raising the living standards of the local population, white and black, with national unification in mind. It was intended that as large a number as possible of white families from the mainland should establish themselves in the villages of the Limpopo valley. Thus vigorous centres of settlement were established where the people owned the land on which they worked and practised the traditional virtues of the Portuguese farmer—tenacity, sobriety, love of work and the family.

The irrigation of 31,000 hectares, including the dam and bridges of the Limpopo railway, as well as the international road into Rhodesia and South Africa, which crosses the dam, cost a total of Esc. 527,000m. In the First Development Plan Esc. 408,826m. were spent on irrigation. In the first two years of the Second Development Plan the cost was Esc. 30,173m. and for the third year Esc. 13,000m. At the end of 1961 the total cost for irrigation amounted to Esc. 451,999m.

In the settlement of Limpopo, which was started in 1954, each family was given 4 irrigated hectares and 24 non-irrigated hectares of land; some native families also were granted irrigated land. The families are established at present in 13 villages. The plan eventually is for 2,438 families (17,000 people) in organised settlements. The villages are connected by a network of dirt roads cleared by the early settlers of the community. The villages are served by collective transport and are provided with water, electric light, school, clinic, church or chapel, cemetery, sports ground, etc.

The organisation of the Limpopo settlement stimulated a remarkable and unexpected method of independent settlement. It all started with about a thousand Europeans who then established themselves in the villages in commerce, industry, craftwork and installation services and had soon built several hundred dwellings and four factories with their own capital. Guijá, for instance, has commercial stores, restaurants and an hotel. Evaluations and economic studies are to be carried out in other villages.

Without socio-economic development there can be no agricultural progress. Where industrialisation develops it makes for greater production in all areas and contributes to general economic progress. The intensification of commerce, and other services such as transport and communications, education, administrative services, etc. all contribute towards raising the standard of living.

With regard to the electrical industries in Mozambique, the principal ones are: electricity generation and the exploitation of coal, tantulum, beryl, mica and bauxite. In the manufacturing industries are factories producing or processing: corn-flour, sugar, tea, beer, soft drinks, textiles, soaps, vegetable-oils, petroleum, cement and fibro-cement, meat, fish and fruit preserves, dairy products, rice and cashew nuts, confectionery and biscuits. In addition to the food industries are tobacco, shoes, clothing, rubber and tyre re-treads, ceramics and glass, etc.

Mozambique has not, however, such varied industry as Angola. Therefore, efforts must be made to channel new investment into under-developed areas of industry, particularly fishing and mining. The Development Tax in both the major Portuguese Provinces of Africa is almost the same. It should be noted that in 1963 there were 431 authorisations for installations or changes in industrial development; by 1965 there were 662, with further increases planned for the future.

In the context of the establishment and execution of the Third Development Plan the prospects for the economy of this Province merit a special reference.

Avenue of the Republic, Lourenço Marques.

LOURENÇO MARQUES

Undoubtedly the best known and most developed city in the Portuguese province of Mozambique is Lourenço Marques, its capital. Tourists who visit it for the first time are enchanted by its continental atmosphere, its wide, shady avenues, its esplanades of cafés, its wealth of architectural interest and, above all, its outstanding standard of cleanliness.

In Lourenço Marques one can find accommodation to suit all tastes and all purses, from the "de luxe" hotels with swimming pools and ample private lawns to the more modest but comfortable pensions. The Municipality is also promoting the building of a type of Motel for those who wish to stay near the beach. It will consist of small attractive houses (chalets) situated in a park, with water, electricity and all modern conveniences, where the tourist can stay for a very modest price. Easy parking will also be available. The whole area is protected on one side of the main road to the beach by large shrubs and trees and on the other side by a hill. A sandy beach with safe bathing extends for some four or five miles, served by a first-class road which joins the city to the Costa del Sol, running parallel to the coast. There are four restaurants situated along this road for the benefit of passing tourists which serve delectable shell-fish dishes.

The city itself and the most developed beaches from the tourist's point of view are found in the Northern part of the Bay. However, there are other large and attractive beaches in the Southern part known as Catembe. They are also full of character but are quite different from the ones in the North and are sheltered by high hills of red rock. Because of the lack of public transport across the Bay, these Southern beaches have not yet been fully developed, but their popularity will grow with the increase of amenities.

Of the beaches surrounding the capital, that of Polana is especially renowned, with its golden sand and privileged position. One of the roads which joins the highest part of the city to the beach, "the Snail," offers the tourist a magnificent panoramic view of the sea.

Lourenço Marques offers the tourist a varied night life, restaurants, dancing and floor-shows, many of a high standard with internationally known stars and performers. Bars at the main hotels provide a pleasant milieu for informal entertainment.

The cuisine of Lourenço Marques is renowned for its wealth of sea food—fish and shell-fish. In any restaurant, from the most expensive to the more modest, the tourist can enjoy superb fish dishes prepared in a variety of delicious ways; or he can choose shell-fish, outstanding of which are prawns and crabs. The prawns, which measure from six to nine inches in length, are found on the coast of Mozambique near the capital, in quantity and of a first-class quality. They are unique in the whole of Africa. Cooked in many different ways, the prawns are particularly delicious when grilled and accompanied by "piri-piri" sauce.

Among the other attractions of the city are fine nineteenth century architecture and monuments. Modern buildings, too, are impressive, many of which line the main roads and add to the overall appeal of the city. There are also some valuable statues, such as the one of Antonio Enes of Mouzinho de Alhuquerque. A building of particular interest and an attraction for tourists is the Museum Alvaro de Castro, with its collection of 225 stuffed animals, divided into 46 groups. There is also a large collection of skulls and skeletons; an ornithological collection of some 700 examples, divided into 36 groups and 4,500 species; 150 species of reptiles and a large collection of invertebrates. There is also a show-case of minerals including some valuable examples of fossils and an ethnographical section containing many articles of native work and models representing the different tribes of Mozambique.

ANGOLA AND MOZAMBIQUE X

Following Dr. Caetano's address to the National Assembly in December in which he announced the first major reforms in the relationship between Metropolitan Portugal and her colonies, extreme right-wing *ultras* have done their best to proclaim their opposition to any change. At the same time support for the proposals has been solid from the African territories. BRUCE LOUDON gives the view from Lisbon.

Vocal opposition to change in Lisbon

Posters on the wall tell the Lisbon story. Since December last year when Dr. Caetano announced proposed constitutional reforms affecting the colonial relationship, barely a single façade in downtown Lisbon has not been papered with a bold slogan of some sort.

Apparently anonymous, but almost certainly produced by extreme right-wing *ultras*, these proclaim: "We do not desire war, but we do not fear it"; "The Army is the mirror of the nation"; "Fight for peace."

More startling are illustrated posters hanging heavily on walls in the Portuguese capital's midsummer heat. One of these, on the theme of "many races," shows four (naked and curiously sexless) men supporting the Portuguese flag—with the Black member of the quartet in the rear.

Another superimposes the overseas possessions on a map of Europe, and proclaims tiny Portugal "in her true dimensions"—stretching from the Atlantic seaboard to Poland's Vistula River and beyond.

Tip of the iceberg

Tourists wandering along the broad, main Avenida da Liberdade may not realise it, but the posters on the wall are an indication of the ferment in Portugal to-day in relation to the overseas possessions. They are, however, only the tip of the iceberg. Going much deeper—in the backstreet cafés and bars where the *ultras* in their dark suits and dark glasses meet, and even in the marbled halls of the National Assembly building, where young Caetano progressives meet to defend their leader—the ferment achieves wilder proportions.

For Lisbon's view of her African possessions at this time is directly linked to this ferment, which has been boiling since Dr. Caetano's December address to the National Assembly and his announcement of the first major reforms in the colonial relationship for nearly half a century.

These reforms propose constitutional changes that will, effectively, grant considerably more political and administrative autonomy to the overseas territories, which may aspire to "statehood." Dr. Caetano was careful at that time to emphasise that the changes will in no way affect the basic unity of the nation as it is currently understood—that is, with a Metropolitan (European) area and overseas "provinces," the title Dr. Salazar gave to the colonies.

He has been at pains to re-emphasise this latter point repeatedly in speeches since December. But nothing, it seems, will effectively douse the suspicions of the *ultras*, who believe Dr. Caetano is "soft" on the colonies and that his changes are the beginning of the slippery slope towards Portuguese withdrawal from Africa.

The *ultras* have had six months to think about the proposed reforms, for only now, at a specially-convened, out-of-season session of the National Assembly, have they been debated and approved. But, led by such forceful figures as Dr. Alberto Franco Nogueria, the former Foreign Minister, Prof. Adriano Moreira, the former Minister for the Overseas, and the Salazarist former Minister of Justice, Dr. Antunes Varela, the Right Wingers have lost no opportunity to try and discredit Dr. Caetano's plans and question the "gradualism" that is implied in them.

The Government's easy victory in the debate does not in any way detract from the depth of Right wing ferment still going on behind the scenes.

Dr. Varela has complained that words like autonomy and state "have the bitter taste of renunciation or abdication in the face of the enemy." Prof. Moreira, still acutely ambitious although out of Government, has also gone into print on a similar theme. And Dr. Nogueira, having changed his tune from the time when he was Foreign Minister and found new friendship for Britain as the President of the British-Portuguese Chamber of Commerce, has harped consistently on another theme which bothers the *ultras* and which is intimately bound up in the current ferment—Portugal's bid for associate membership of the EEC.

The *ultras* see this as another symptom of the Caetano regime's "withdrawal" from Africa. To them European integration is a "myth."

Wild aspects

The campaign against Dr. Caetano has taken on some wild aspects. Extremist author Fernando Pacheco de Amorim accused the Prime Minister of "traitorous" intentions as far as the colonies are concerned. Copies have been circulated of a Portuguese diplomatic document from Australia purporting to reflect the Soviet Ambassador in Canberra as backing the constitutional reforms and giving Moscow's approval of plans for a Portuguese Commonwealth. Rumblings in the Army have come to a head with a highly critical speech by one of the leading Army commanders, General Reymão Nogueira, who was promptly sacked by Caetano.

Significantly, all this opposition to Dr. Caetano's planned colonial reforms has come from Metropolitan politicians. From both Angola and Mozambique, as well as from Guiné-Bissau, has come solid support for the concept of increased autonomy and virtual internal self-government. In the National Assembly debate deputies representing the colonies, to a man, gave vocal support to Dr. Caetano.

For his part, Dr. Caetano has gone out of his way to try and underplay the significance of the changes. He has repeatedly reassured his critics that the reforms do not in any way imply any weakening of the colonial link. His speeches in defence of Portugal's right to stay in Africa have been as tough and uncompromising as any ever made by Dr. Salazar; his support of the Army against insurgent attacks just as stern. But it will be only in six months when the reforms are promulgated and "regulations" governing their application published, that the real effect of the changes will be seen. Here too the rebels of the PAIGC movement are reduced to little more effective than the occasional hit and run border raid — though the frequency of these raids has increased considerably recently and is causing some concern in Lisbon. For the first time in years insurgents have attacked the capital of Bissau, itself, although the feeling in Lisbon remains that there does not appear to be any immediate military threat to Portugal's presence in Guiné.

Thus, though the *ultras* beaver away to show otherwise, the view from Lisbon of the colonial possessions remains unchanged as far as their defence against guerilla insurgents is concerned. Indeed, those closest to Dr. Caetano reflect considerable optimism about this defence, and in some of his advisers there is even optimism about a "breakthrough" as far as the African bush wars are concerned.

Viewed from Lisbon the military situation in Mozambique looks particularly encouraging for the Government. There, General Kaulza de Arriaga, the ambitious and public relations-conscious commander-in-chief who was kingmaker in the Salazar succession, has dealt some pretty profound body-blows to Frelimo, long regarded as perhaps the most accomplished of the African guerilla movements. By any stretch of the imagination Frelimo and the other splinter guerilla groups operating in Mozambique do not pose any kind of military threat to the Portuguese presence in Mozambique—either now or in the foreseeable future. This, at least, is the considered view of a high-powered team of military attachés from embassies in Lisbon that recently visited Mozambique.

New experiment

The situation is not much different in Angola, where the war looks even more stalemated. Entering its 11th year last March the Angola conflict is described in Lisbon as "a great yawn," although it does continue to tie down a sizable Portuguese army in what Lisbon describes as a "police operation."

In Guiné, sandwiched between hostile Senegal and the Republic of Guiné (Conakry) on the bulge of Africa, the situation, as seen from Lisbon, is perhaps the most fascinating of all Portugal's colonies.

Rather, a new experiment is being tried by Guinea's Portuguese administrators, led by the colourful, bemonocled General Antônio Spinola. He is trying to "out-revolutionise the revolutionaries," and stumps the territory proclaiming himself as much a revolutionary as Amilcar Cabral, the PAIGC leader. He makes it known that under the Portuguese flag the Guineans have to develop their own governing élite, for the Portuguese will not be around for ever with their army of soldiers.

Optimism in Lisbon about the military situation in the colonies is backed by the knowledge that Angola, and to a lesser extent Mozambique, is rich and that both territories are on the threshold of a major economic expansion.

Optimism is tempered only by the knowledge that no end is in sight to the bush wars, and that they will probably drag on at their current pace for years to come—and as long as neighbouring countries continue to give succour and aid to the guerillas. There is concern, too, about the growth of anti-war feeling among some sections of the Army, especially conscripts from the universities who have, until now, formed the backbone of the officer classes.

The Minister of Defence, General Hóracio Sá Viana Rebelo, has himself complained publicly about this growth of anti-war feeling, and some observers foresee a growth in this feeling in the months to come.

Nonetheless, Dr. Caetano is undoubtedly making his constitutional reforms from a position of strength. There is no backing for Dr. Varela's emotional stricture about "renunciation and abdication in the face of the enemy."

Backing Dr. Caetano in his reforms is the broad mass of opinion both in continental Portugal and the colonies. Approval of the changes means a new phase has begun in Portugal's colonial history.

Just where the changes will lead is open to conjecture. Dr. Caetano, it is suggested by those who claim to be in the know, sees the future of Angola and Mozambique as being rather like that of dominions within a Portuguese community. That, it is suggested, is what the constitutional reforms really mean.

Own problems

There is talk in Lisbon of a Portuguese-speaking Commonwealth—in which, possibly, even Brazil would be a participant.

The granting of greater autonomy could, of course, bring its own set of new problems. Coupled with a downscaling of the guerilla threat, the stage could be set, say, for "more Rhodesias" that would follow differences of opinion between the settler-led self-governing states and the Lisbon Government. In this connection it is noted that Dr. Caetano has been remarkably strident in his insistence that there should be "no more Rhodesias," and implacable in his orders that there should be no racialism in Portuguese territories—specifically reserving for the central Government the right to step in actively at the first signs of any sort of racialism.

One immediate cause of tension could be Lisbon's current negotiations with the EEC, although in fairness it should be said that economic spokesmen in both Angola and Mozambique, unlike some Portuguese politicians have, until now, adopted the line that "we regard this as necessary because the overseas territories need to have a strong metropolitan area." Equally, Portugal's negotiators have made it plain they are not prepared to compromise their economic ties with Angola and Mozambique to too great an extent for the sake of the EEC.

But inevitably Lisbon orientation will be more and more towards Europe and away from Africa. As one leading Caetano aide said: "The enlarged Common Market will take 46 per cent. of our total exports, and 70 per cent. of those to foreign countries. Compare this with the 20 per cent. we send to the overseas territories. How can anyone say that the overseas territories are a substitute as far as trade is concerned?"

The constitutional reforms and the EEC bid means that Portugal is at a watershed in relations with her colonies. As seen from Lisbon, however, this does not imply anything dramatic for the time being, despite the doleful prognostications of the *ultras*.

If Dr. Caetano has his way the shift in political and administrative power from Lisbon to the colonies will be evolutionary and gradual ("evolution without revolution" is how he sums up his administration). What remains to be seen is whether events both in Lisbon and the overseas territories will allow him to maintain his own pace.

THE CONSTITUTIONAL REFORM

The key article of the Government-sponsored constitutional reform—and the one which was most closely debated in the National Assembly—is number 133, in which it is specified that "The territories of the Portuguese nation located outside of Europe are considered overseas provinces, which will have their own statutes as autonomous regions, and they may be called States, in accordance with the national tradition, when their social progress and the complexity of their administration justifies such honourable qualification."

That article sums up the basis for the reforms. Similarly, the rest of the approved legislation deals in broad principles rather than specifics, and the precise application of the reforms will not be known until six months hence, when, in the next stage of the legislative process, the Government publishes its Regulamentos, which will deal with details. It will not be known until then, for example, just what the rate of application of the principle of autonomy will be to the two big overseas provinces, Angola and Mozambique.

The broad principles approved do, however, contain some solid indications of what the Regulamentos will contain. The reform, for example, provides for the introduction of an additional 20 deputies representing the overseas territories in the central parliament. This will bring overseas representation up to 43 of the total of 150 deputies.

As far as the "autonomy" of the provinces is concerned, the reforms state this to be understood as the right to possess their own elective governments, the right to legislate over their own affairs, the right to ensure through the organs of government the execution of laws covering internal administration, the right to effect public spending in line with the authorisation of the legislature, the right to their own patrimony and to celebrate acts and contracts, the right to pursue an economic regime adequate to the necessities of their development and the well-being of their populations, and the right to deny entry into their territories of nationals or foreigners for reasons of public order, and to order expulsions in accordance with the laws when presence would result in serious threats to internal or international order, save only that the central Government should have the right of final say.

The reform states emphatically that the autonomy for the overseas provinces does not affect the unity of the nation or its integrity and sovereignty.

Thus the Government (in effect, the Central Government, which is how it was described in the draft of the Government's proposals, the word central having been dropped after deputies protested it could imply there was more than one government in Portugal) will continue to represent Portugal abroad, and the provinces may not maintain diplomatic or consular relations or celebrate separate accords or conventions with foreign countries.

The (Central) Government will continue to legislate over matters of common interest. It will continue to designate the governor of each province, but as the representative of the Government as a whole (and not just of the Ministers for the Overseas Territories), and as the head of the local executive.

The (Central) Government will secure national defence, superintend the administration of the provinces in line with the overall interests of the country, supervise and control their finances, allowing them assistance, guarantees and credit.

The (Central) Government will also ensure the integration of each provincial economy with that of the general economy of the nation. Where necessary, it will protect populations against threats to their security and welfare when such threats may not be met by local means. The (Central) Government will also oversee the rights of individuals in terms of the constitution. Specifically, the (Central) Government will also intervene the moment there is any sign of racial discrimination in the provinces.

Mozambique

FINANCIAL TIMES SURVEY

Dr. Balthazar Rebello de Sousa, Governor General of Mozambique, writes:

A European settlement with its coastline facing the Indian Ocean, Mozambique has become a meeting place for European, African and Oriental cultures. From this it has developed its character, which is revealed in the great diversity of its daily life.

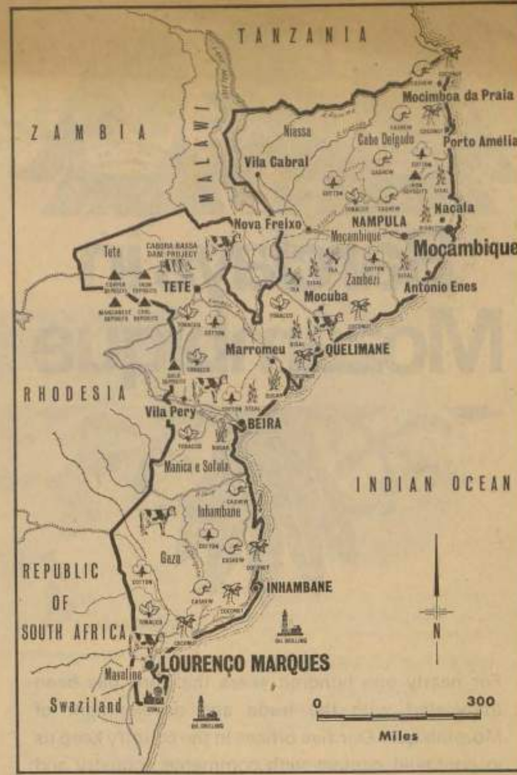
Mozambique's coastline is extensive, and her ports have long been at the disposal of those landlocked territories of the interior requiring access to the sea.

This is reflected in the traditionally friendly relations with neighbouring peoples, which constitute a permanent factor in her policy and economy. Besides this, Mozambique seeks to develop her own potentialities. These potentialities are considerable, bearing in mind the extent of her territory and, as commonly occurs in Africa, her relatively sparse population.

This development will be carried out in accordance with a plan, in which the State will take a leading role but will leave a large field to private initiative.

The capital for this private initiative may be of both domestic and foreign origin, since we are open to every form of collaboration—provided always that this collaboration takes place in the terms outlined by Portugal's Prime Minister in his recent message (June 10) to the FINANCIAL TIMES: "Understanding and mutual respect are the foundation of true friendship. And commercial relations cannot forgo a firm moral basis."

Mozambique's English community—which for many years has contributed to the progress of this territory—is, as has often been pointed out to me, in a position to give reliable evidence of the life of Mozambique, its characteristics, its possibilities, the climate in which these have been developed.



Frontiers with two Africas

By BRIDGET BLOOM, Africa Correspondent

When Eduardo Mondlane, the American-educated leader of Frelimo, the Front for the Liberation of Mozambique, was killed by a time bomb in Dar es Salaam last February, there were many who believed that a turning point had come in the war Portugal is fighting in Mozambique. Whoever had killed Mondlane—and his assassins will probably never now be found—it was argued that the death of this man would so split the Frelimo leadership that its five-year-old armed insurgence against Portuguese rule would now be easily controllable.

Nationalist war

There is some evidence to suggest that the Portuguese themselves have not fully evaluated the effects of the new Frelimo leadership on the course of the war. On the other hand, there is very little evidence that the sizeable Portuguese army in Mozambique are letting up. The war against the African nationalists remains, as in Angola on the west coast, central to the Mozambique scene, even though in large areas of the country there is no sign of war at all.

This is partly because Mozambique is a very long and comparatively narrow sliver of the south east African coast, with the capital city Lourenco Marques at least 600 miles from the nearest fighting zone. The war is localised along the northern border with Tanzania, and to an apparently now less troublesome area in the Tete region bordering Zambia. But the fact that the war is being fought however far away from the scene of most people's daily lives, closely affects both the political and economic situation.

It is estimated that Portugal spends some 40 per cent. of its annual budget—around £116m.—on defence in its three African territories, the expenses for war in each being topped up from local budgets. Much of these costs are absorbed within the escudo area, but although defence spending of this magnitude is a heavy burden, there is little indication, after nearly a year, that the new government of Marcello Caetano is any less determined than that of Salazar to continue the war.

There are several reasons for this, although there is little talk in Mozambique or Lisbon of the likelihood of a quick military victory (the Portuguese argue that this depends primarily on outsiders ceasing to arm the insurgents; in this respect the Communist involvement is one frequently mentioned and feared). Perhaps the main reason is that, while the balance sheet since the beginning of the war in Mozambique may so far be slightly against Portugal, the investments of the past few years, in both Angola and Mozambique, should soon right the situation very much in Portugal's favour.

BASIC STATISTICS

Area	**6.6m. square miles**
Population	**8m. (est.)**
Exchange rates	
	£1=69 escudos
	$1=28.7 escudos
Foreign Trade	
Exports 1967	**£50.6m.**
Imports 1967	**£82.8m.**
Exports 1968 I	**£17.4m.**
Imports 1968 I	**£23.4m.**
Exports to U.K.	**£7.4m.**
Imports from U.K.	**£15.7m.**

Mozambique is considerably smaller than Angola, although its population, estimated at 8-9m., is almost double. It is poorer than Angola. Exports are almost entirely agricultural, the subsistence sector being very large. Mineral production has so far been negligible, confined mainly to coal, and for many years there has been a heavy deficit on visible trade—although receipts from transit trade, tourism and migrant labour have until recently meant a balance of payments surplus.

Although agricultural diversification programmes, including processing of cotton and cashew in particular have had some success, the main hope for future expansion seems to be placed in mineral exploitation. Recent surveys have located good deposits of iron ore, while copper, coal, iron and other minerals are now known to exist in the Tete region of the Zambesi valley. Oil exploration is proceeding apace, but the sort of strike which is beginning to make Angola boom has not yet been made.

The discovery of oil in viable quantities would obviously be a great fillip to the economy, as would the exploitation of iron ore and other minerals. The latter will depend on the availability of cheap power, on improved communications and on the willingness of international capital to exploit them. Improved communications will no doubt come with time, while as another article in this survey points out, Portugal now has an open door policy towards foreign investment. For the time being, sufficient power is not available, and plans to build the giant £125m. Cabora Bassa Dam, producing the cheapest power in Africa, seem to have come to a temporary halt. When Cabora Bassa is built however, the spur to mineral and agricultural development in the whole of central Mozambique should be considerable.

How far this sort of development would, under present policies, filter down to the majority of Mozambiquans remains uncertain. For the time being, although reliable statistics are very hard to come by in Mozambique, there is no doubt that wealth is held by an élite, almost entirely European. The much-publicised policy of multiracialism is even less in evidence in a practical form than in Angola.

Racially complex

Mozambique is racially more complex than Angola—although there are fewer Europeans. At the last census at which race was recorded in 1960 (it has not been since the assimilado system was abandoned in favour of a theoretical universal Portuguese citizenship) Europeans numbered 100,000. There were some 32,000 people of mixed blood, about 20,000 Indians and Goans, and 6.6m. Africans. In spite of the theory of equality, it remains true that almost all senior government jobs are held by Portuguese, whether they are seconded direct from Lisbon or are settlers, and that—as elsewhere in East Africa—Asians have an important role as clerks and traders, a function which people of mixed blood also fulfil to a certain extent.

A belief in multi-racialism is sincerely held by some Portuguese, but the fact that there are very few Africans in responsible positions has obvious political and social implications, especially as educational programmes begin to accelerate. In a sense, the test is just beginning. Of some 1,100 students at the university in Lourenço Marques last session, only about 15 per cent. were coloured. Of these less than 50 were African. The test is twofold. Can this extremely small percentage be increased; and can the increased numbers of African students find suitably responsible jobs in Mozambique?

Racial problems—indeed, the whole Mozambique scene—is complicated by the territory's geographical position. Mozambique has long made a good living from transit trade. But the countries on which Mozambique depends for this trade are South Africa, Rhodesia, Swaziland, Malawi and Zambia. To a much greater degree than Angola, Mozambique is inevitably a buffer between white and black governed Africa. It is a moot point whether those who govern Mozambique want the territory's southward ties to be tightened. But the tendency for this to happen—as seen as much by the growing number of South African and Rhodesian tourists as by the rising level of South African investment—exists, and at the very least, will not make the task of the genuine multi-racialists in Mozambique any easier.

But in the end, it will be up to Portugal itself to decide on Mozambique's future. Until now, the country's rulers have been able to ride out the winds of change. The chances for peaceful development however would be much enhanced if the logic of multi-racialism were to be recognised, and a majority, if racially mixed, government accepted as the eventual aim in Mozambique. Unfortunately, the possibility of such a solution appears remote.

MOZAMBIQUE II

Encouraging signs that the economy is on the move

By a Correspondent

The story of the development of the economy of Mozambique is the story of the humble cashew nut.

Centuries ago, Portuguese sailors who had visited Brazil introduced the cashew nut tree to this part of the African coast. It flourished remarkably and was soon growing wild all along the coast. No special efforts were made to cultivate it. The ripe nuts fell to the ground to be harvested with the minimum effort. The African people collected the nuts, Portuguese traders bought and sold them to merchants who shipped them off to India. It was international commerce, of a fashion, in the raw.

To-day all that is changing. The cashew nut is big business and could become Mozambique's biggest. For secondary industry has grown up around it. The days of the haphazard exploitation of the cashew nut and other resources are over. The attitude now is one of fostering national development and hammering home the need to get things done.

Typical example

Typical of what this can mean to an under-developed country like Mozambique, where vast tracts of land lie virgin, is the growth of industry at the rough-and-ready little port of Nacala, 1,000 miles north of the capital, Lourenco Marques. There a £1.3m. cashew nut plant has been built capable of processing 35,000 tons a year. Exported in processed form, the cashew nut is worth about £150 a ton, more than double the value unprocessed.

The oil which is extracted finds a ready market in the United States for the paint and varnish industry and has strategic value as a component of rocket lubricants. A by-product is used in cattle feed and the kernel itself is sought after as a delicacy and for its high vitamin content.

But for the people of Nacala, the factory means jobs for 200 semi-skilled workers, for 1,200 unskilled African women, and for 40 technicians from metropolitan Portugal. It means houses for immigrants, money in the pockets of the local shopkeepers. It is evidence of progress and it is worth a million propaganda leaflets telling the people how life is improving for them.

There can be no denying that there has been a sharp upsurge in economic activity in recent years. From 1961 to 1967, imports leapt up by 53 per cent. The increase in the value of exports in the same seven year period was 37 per cent. but the imbalance is to be expected in a country where the economy is only beginning to move from the primary to the secondary sector.

Cash crops

Agriculture is the mainstay of the economy. It contributes about 25 per cent. of GNP, employs about 88 per cent. of the labour force and is responsible for the bulk of foreign earnings. Principal cash crops are cotton, sugar, cashew nuts, tea, copra, sisal and groundnuts. Of the Province's exports and re-exports in 1967, these products earned £31m. out of the total earnings of £49m.

Cotton was the biggest money-spinner with exports worth £9.2m., followed by cashew nuts, both unprocessed and decorticated, which were worth £7.5m., and sugar worth £4.5m.

The bulk of the peasant farmers are still in the subsistence bracket—they grow crops to feed themselves and little else. It has been estimated that well over 90 per cent. of the manioc produced, 85 per cent. of the maize crop, and about a third of the rice production is for self-consumption. Less than 6 per cent. of the 298,000 square miles which make up Mozambique is under cultivation despite the fact that a very high percentage is arable.

However, under the six year development scheme which began last year, agriculture is to benefit by some £28m. A radical re-organisation of subsistence farming is planned, including the construction of storage depots in areas where cash crops will be encouraged. It has been estimated that up to 94 per cent. of the population of over 7.3m. are rural Africans scratching a living from the soil.

The development plan, which totals some £230m. for Mozambique, excluding expenditure on the Cabora Bassa hydro electric scheme, singles out transport and communications as the sector of the economy requiring the biggest boost. It will get about double the amount to be spent on agriculture.

This reinforces the view of many economists that the need to improve communications is the most vital requirement if Mozambique is to develop rapidly.

Manufacturing industry has grown rapidly in recent years. Much of it is concerned with processing agricultural products, but it is also branching out into other lines such as the assembly of commercial vehicles, the production of refrigeration equipment, paper production and the manufacture of railway wagons.

In the seven years up to 1967, the value of secondary industry production increased by nearly 75 per cent. The fact that this sector's contribution to GNP is still only about 9 per cent. is adequate reflection of the failure in past decades to exploit obvious openings.

The total value of manufacturing industry in 1967 was £59.8m., of which about one-third was contributed by the food sub-sector. This included sugar production and is further emphasis of the dependence of Mozambique on the production of her primary products.

The main centres for industrial development are the capital, Lourenco Marques, and the port of Beira, which together account for nearly 70 per cent. of total production.

Promising centre

Nacala, a site for one of the new cashew nut processing plants, is regarded as a promising centre for industrial development. Also in operation there is a sisal plant which employs about 200 men and processes some 7,000 tons of sisal a year and a cement factory with a 90,000-ton capacity.

There have been reports recently that a big dry-dock and shipyard may be established at Nacala, which is situated on the finest natural deep-water harbour on the East African coast. It is capable of providing a safe anchorage for the biggest of the supertankers and ore carriers afloat or envisaged. It lies alongside an eight-mile-long bay which is reached from the open sea through an even bigger bay with a channel where the water is more than 200 feet deep.

Mining is in the embryonic stage in Mozambique and up to now only coal has been produced in any substantial quantities. The future contribution of minerals to the economy, however, could be most significant.

Great interest centres in the Zambesi Valley area of the Tete district where surveys have revealed deposits of iron, coal, copper, fluorite, manganese, chromium, gold, nickel and titaniferous magnetites.

Exploitation of these occurrences is largely dependent on the provision of power and the stimulus to the economy as a whole from the projected Cabora Bassa hydro-electric scheme.

The search for oil along the coast and offshore has been intensified in recent years and by last year nine big international companies had been granted prospecting rights in Mozambique. They guaranteed to spend some £8m. on their search for oil during the three year period 1968 to 1970.

The Mozambique Gulf Oil Company, which has been prospecting in the area for 20 years, has announced that it will sink a test drill 20 miles offshore and 80 miles south of Beira. This announcement followed an intensive study of a seismic survey programme.

Trade with Portugal

The prospects for economic advancement in Mozambique are thus favourable. At present the bulk of the Province's trade lies with metropolitan Portugal, which supplies about a third of the imports: these totalled £81m. in 1967.

After Portugal, South Africa is the biggest single supplier, providing about 11 per cent., with Britain next with 9.6 per cent. in 1967. Another major supplier was W. Germany which provided 7.7 per cent. of Mozambique's imports.

Of Mozambique's exports, an even bigger slice—37.9 per cent. —went to metropolitan Portugal in 1967, with South Africa taking 13.5 per cent., the U.S. 7.6 per cent. and Britain 6.8 per cent.

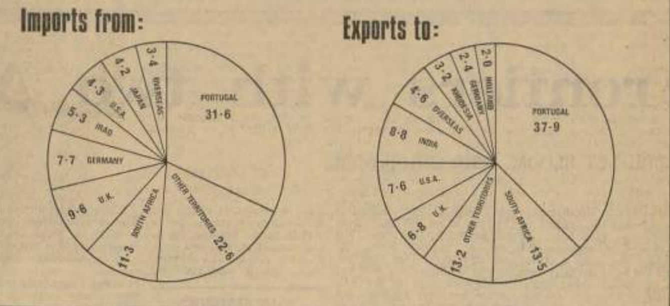
Currency zone

The balance of payments has long been an adverse one for Mozambique but this is not regarded as a serious problem since the deficit is within the escudo currency zone and Portuguese legislation embodies the economies of all the overseas provinces within that of Portugal and appreciable positive balances have traditionally been reflected.

The total adverse balance in 1967—the last full year for which this figure is available—was £4.7m. The fact that it was only about one-sixth of the adverse direct trade balance was due largely to the hefty inflow of the invisibles including transport charges for traffic in transit to and from South Africa, Rhodesia, Malawi and Zambia.

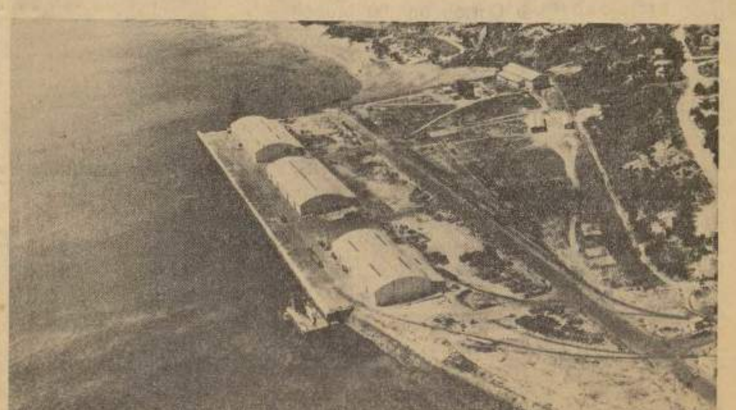
But what is important is that the economy is on the move. Outside investment will be needed to maintain the impetus, and under Dr. Caetano's premiership it can be hoped that obstacles surrounding the employment of this will be reduced to a minimum.

DIRECTION OF TRADE 1967 (% SHARES)



COMPOSITION OF TRADE 1967

EXPORTS	%
Vegetable products	26
Textiles raw and manufactured	23
Food products	21
Mineral products	12
Vegetable fats	6
Miscellaneous	12
IMPORTS	
Machinery, tools and electrical equipment	21
Manufactured metals	18
Transport equipment	15
Textile material and textiles	10
Mineral products	8
Miscellaneous	28



The Port of Nacala, a likely centre of development.

MOZAMBIQUE III

The habit of being master dies hard

By HUGH KAY

If, within the foreseeable future, there were to be a UDI in Mozambique, it would probably be, as in Rhodesia, a white man's coup. Few Africans there are highly educated yet, and most are well under control. Militant *négritude* is effectively discouraged by the Portuguese, and all the really keen can do is to cross the borders and join the freedom fighters in Tanzania or Zambia.

Comparatively few have done so. After nearly 500 years, the Africans in Mozambique are more accustomed than their counterparts elsewhere to the white man's presence. Materially, they are starting to "get on," which tends to mute the political theme for a time.

Most of their 68 ethnic groups dislike the Maconde, semi-nomadic tribesmen of the northern frontier through whom the Frelimo insurgents work from their Tanzanian bases, and Frelimo is not within sight of success.

The whites to-day account for only two per cent. of the population, and, while the mulatto proportion greatly exceeds the official, first generation, figures, whites and "mixed" together form only a small minority.

Still, any degree of miscegenation makes a mark on the whole of the local society. Slaves were exported from Mozambique, but the emphasis there was on the domestic slave. The lustrous *cativa* became *amiga*. A planter's widow might in practice need her slaves' assent before she could re-marry.

Relative blindness

There were Portuguese who could even flog without hating or being hated, and, while in theory trying to make the African into a European, the white man often "went native" himself. His vaunted colour blindness is relative, but his sense of white superiority has less to do with race than with money and education. No door is barred to Africans who can pay and are suitably dressed. Some even can and are.

For 450 years, the Portuguese were either too busy repelling their European rivals in Africa, or too poor and too short of the right personnel to tutor the African peoples to maturity. The best people did not go to Africa. Only the toughest survived. Blueprints humanely conceived in Lisbon came to grief in the bush. Livingstone had praise for the Portuguese in Angola, but none for them in Mozambique.

Antonio Enes tried to build a new African civilisation towards the end of the 19th century, Norton de Matos tried again in the 20th. Whatever else is said of it, the Salazar regime was the first to produce an effective and durable cadre of colonial officials with a social conscience.

For them the Angolan uprising of 1961 came as both warning and stimulus. But Mozambique had its own nationalist movement to cope with. The African leader Lazaro Kavandame had openly run collective farms on Marxist lines in the 1930s. After the war came a protest generation of African intellectuals, led by names like Honwana, Malangatana, Noemia de Sousa and Craveirinho.

The movement was small but energetic and fostered a number of serious dock strikes in the 1940s and 1950s. Eduardo Mondlane, one of the few Mozambican Africans to study in Europe and the U.S., returned to co-ordinate rival African rebel groups within his Frelimo movement. He secured support not only from African States and the Communist bloc but also from the West.

His war of attrition started in 1964 on the northern Mozambique border and later extended through Zambia to the district of Tete in western Mozambique. By 1967 he claimed to have an army of 8,000, drawn mainly from the Maconde and Nyanja tribes.

Many Frelimo recruits, however, were and are disillusioned, and return to Mozambique in small waves. The Portuguese have subtly established a reclamation policy. There are more than 300,000 Africans, armed by the Portuguese, in fortified northern villages, an anti-Frelimo line of defence. The villagers include "reclaimed" freedom fighters. As for the Portuguese army itself, a third of the troops are black.

War contained

Early this year, Mondlane was killed, some say by Portuguese police, others by his rivals within Frelimo. Kavandame has surrendered. Simango, the new leader, is not a Mondlane, and is said to be Mao-centric. But the war, though contained, is not done.

Frelimo controls perhaps 5 per cent. of the country, most of it uninhabited. Elsewhere, life is normal. More Africans are going to school, many to technical training. Workers' living standards are rising. In the shanty towns outside the capital, motor bikes and transistors are status symbols.

Traditional abuses in the labour system and cotton markets have largely been abolished, while education, health and housing have improved out of recognition for those who knew the country a decade ago. But while effectively sharing in local Government, the Africans' representation in the central provincial assembly is three out of 29, and their role is advisory.

The policy is not to Africanise. The theory is that the African can rise to the top through merit. Native tradition is acknowledged, but in practice this means that the African lives by his customary law until he "graduates" to a share in the Portuguese way of life. Africanisation is racialist, the Portuguese say: a denial of the marriage of cultures implicit in inter-racial living.

There are African officers, but not generals; African priests but not bishops; African magistrates, but not judges; African mayors but not provincial secretaries (local cabinet ministers). To be genuine, it is argued, progress must be "natural," therefore slow.

How honest are Portuguese intentions? The rejection of formal apartheid is perfectly genuine, but the habit of being the master dies very hard. Lisbon is looking more than ever to Africa, now that Portugal's EFTA benefits may be at risk if Britain enters EEC. The whites in Mozambique itself are economically bound to their Rhodesian and South African neighbours. There is also the fear of a Mozambique version of the Congolese or Nigerian tragedies.

The President of Portugal, Dr. Caetano (centre), during his visit to Mozambique last April.

It is possible that the Portuguese have a built-in flair for inter-racial living of a kind that eludes the rest of us in the West. As one observer told the writer: "You get the feeling that nothing will happen as planned, but that everything will be all right on the night."

Test of honesty

It would be tragic to lose the chance of a genuine inter-racial society in the name of an alien nationalist stereotype. The Portuguese way could prove to be justly "different." But the test of its honesty will be, first, the place it now gives to the newly emerging African "intelligentsia," and, secondly, Lisbon's willingness to grant honest forms of effective representation.

With the opening up of new mineral potential and the prospects of the Cabora-Bassa scheme, the whites in Mozambique have grown in self-confidence and chafe when Lisbon or their Governor-General bypasses the local assembly's advice. For the present, however, a UDI is most unlikely since Mozambique relies on the homeland's army and investment, and the benefits of the escudo area.

Some would favour autonomy within a Portuguese Commonwealth and improved relations with African states. There is already close co-operation with Malawi. Lisbon is trying to set up "correct if not cordial relations" with the Congolese and Zambian Governments, and the Benguela Railway is planning, with sources in Lusaka, to give the Zambian Copperbelt fresh outlets to the Atlantic.

Much will depend on whether Zambia throws in her lot with East Africa or with her natural trading partners in Africa's "southern third." Portugal's relations with African states have recently tended to improve, but, to win their wholehearted confidence, she will have to give the key of the door to her own African peoples, who will nevertheless continue to need her services.

The view from Lisbon

By BRUCE LOUDON

Viewed from Lisbon, Mozambique's potential has seldom looked more promising than it does now—just five years after the guerilla insurgency spearheaded by the Frelimo movement began in earnest.

Military successes are being claimed by the 50,000 Portuguese troops stationed there. So, too, is the pacification programme that is a major factor in the Portuguese counter-offensive proving fruitful. It was this programme that earlier this year provided the spectacular return to the ranks of the loyalists of Maconde tribal head and Frelimo manager Lazro Kavandame.

But, more important, is the economic outlook—the result of careful, long-term planning at the Ministry for the Overseas provinces in Lisbon, and, obviously, the main hope for the future. And, as far as this is concerned, just two words — Cabora-Bassa—sum up Portuguese optimism and aspirations. For, rightly or wrongly, the belief in Lisbon is that this massive scheme really holds the key to both the economic and political future of Mozambique.

From an economic point of view its capacity is undoubted, producing as it will huge quantities of power at the cheapest rate in all Africa, and irrigating huge areas of previously backward territory that may now become arable and rich—with a commensurate effect on the attitude of tribesmen in the area who have so far proved ripe for Frelimo subversion.

Politically, the belief in Lisbon is that Cabora-Bassa could prove the catalyst for better relations between black and white countries in Southern Africa; that, with a resulting power grid covering the white African countries, others, notably Zambia, will look south with covetous eyes—and lay themselves open to seduction at the thought of a share in the scheme.

From this, so the thinking goes in Lisbon, could flow political benefits: after all, the Portuguese are not going to give Zambia a share in their wealth unless Zambia undertakes to expel the anti-Portuguese terrorists presently operating from within her borders. As one official here has put it: "Cabora-Bassa will bring wealth: if Zambia wants a share in it, she will have to behave."

Co-operation need

Zambian understanding and co-operation is, of course, needed if the Portuguese are going to scale down the level of the war they are fighting in Mozambique. But even that would not be the end, for guerilla incursions from across Mozambique's border with Tanzania are far more serious—and the prospects, at this stage, of President Nyerere allowing himself to be seduced are a good deal more remote than the conjecture that attaches to President Kaunda.

It is, indeed, in the northern districts of Niassa and Cabo Delgado, on the Tanzanian border, that Frelimo has enjoyed its biggest successes so far—although it should be said that they have never been as great as the late Dr. Mondlane's claims to "control" certain areas.

In Lisbon, the belief is that there can be no immediate scaling down in the level of the conflict in Northern Mozambique. Equally, however, policy planners take heart from the fact that the battle in Mozambique is probably more regional than any other in Portugal's African territories, and that it is unlikely to ever get much further south than it is now. For, in the south the tribes are largely loyal to the Portuguese—and, in any case, there is a strong South African and Rhodesian influence that would bring up the big guns at the first sign of southward bound guerillas.

More remote

Curiously, the South African influence somehow seems to make Mozambique's war a good deal more remote from Lisbon than its contemporary in Angola. Portuguese officials, of course, deny this—just as they deny any South African "presence" in the territory—but it is an undoubted fact that many observers here feel.

At the same time, it should be said that the Portuguese in Lisbon are ever-wary of anything that smacks of South African "colonialism" in Mozambique, and that they are ever calling in the South African Ambassador here to get assurances that South African gifts at Christmas to Portuguese soldiers, South African donations of ambulances and medical equipment, and South African interest in Cabora-Bassa are not all, in fact, Vorsterite colonialism.

From Lisbon, Portugal's war in Mozambique looks different from its contemporaries because of the great emphasis placed on social rehabilitation and reconstruction—an attitude that got its greatest boost wih the appointment to Lourenco Marques of Dr. Balthazar Rebello de Sousa as the first civilian governor-general for a long time. He is undoubtedly doing sterling work. It is said here that while the military battle continues unabated and with little change, de Sousa's social programmes are paying off. This being so, it could be the most significant development in Portuguese overseas planning for a long time.

Agriculture: the mainstay of the economy

By a Correspondent

Agriculture is far and away the biggest wheel in the Mozambique economy, accounting for 88 per cent. of activity. Of the province's total area of 292,636 square miles, 7.5m. acres are occupied by small farms, 1.2m. by average size farms and 1.2m. by large estates and plantations.

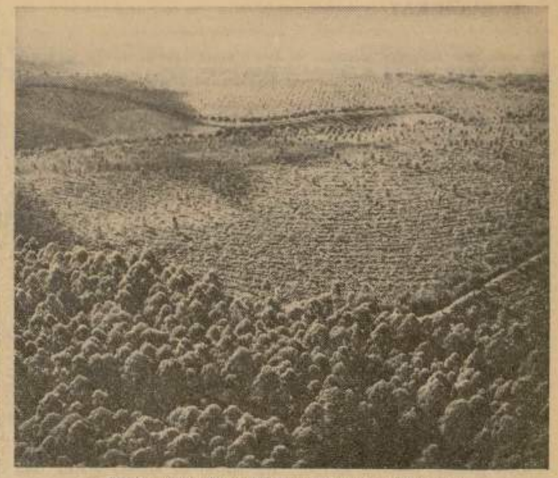
Some 50 per cent. of Mozambique exports are agricultural products, including timber and livestock. About half of this 50 per cent. consists of foodstuffs, of which the most important are sugar, tea, vegetable oils, fruit, nuts and cereals.

The range of altitudes in Mozambique make it possible to grow varied crops in the same area. For instance, the low-altitude coastal belt extends along the valleys of the main rivers inland. These are the Zambesi, Limpopo, Revuma, Revuè, Save, Maputo, Umbeluzi and others. In these valleys the rich alluvial soil encourages the growing of sugar, rice, wheat and millet. There are valuable citrus orchards along the banks of the Umbeluzi.

This belt also includes areas of lighter soil suitable for food crops such as cassava and peanuts. These areas also produce three of the most valuable commercial crops—cotton, cashew nut and coconut.

There are more than 31m. cashew trees in the Province, and the Zambezi district has the world's largest copra plantation of coconut palms, totalling more than 2m. trees. Most of Mozambique's cotton and sisal comes from the slightly higher zones; higher still are the tobacco, fruit and tea plantations.

Modern machinery collecting the harvest on a sugar cane plantation.



Millions of potential cups of te on a Mozambique plantation.

Latest figures

The Banco Nacional Ultramarino, which is the bank of emission for the Province, gave in its latest report the following 1968 agricultural production figures for Mozambique ('000 tons):—

Corn	500
Sugar	220
Cotton	122
Peanuts	118
Cashew nuts	98
Rice	81
Copra	45
Sisal	32
Tea	14
Tobacco	2

Other official figures show that these commodities were exported in the following quantities and value during the first seven months of 1968:—

	'000 tons	m. escudos
Corn	90	130
Sugar	57	176
Cotton	13	200
Peanuts and oil	14	97
Cashew nuts & oil	9	638
Rice	3	18
Copra and oil	34	202
Sisal	15	51
Tea	12	225
Tobacco	1	41

Although the export figure for sugar is high, it must be remembered that this does not go primarily to foreign countries, since the leading customer is European Portugal. The chief tea buyer is Britain, followed at a long distance by Holland and the U.S. The U.S. leads the market for cashew, while Spain, Denmark, Norway, Italy and France are the chief customers for copra.

Efforts are now being made to expand cultivation of some of the commodities which may find world markets. Citrus fruits and bananas are among these, and already Mozambique has begun to supply European Portugal with oranges and bananas. The first shipment of 4,250 crates of Mozambique oranges went to Britain last year.

An offshore crop which is now coming into a promising market is seaweed, and it is understood that the Japanese are particularly interested in buying it up. The chief producing region is off Cabo Delgado in the North, but it is possible that the seas off the Southern coast may soon be exploited. The MOCALGAS firm, which is linked with the French firm of Produits Chimiques d'Augy, is the chief firm in the Mozambique seaweed business at present.

Although tea is one of the most valuable Mozambique exports to foreign countries, it is now faced with a serious crisis. This is due to over-production in the tea-planting countries and the consequent over-large stocks available in London. The situation is also aggravated by the appearance of low-quality teas on the market and the new "instant tea" which is being made available.

The chief tea-growing districts are Guruè, Milange, Socone and Tacuane. These areas comprise more than 37,500 acres of plantations in the hands of 36 planters.

Cotton is another source of wealth. Here again the Cabo Delgado district is rich, as well as the Vila Péry area in the district of Manica and Sofala. The cotton mill of Vila Péry is run on power from the great Revuè power station, and there are other mills at Beira. Cotton is also grown in the district of Gaza. The textile industry comprises dozens of units besides those for cotton ginning. These include sack-making, rope-making from sisal and knitted goods.

Cashew nuts

The cashew nut industry was once the Cinderella of trades in Mozambique. Now it is forging ahead to take an increasingly important place in exports. Not only are the nuts in high demand, but the market price is high. In addition, cashews is the source of CSL, which is an essential ingredient in brake linings. The industry now employs 18,000 men. The vegetable oil industry handles 140,000 tons of seed annually, including peanut oil, cottonseed and sunflower.

By the last count there were some 1,223,846 head of cattle in Mozambique, and large subsidies are encouraging breeders to improve their stock and widen their commercial horizon. Recently 100 head of American stock was imported, including the famous Hereford breed.

Teams of veterinary experts are employed to fight the cattle pests and disease spread by the tsetse fly. A special body called the Mission for the Eliminating of Parasitic Diseases has been formed to deal with this matter. It has a wide network of outposts where veterinary exports provide the necessary serums for vaccination and wash tanks for regular dipping of cattle. Incidentally, Portugal is in the vanguard of research on elimination of the tsetse fly, the carrier of sleeping sickness to human beings.

Improved stock

The total of farm animals of various species now in the Province is computed at nearly 3m. As with cattle, flocks of sheep which originally were ordinary native stock, have gradually been improved by cross breeding.

Although sugar production is largely absorbed by European Portugal, it comes high on Mozambique's commercial value list. The greater part of the local industry is in the hands of Sena Sugar Estates which has some 20,000 acres under cane and employs around 20,000 workers. Of the total 1968 production of 220,000 tons, 150,000 came from Sena Estates. The cane is crushed in the Sena factories at Marromeu and Luabo. The product is then shipped to the company's Lisbon refinery for final treatment.

The Third Development Plan, which came into operation last year, allocated 441.1m. escudos to agriculture over the six years 1968-73. Of this, 287.1m. escudos will be used to boost the production of cotton, cashew, corn, bananas and citrus fruits. Forestry has an allocation of 1.5m. escudos and cattle-raising 152.5m. The largest allocation, however, 1,695m. escudos goes to irrigation and settlement of the land.

An enormous impetus will be given to agriculture when the great Cabora-Bassa dam scheme is in operation. This gigantic plan to harness the waters of the Zambesi river entails a diversion of its course at certain places, and will eventually mean the reclamation of thousands of acres of arable land which can be used for agriculture.

A warm welcome for foreign capital

By BRIDGET BLOOM

"When you judge the Government's attitde to foreign capital to-day, you'll do well to remember that when Salazar took over in Portugal just about 40 years ago, Mozambique was virtually owned by foreigners—many of them British." It is a salutary reminder, made by one of Mozambique's oldest and most respected foreign businessmen. He was recalling the days, just pre-Salazar and well within his own memory, when a very small number of foreign companies in Mozambique had rights which allowed them to exploit large tracts of land, but which, in practical terms, permitted them to trade, administer the ports and thus control Mozambique's livelihood.

When Salazar came to power in Portugal, one of his first moves was to clamp down on the activities of these companies, most of which—such as the Companhia de Moçambique—had been incorporated by Royal Charter in the 19th century. In the case of the Companhia de Moçambique, sovereign rights had been granted over the territories of Manica and Sofala, some of the richest territory in the centre of Mozambique, including the port of Beira. The charter was granted for 50 years—and the company did not in fact relinquish its rights formally to direct Portuguese administration until 1942.

British investment

There was a good deal of British investment in this particular venture. In 1882 the Companhia de Moçambique, for example, granted a concession to build a railway from Beira to connect with the Rhodesian network. The British South Africa Company held a majority of the voting rights in the resulting Beira Railway company—which was not in fact bought out by Portugal (at a cost of £4m.) until 1949.

The action of the Portuguese Government under Prime Minister Salazar was economic nationalism pure and simple—applied in this instance to Portuguese colonies, but ironically similar in other respects to the moves towards economic nationalisation in independent developing countries to-day. By the late 1940s it had become extremely difficult for any new foreign investor to establish in Mozambique—although non-Portuguese still had a dominant role in much of the shipping and other aspects of economic life.

To-day, however, the position is completely changed. Foreign capital is returning to the territory—allowed and encouraged by the Portuguese, not to control the economy as previously, but certainly to play a very active part in its development.

Complex roots

The revolution—for that in a sense is what it is—in Portugal's attitude to foreign investment in its African territories has complex roots. By the late, 1950s it had become obvious that, while a great deal of capital was necessary to develop the resources of Mozambique and Angola, there was a scarcity of capital in Portugal itself.

This urge to develop, however, came as a result of the wars in all three African territories, while latterly there has been a growing realisation that the involvement of foreign capital in Portuguese Africa has its effect on the attitudes of foreign governments to the nationalist revolts. Even Portuguese officials privately admit a connection between the cessation of guerilla activity in the Angolan Cabinda enclave, and the commercial establishment of Gulf Oil there.

The first changes in legislation governing the operation of foreign capital in Portugal's overseas territories came in 1962. They culminated in Decree No. 46,312 of 1964. Effectively this opened the door to private foreign capital in almost all fields. The major exceptions were public utilities and "property of the public domain"; and activities which were in any way connected with the defence of the territory.

One limitation to the foreign investor—in a sense of more interest than the two quoted above, to which the law does in certain cases allow exceptions to be made—is the fishing industry. While any shore fishing installations may be 100 per cent. foreign owned, the majority shareholding in any fleet connected with a fishing operation must be Portuguese.

The foreign investor is to-day given much the same guarantees in Mozambique as he would get in any developing country. There are tax holidays of up to ten years (depending on the type of project), guarantees regarding the repatriation of capital, profits and dividends, and Customs exemptions on plant and raw materials.

Any mining activity may be 100 per cent. foreign owned. Mining concessions are negotiated between companies and the Government on terms comparable to those obtaining elsewhere.

According to Mozambique's Provincial Secretary for the Economy, Dr. Oliveira Marques, Government assigns "a key role to foreign investment. One of our main limitations to development is a shortage of capital and of technical know-how, both of which, we hope, foreigners can supply." Priority, Dr. Marques says, is given to three main areas: agricultural processing, import substituting industry and tourism. Dr. Marques makes the point that very considerable opportunities exist in all these areas.

They are opportunities which are already being taken up—although, largely due to the effect of war, there was little foreign investment in Mozambique until 1966. In the last three years, however, South African, German, French and American investment in particular has increased markedly, with the mining industry accounting for a considerable share.

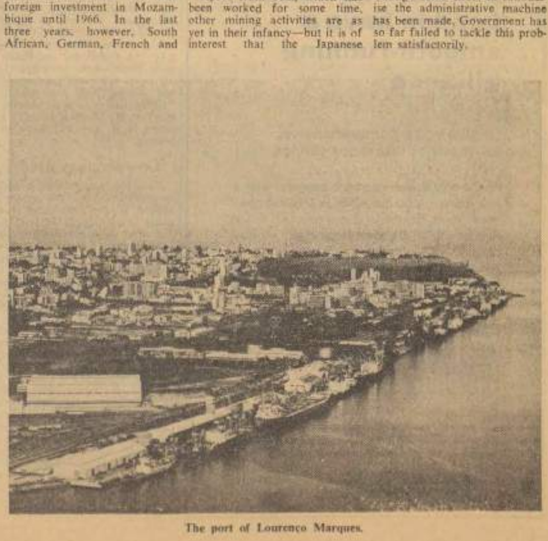
Oil is so far the biggest single sector. Among oil companies already prospecting, or granted exclusive rights in certain areas, are Texaco, Gulf (both of which are also in Angola), and the Sunray, Clark and Kelly Mozambique Oil companies, which are prospecting jointly in the south of the province. French companies are also represented—Société Nationale des Petroles d'Aquitaine, the Entreprise de Recherches et d'Activite Petrolières, and the Anglo-American Corporation of South Africa have certain exclusive prospecting licences, while with them are associated the Gelsenkirchner Bergswerks Aktien Gesellschaft (Gelsenburg).

Mining activities

Apart from coal, which has been worked for some time, other mining activities are as yet in their infancy—but it is of interest that the Japanese Sumitomo group has signed a contract for exploitation of iron ore near Nacala.

One problem faced by investors in general in Portuguese Africa, at least until recently, has been the shortage of credit. Until this year, Portuguese banks were only permitted to operate short-term credit to the private sector. Legislation has now been introduced to allow them to move into the medium- and longer-term fields. The Mozambique Government however claims that credit is in general not an obstacle to the foreign investor, while it hopes that the planned introduction later this year of an Institute of Credit will ease the problem for the private investor within Mozambique.

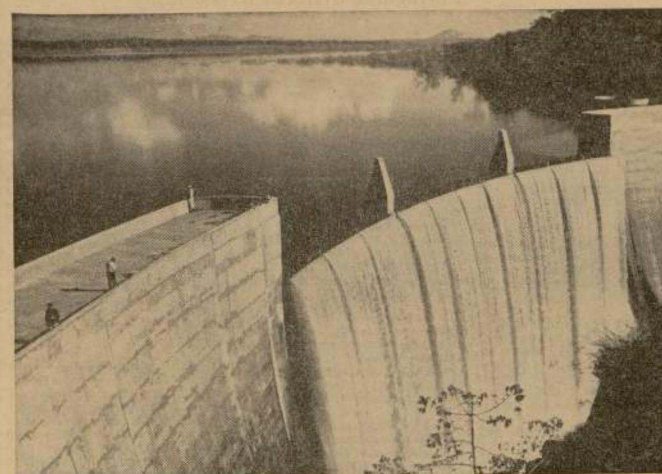
One problem which is acknowledged by the Government is the enormous amount of red tape with which any investor—or local citizen—is confronted. Though some effort to rationalise the administrative machine has been made, Government has so far failed to tackle this problem satisfactorily.



The port of Lourenco Marques.

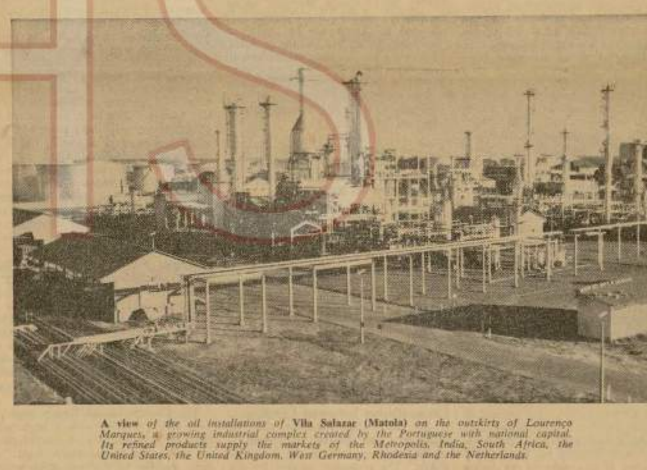
PORTUGAL MOZAMBIQUE

Lourenço Marques, *a city of around 400,000 inhabitants and capital of a vast territory under rapid development, situated on the south-east coast of the African continent, stretching from the mouth of the Rovuma (10°, 27' S.) to Ponta do Ouro (26°, 52' S.). The city's geographical position and its infrastructure of air routes, road and railways makes it a point of considerable importance for the distribution of products to and from neighbouring foreign territories.*

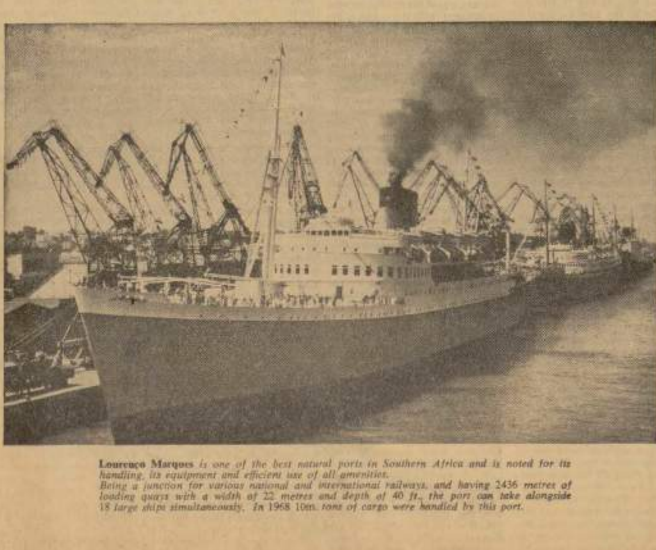


The Chicamba Dam—*one of the most important hydraulic achievements in the Province —will regulate the annual flow from the Revuè river. The first phase, 53 metres high, ensures a provision in the order of 450,000 cubic metres of water, considered to be sufficient to cover requirements in the next few years in the region served.*

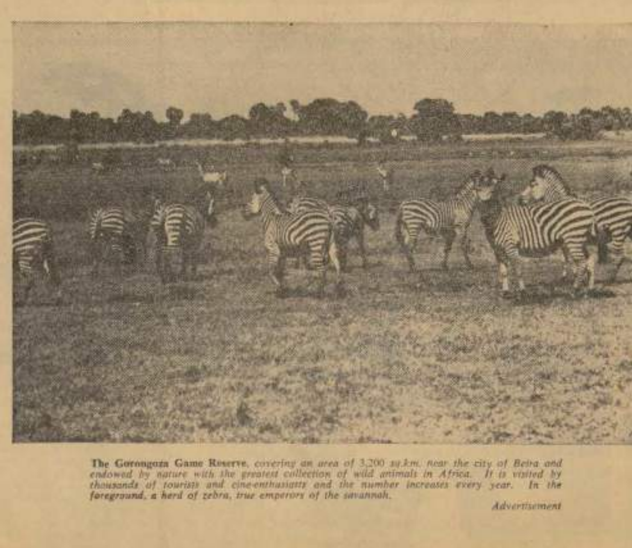
Tea, *like cotton, sugar, cashew nuts, copra and sisal, is one of the principal sources of agricultural wealth in Mozambique and increases its annual production by about 10 per cent. The actual value of the export of this product, whose cultivation takes place primarily in the Upper Zambesi (Guruè, Tacuane, Milange, Namuli and Socone) reaches more than 300,000 contos* (£4½m.).



A view *of the oil installations of* **Vila Salazar (Matola)** *on the outskirts of Lourenço Marques, a growing industrial complex created by the Portuguese with national capital. Its refined products supply the markets of the Metropolis, India, South Africa, the United States, the United Kingdom, West Germany, Rhodesia and the Netherlands.*



Lourenço Marques *is one of the best natural ports in Southern Africa and is noted for its handling, its equipment and efficient use of all amenities.*
Being a junction for various national and international railways, and having 2436 metres of loading quays with a width of 22 metres and depth of 40 ft., the port can take alongside 18 large ships simultaneously. In 1968 10m. tons of cargo were handled by this port.



The Gorongoza Game Reserve, *covering an area of 3,200 sq.km. near the city of Beira and endowed by nature with the greatest collection of wild animals in Africa. It is visited by thousands of tourists and cine-enthusiasts and the number increases every year. In the foreground, a herd of zebra, true emperors of the savannah.*

Advertisement

MOZAMBIQUE VI

An aerial view of the main wharves at Beira.

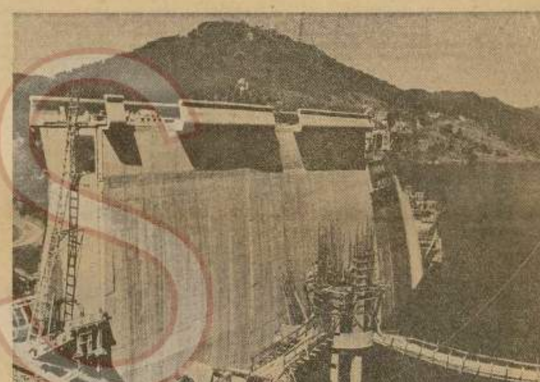
Harnessing the power of the Zambesi

By MARTIN SPRING

The Cabora Bassa project, which involves harnessing the Zambesi for hydro-electric power generation and crop irrigation at the Kebrabasa Gorge, near Tete, where the river plunges down off the Central African plateau on to the East African coastal plain, is not only enormously important to Mozambique—it also represents a major step towards economic and political co-ordination in Southern Africa.

The potential of the Zambesi at Kebrabasa has long been realised—the river's thrust is enough to generate 4,000 MW, equal to two giant coalburning power stations or two-and-a-half Karibas—and the Portuguese Ministry for Overseas Affairs spent the equivalent of £5m. just on investigating it.

But exploitation of this potential required an enormous amount of capital—the first two stages of the project are likely to call for £150m.—and it was out of the question unless a big customer could be found for hydro-electricity on a long-term basis, so that there would be an assured source of revenue to service the loans which would have to be raised.



The Chicamba Real dam, 120 miles north of Vila Pery. This power and irrigation project is nearing completion.

Interestingly enough, the grandiose idea only became a practical project when Dr. Hennie van Eck, chairman of South Africa's Industrial Development Corporation and the most powerful industrialist in the Republic, got personally involved. Van Eck is a potent combination of visionary and practical businessman, and when he sets his heart on a venture it nearly always comes off.

Eye-catching

He saw Cabora Bassa as an eye-catching opportunity to strengthen the ties between South Africa and Mozambique—never very strong in the past because of the backwardness of Mozambique's economy, and South Africa's disdain for the Portuguese fear of South African economic imperialism. Stronger economic and political ties between the territories of Southern Africa are very much part of the Verwoerdian concept of a sort of looseknit Southern African confederation led by the Republic.

Through van Eck's intervention South Africa's Electricity Supply Commission was cajoled into a reluctant agreement to take an initial 680 MW of power from Cabora Bassa, rising to 1,470 MW. These figures include some power to be channelled to Lourenco Marques in Southern Mozambique—100 MW of the higher total.

The agreement is for 35 years. The exact price at which ESCOM will buy is still confidential, but it is known to be slightly more than the Commission now charges its consumers for supply of coal-generated power—three-farthings a unit.

Of course, coal costs have been rising steadily and are likely to continue doing so, the opportunities for holding down costs through going for ever-larger production units are decreasing, and water shortage is forcing ESCOM towards more costly water-conserving " dry " stations. This is the line of reasoning put forward to defend the agreement on economic grounds—but it ignores the inception of cheap nuclear power (South Africa is now planning its first atomic station near Cape Town).

It's no secret that ESCOM is also worried about reliance on electricity generated in a foreign territory with an uncertain political future, which would be transmitted over an 800-mile power line through much desolate country, with its 7,000 pylons an easy mark for sabotage-minded guerillas.

So, not surprisingly, the Cabora supply has been calculated in such a way in relation to the Republic's planned capacity that should the supply fail for any reason, South Africa will have just enough local capacity to squeeze by.

ESCOM'S undertaking was the starting signal for the Portuguese to proceed with the scheme, because it assured them of the revenue to service the capital. However, there was a three-year delay after the start of negotiations between the South African and Portuguese Governments—the ESCOM agreement was only finally signed last month. In the interim the contract to build the dam—and arrange for the financing of it—provisionally awarded to the international Zamco consortium headed by the Anglo-American Corporation Company LTA, hung fire.

The reasons for the delay are shrouded in mystery. One theory is that the Portuguese Government was unwilling to guarantee such a large amount of capital until it was sure in its own mind that it could win the war against the guerillas in Mozambique, and keep the territory a permanent part of Portugal.

Exchange rate risk

A more likely suggestion is that the Portuguese insisted that both the Escom contract to buy power and the loans to raise capital for the project be denominated in the same currency to cover them against the exchange rate risk. This would be difficult because South Africa would naturally be unwilling to contract in anything but rands, whereas much of the capital would have to be raised in Europe or America, where loans would have to be denominated in dollars, pounds, deutschemarks or similar international currencies.

The Portuguese are also believed to be anxious for political reasons to involve American interests in the project. The Zamco consortium consisted of South African, French, German, Portuguese and Swedish companies, but no American concerns. The final contract will almost certainly be awarded to a new consortium including participants in Zamco, but also Morrison Knudsen of the U.S. and probably others.

Announcement of this is expected within weeks, and then the race will be on to get the dam, first hydro-electric station and the transmission line complete by 1975, when the first power is due to flow to South Africa. The dam site, 86 miles upriver from Tete, is isolated from existing transport routes. Most of the steel, cement, machinery and other equipment required will have to be shipped to Beira, railed to within 100 miles of the site, ferried across the Zambesi, and then trucked in over improvised roads.

A complete new town will have to be built to accommodate the 750 whites and 3,000 Africans expected to be employed on the first phase of the project.

The first phase involves cutting a diversion tunnel, building coffer dams, construction of the main wall, cutting out the first power station on the south bank, putting up a transmission hall downstream, and laying the high-voltage power transmission line to the Republic. The dam wall, 510 feet high but only 1,000 feet long, will create a lake stretching back 150 miles to Zumbo on the Zambian border (24,000 tribesmen will have to be moved and another Kariba-type operation Noah's Ark will be needed to save wild animals).

Phase two will involve a raising of the south bank power station's generating capacity from 1,200 to 2,000 MW and the building of additional power lines to serve areas other than South Africa (including possibly an aluminium smelter in Malawi, which has a good bauxite deposit but no cheap power).

Phase three—not planned in the immediate future—involves building a second power station on the north bank, and possibly construction of three dams in gorges downriver from the Kebrabasa to regularise the flow of the Zambesi and allow navigation by barges with a draught of up to eight feet, able to carry loads of up to 1,000 tons apiece.

The Mozambiquans do not see the Cabora Bassa dam in isolation, but as the key to a much grander scheme to open up the whole area to industry and modern agriculture. With cheap power available, exploitation of rich mineral deposits known to exist will become possible. There is a large coalfield near Zumbo — Japan's Sumitomo Mining is already interested—and other minerals discovered include iron ore (some rich in titanium and vanadium), copper, manganese and fluorspar.

A Portuguese company, De Uramio, is interested in establishing a steel mill. Other industrial possibilities are an aluminium smelter, an electrolytic copper refinery, and factories to process agricultural produce.

New settlers

The wider scheme is expected to open up millions of acres of plantation and smallholder-type farming and put 200,000 acres under irrigation. With the prospect of large-scale forestry, cattle ranching and growing of crops such as maize, tobacco, kenaf, flax, cotton, vegetables, sugar, copra, rice and tropical fruits, the Portuguese talk excitedly of attracting perhaps as many as one million settlers to the area.

The authorities' starting plan for developing the infrastructure of the Zambesi delta—which comprises about one-quarter of Mozambique—envisages expenditure of £74m.

One is naturally inclined to be sceptical about the more visionary possibilities of the area, but it seems that the basic scheme itself—which outdoes Egypt's Aswan Dam venture in its size—is certainly going to come about. That, in itself, assures Mozambique of considerable development and seems to make certain closer ties between the territory and the dynamic South African economy.

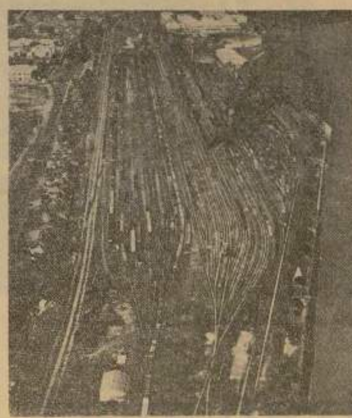
MOZAMBIQUE VII

A potential bonanza from mineral wealth

By BRUCE LOUDON

Time was when Mozambique relied exclusively on agriculture for its wealth. Tea and cotton, sugar plantations, coconut groves, cashew nuts, and sisal and tobacco were the mainstays of the economy. To a lesser degree, so was the development of cattle raising in the highland areas.

But things are changing in the sprawling East African province discovered by Vasco da Gama in 1497. Both onshore and offshore, geological experts have been at work—and have come up with what are considered to be very promising results: so promising, in fact, that during the past few years there has been a massive infusion of foreign capital into Mozambique destined for what could become the most important feature of the country's economy — the development of its natural resources.



The marshalling yards at Lourenço Marques harbour.

Coal exports

There has been mining for a long time on a small scale, with coal from the northern areas being exploited in fairly large quantities that have proved sufficient for home needs, and have allowed an average of nearly 50,000 tons to be exported each year to neighbouring countries, notably Kenya, Malawi and Angola.

Recently, however, there has been a concentration of effort in attempting to exploit what are considered to be possibly large deposits of high grade iron ore, and in developing and expanding oil prospection both onshore and offshore. Iron ore has, to date, given the greatest cause for optimism, with the biggest proven find so far in the province located at Namapa (Mirrote) in the north of Mozambique. Early estimates place reserves there at something like 360m. tons of ore—most of it of a very high quality.

The mines lie within easy reach of the fast-expanding port of Nacala, and plans are in hand for the improvement of facilities there with the aid of Japanese capital and expertise. The Japanese Sumitomo group has signed a contract covering exploitation of the mines, which are held by the concessionary Senhor Leopoldo da Silveira. They will be exploited on a royalty basis, and Sumitomo will, in addition, build a private railroad linking Mirrote and Nacala, and, in the port itself, oversee developments and improvements to facilities that will include the installation of modern ore-loading equipment, as well as facilities for the docking of ore-carrying tankers of up to 100,000 tons.

A report by Dr. Pimental Pereira dos Santos, of the Ministry of the Overseas Provinces in Lisbon, recently stated that after long years of research, Mozambique's richest mineral area was discovered to be in the district of Tete and adjacent areas. Here, considerable deposits of coal, iron, titanus-magnetite, copper, cluorite and manganese have been discovered. In addition, there are indications of the existence of beryllium, corundum, chromium, graphite, magnetite, nickel, titanium and bauxite.

Major centre

Tete is, therefore, seen to be the centre of what could be a major industry in the next few years. The town itself, until now a village hamlet, has a big advantage in development programmes in that nearby is the site of the proposed Cabora-Bassa dam, which is seen as the key to Mozambique's future social and economic development. From Cabora-Bassa will come masses of power at the cheapest rate in all Africa—and power that will prove suitable for the development of mining, not only in the immediate vicinity of Tete, but in the whole of Mozambique.

Elsewhere in the province, the first diamond has been discovered and a company backed by American and Luxembourg capital has been set up for the exploitation of precious and semi-precious stones (other than diamonds). There are reports, too, that a rich vein of gold has been discovered near Vila Manica, at the source of the Chua river, and of big plans to continue prospecting in the hope of finding a continuation of the veins that have done so much for the development of neighbouring South Africa.

The Vila Manica vein is assessed as having a depth of 10 metres and to be 90cm in width—the biggest and most promising find for a long time, and a big development on existing small gold mines at Manica, Tete and near Alto Aigonha (Quelimane).

Several months ago the Mozambique firm of Gamor signed a contract with the South African Federal Volksbeleggings Beperk covering the exploitation of deposits of diamonds, manganese and asbestos in the Catuane region, near the frontier with Swaziland. Initial investments have totalled 250,000 rand.

Both onshore and offshore, the search is, of course, on in a big way for oil—and it is to this field that most foreign investment in Mozambique has been attracted. In the words of one recent visitor "the countryside is littered with boring rigs—and so is the coastline."

Oil is undoubtedly one of the great potential riches of Portuguese Africa. Already it is fast becoming the biggest moneyspinner of Angola's economy. Mozambique would like to make the same boast, and is doing everything possible to encourage more and more prospectors to seek concessions in the territory.

Several big companies have already signed contracts with the State, among them the Société Nationale des Pétroles d'Aquitaine, the Enterprise de Recherches et d'Activités Pétrolières, and the Anglo-American Corporation of South Africa, which, together, have been granted exclusive prospecting rights in certain areas of Mozambique. The Gelsenkirchner Bergswerks Aktien Gesellschaft (Gelsenberg) is associated with these ventures.

Underwater prospecting

The Sunray Mozambique Oil Company has begun prospecting underwater between Bartolomeu Dias and the southern frontier of the province in conjunction with the Clark Mozambique Oil Company and the Skelly Mozambique Oil Company. They are scheduled to invest some 100m. escudos during the first three years of prospecting.

Portugal has also signed a contract with the Aunt International Petroleum Company of Mozambique covering exclusive prospecting rights. Texaco Inc. has another prospecting contract covering a different area. A major contract has been awarded to the Mozambique Gulf Oil Company—sister company of that which has been so successful in the Angolan enclave of Cabinda. Yet another has been granted to the Pan American Oil Company.

Throughout the territory, prospecting is, indeed, still in its infancy, although initial reports in all fields have proved promising. But, with the Government doing all it can to encourage foreign investment in this field, it seems certain that exploitation of Mozambique's mineral resources could become a major factor in the country's economic development in the reasonably near future.

An urgent need for more skilled labour

By HUGH KAY

Mozambique's manpower problems basically stem from the ease with which the African can live by subsistance farming, however low the standard of living it yields. The burden of family farming often fell on the women, and the men were glad to be free. In the country's exchange sector, therefore, there has always been a manpower shortage, and what there was tended to be unskilled.

The supply of labour has also been lessened by migration to the mining districts of the Rand. It was, and is, a symbol of social status to have worked in South Africa, and, to a lesser degree, in Rhodesia.

The Portuguese brought to Africa not only a managerial class, but a whole urban complex, with Europeans predominant in the artisan class. Many immigrant Portuguese are illiterate, and learn to read and write from African teachers.

So the paradox is that 100,000 Africans may be found at any given time working outside Mozambique to earn money for the bride-price or for the purchase of cattle, while the urban centres at home are in need of their labour; yet many may be deterred from working at home because of white competition for jobs.

The biggest blot on the Portuguese escutcheon was the system of forced labour which succeeded slavery, and was not so very much better. It was prompted partly by the Africans' lack of interest in work for a market economy, but was none the less deplorable, especially when fathers of families were removed from their homes for long periods.

After long generations, however, a start was made in the post-war years to clear up abuses once and for all, and a generous, if qualified, tribute to the Salazar regime's success in this field was paid in 1962 by an investigating team of the International Labour Organisation.

Real changes

It found that far-reaching changes had been made in Portuguese policy, legislation and practice, in accordance with the ILO Forced Labour Conventions, which Portugal ratified in 1956 and 1959. The team was fully satisfied that these changes were bona fide and it rejected complaints that they were meant as a cover "to continue her ruthless labour policies."

It found that recruitment of forced labour with official help had been ended. Africans were no longer compelled to work in industry or for punishment, nor to grow cotton and rice at home to government order.

There was no forced labour in railways and ports, where conditions of work and social services were in many respects exemplary. The team gave a clean bill of health to commerce and light industry, and found that humane and efficient arrangements had been made by the Portuguese and South African governments to safeguard migrant workers.

With improved conditions, workers were going to work because they wanted to, often for only part of the year, though sometimes in order to pay land taxes. There was no racial discrimination in the labour laws though it had to be said that the unions did not effectively represent African workers.

There was no doubt that the government was completely committed to sound labour policies, but the African would not benefit fully until his overall social condition had risen. Too often his life was a series of conditioned reflexes. Distinctions between suggestions and orders were blurred in his mind. Still, on the whole, there were abundant signs of social and economic development.

Legislation, like statistics, is less detailed in Mozambique than in Angola, but, in general terms, the rural worker to-day is well protected. Inspectors ensure that each worker's contract is freely reached, and there are strict regulations, sternly enforced, to govern hours of work and fringe benefits.

Plantation owners are bound by law to supply transport, schooling for children, medical services, prescribed clothing, and housing for families. The larger industrial firms run minor "welfare states" of their own. Prices for "home grown" crops are controlled by the marketing Boards.

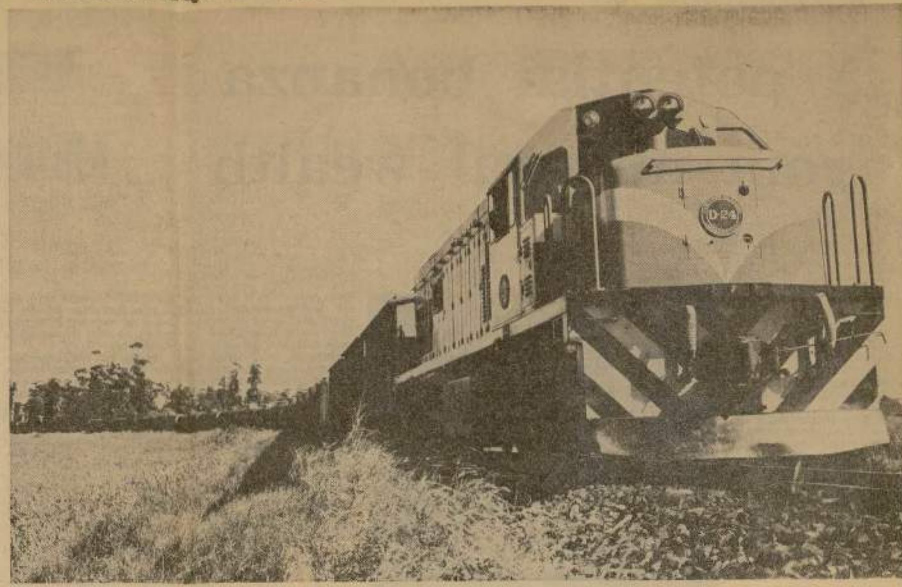
The ILO found in 1962 that industrial wages ranged from 100 to nearly 1,000 escudos a month (though white collar workers could earn much more). These levels are very low, and they are still distinctly lower than in Angola. On the other hand, they have risen in the intervening years at an average annual rate of 5.8 per cent., and the earnings of workers paid partly in money and partly in kind have risen from an average 337 escudos to 1,275.

Lower wages

To-day it is generally accepted that wages and conditions in Portuguese Africa are lower than in Rhodesia and South Africa, but better than what can be offered in most African States.

The urgent need is the training of skilled workers, and, while this connects in part with the growth of technical schools, the larger industrial firms bear much of the training burden themselves. It is not uncommon to find an African foreman controlling white immigrant labourers.

With the rise of new industries, and the development of more sophisticated tastes, African workers have crowded into the cities and the housing programmes cannot cope with them. There are plenty of special schemes, including a system of do-it-yourself house-building. But the shanty towns proliferate. So the business man who sets up shop in Mozambique to-day will find there are workers available, but he will probably have to teach them from scratch.



A modern diesel-electric locomotive of Mozambique Railways.

Internal transport links are the main priority

By BRIDGET BLOOM

There is a small petrol station along the sea front in Beira named the Joanna V, not far from a hotel much frequented by Rhodesian tourists. Its name mockingly reminds the visitor of one of the most publicised—if in this case unsuccessful—attempts to break Britain's oil blockade of this Portuguese East African port, until 1965 Rhodesia's main outlet to the sea. No other ship has been so dramatically turned away from Beira, but the blockade goes on. Its effects are registered in the statistics of tonnage handled at Beira's port; its existence, and Portuguese complaints against it, are a constant reminder of Mozambique's traditional role in the transit trade of this part of southern Africa.

Until very recently, the story of transport in Mozambique was the story of the territory's role in the transit trade and it is still this which dominates. The reason is obvious: Mozambique's coastline stretches some 1,400 miles and is an outlet to the sea for four landlocked countries—Rhodesia, Zambia, Malawi and Swaziland. It is also a natural outlet for much of northern South Africa.

Traditionally, the deficit on Mozambique's external trade had been turned into a balance of payments surplus largely as a result of earnings from the transit trade—some 20 per cent. of its international payments receipts were earned in this way in 1965, while last year, although there was an overall payments deficit, this was primarily due to an increased deficit within the escudo area. There was a payments surplus with foreign countries of some 920m. escudos.

Transit trade

Nevertheless, the Portuguese argue that one reason for the payments deficit last year was the decline in transit trade through Beira, the port traditionally used by Rhodesia. Certainly, traffic through Beira has declined markedly—total tonnage handled last year was 3.5m. against 4.3m. in 1965.

A profit and loss account for Mozambique because of sanctions, however, is almost impossible to calculate. It is officially estimated in Lourenco Marques that the loss of Rhodesian traffic has cost some £R22.5m. in the three years 1966-68—and that balance of payments losses should be calculated at double this amount. Invisible losses—payment for and charges on the Beira-Umtali oil pipeline closed in 1966, services and tourism for example—being mainly responsible.

On the other hand, traffic at Lourenco Marques has increased by much more than the loss of traffic registered in Beira; there is no doubt that this is partly due to Rhodesian traffic being rerouted. Traffic through Lourenco Marques last year topped 12m. tons, compared to less than 8m. in 1965.

Mozambique's railways have a vital role in the transit trade—road communications are still relatively undeveloped. There are three separate railway systems—each striking laterally from the sea into the interior.

The southern system is based on the capital, Lourenco Marques, with lines extending into Swaziland, South Africa and upwards, through Malvernia, into Rhodesia. The central system is based on Beira, connects with Rhodesia and so with Zambia through Machipanda, with a branch northwards across the Zambesi river to Tete in Mozambique, and to the border with Malawi. The northern system is based on Nacala, with one 800-km branch running in the direction of Lake Nyasa. There are three much smaller lines, not connected to any of the major systems.

Improvements to the rail system have received high priority from Government, through whose Harbours, Railways and Transport Administration, all railways are run. In the past two years, under a fairly heavy programme of capital expenditure, there have been programmes of line replacement and realignment, bridges have been strengthened and a degree of dieselisation on the southern lines has been introduced—full dieselisation is planned eventually for the major lines.

The increases in heavy freight traffic in particular have compelled modernisation of the main ports, Lourenco Marques and Beira, as well as the development of a new port, Nacala, which many see as a "super-port" of the future, able to take giant tankers and eventually replacing, in all probability, South African ports like Durban and Port Elizabeth in importance.

Nacala is in fact a quite exceptionally large natural harbour. Development is fairly recent—capacity at present is reckoned at around just under a million tons a year. Cargo handled last year, although nearly a third up on 1967, was still just under 500,000 tons. But all Mozambique ports have benefited to some extent from the closure of the Suez Canal, and the authorities reckon, with the introduction of giant tankers, that Nacala will become increasingly important, whatever happens to the Canal.

Railway extension

Great hopes also are placed in the extension of the Nacala—Vila Cabral railway through to Malawi. Construction of this 120-mile line is now well advanced—by August next year it should be finished, and Nacala's hinterland will thus be significantly larger, giving the network as a whole increased receipts from transit trade.

Even more ambitious plans are afoot. Malawi's President, Dr. Banda, who sets great store by the Nacala link, spoke last month of plans to build a second westward link to join the Mozambique line from Beira to Moatize, near Tete in Western Mozambique. This would then be extended to Cabora Bassa, the site of the proposed £125m. hydro-electric project.

President Banda added at that time that he had proposed the extension of this line to Rhodesia, as an alternative to Beira, for the rail systems of Malawi, Mozambique and Rhodesia. This project would undoubtedly be expensive, but it has many advantages. Mozambique would have direct access to Rhodesia and South Africa from the Zambesi valley, Malawi would have a more direct route southwards, while Rhodesia would gain a second port in Nacala (in view of the limited capacity of Beira this would ultimately be necessary anyway, and would be economically a better proposition than the long route round to Lourenco Marques).

There are other, though not especially well advanced plans, including building a new port at the mouth of the Zambesi, which could presumably be viable if minerals are exploited as a result of the Cabora Bassa developments.

Road development has lagged a long way behind railways in Mozambique, although the balance is gradually being redressed. The Road Authority, according to officials in Mozambique, has construction programmes this year involving a total expenditure of some 1,212m. escudos, a great deal of which involves resurfacing and realignment, the major project being the intended completion of an all-season road connecting Lourenco Marques with Beira.

There is obviously no replacement for a good network of feeder and main roads, which Mozambique has not yet got. But air transport has developed rapidly in the past few years, and has filled some gaps. District headquarters are connected with each other and with the main ports, while services to South Africa and Rhodesia are frequent.

DETA, the Mozambique airline, has recently announced that two Boeing 737-200 twin jets are to go into service in January next year. The airline plans to "go jet" soon and is presently being reorganised to cope with the increased traffic of the past few years.

The main priority in the future should be the internal transport system, which has seriously lagged behind Mozambique's international routes, and is a condition of balanced development. But for many years to come, it will be the international routes which will be the big revenue earners, sanctions on Rhodesia or not.

One of a fleet of Fokker Friendship aircraft operated by Mozambique Airlines.

MOZAMBIQUE IX


Tourists view one of the traditional attractions of Mozambique (left)—spectacular scenery is another feature (right).

Key link on the Southern Africa tourist trail

By a Correspondent

One road is going to make an enormous difference to the development of tourism in Mozambique. The industry currently earns the province around £5m. a year, making it one of the major money-spinners, and the third most important industry. Last year there were 250,000 visitors and there will be more this year.

Most of the tourists are from Mozambique's neighbours in the hinterland—from South Africa and Rhodesia and, to a lesser extent, from Zambia and Malawi. For their staid Southern African cousins, the big attraction is the Continental way of life—the pavement café, the vinho, the fado.

New road

The road which is expected to boost tourism will link Lourenco Marques, the capital, which lies at the extreme southern end of the country, and Beira, the second largest city, 500 miles to the north.

At present the bulk of the tourists group themselves either around Lourenco Marques, which because of its geographical situation attracts the South Africans, or Beira, which offers Rhodesians their nearest seaside resort. In the past few have attempted the gravel road route between the two cities, where crossing major rivers entails a ride on a rickety ferry and heavy rain puts a stop to all traffic.

But when the £6.5m. metalled road is completed the way will be open for the Grand Tour—from South Africa, up the Mozambique coast, into Rhodesia and inland back to South Africa.

Already the tarmac stretches some 400 miles north of Lourenco Marques, a city with modern hotels and sophisticated entertainment, to the Vilanculous region. Here is the playground of the big game fisherman, the underwater spear fisherman and the lotus eater who likes to lie around and soak up the sun or just revel in the beauty of coral reef life.

There are settlements on the mainland and offshore islands—Santa Carolina is the best known—which provide all the amenities for a get-away-from-it-all type holiday. For the international tourist the attraction of this area lies in the game fish—marlin, sailfish, barracuda, tuna, bonito—which provide excellent sport.

Only a couple of hours inland from the port of Beira, a smaller version of Lourenco Marques, is the Gorongoza Game Reserve which ranks with South Africa's Kruger National Park and Rhodesia's Wankie Game Reserve as a superb game viewing location. Mozambique also offers hunting safaris on the East African pattern and these have attracted a steadily growing number of high-spending American and continental parties.

Attractive island

North of Beira, Mozambique stretches another 700 miles to the Tanzanian border. Here the tourist potential has barely been scratched. An outstanding attraction is the little island, Ilha de Mozambique, only two miles long and linked to the mainland by a bridge. It was once the capital of the whole province.

Vasco da Gama landed there in 1498 and to-day the island is saturated with the past, a medley of centuries-old forts and chapels in a brilliant tropical setting, with a strong Arab influence, and altogether a delightful place on which to wander about and ponder on the past greatness of the Portuguese Empire.

Surprise value

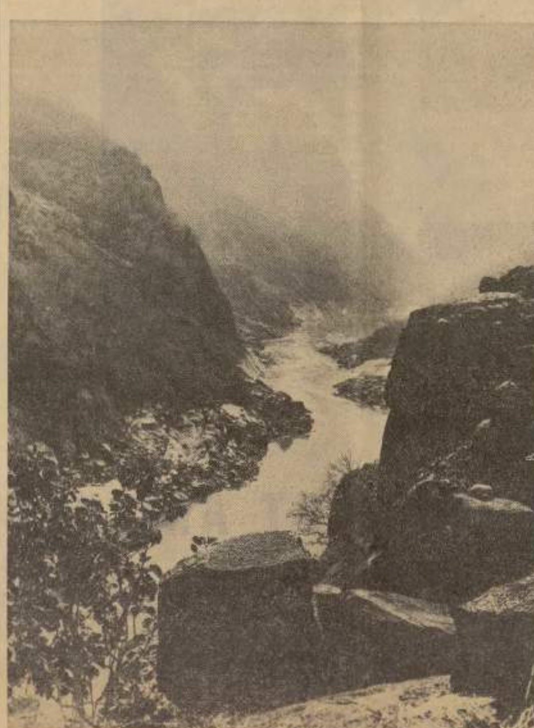
Part of the charm, of course, of places like Ilha de Mozambique lies in the fact that they are off the tourist's beaten track.

The appeal often lies in the unexpected and in Mozambique there always seems to be something strange around the corner. In Quelimane, a little town 200 miles north of Beira in a Joseph Conrad setting of sweltering heat and palm trees on the banks of a sluggish African river, there is an eight-storey £1m. luxury hotel, where the service is equal to the best in Lisbon.

It was built by three brothers who made their fortunes in the district where there are large cotton plantations, tea estates, forests and the most extensive palm tree groves in the world. It is a monument to their success and to the determination of the Portuguese to make Mozambique prosperous.

One day, the Cabora Bassa project is going to be a splendid tourist attraction. Here in spectacular, jagged country, the mighty Zambezi River will be trapped behind a 510 foot high wall to create the greatest single source of electric power in Africa. Like the Kariba Dam upstream, Cabora Bassa will become a place that must be visited by all for whom Africa holds any attraction.

Jumbo jets, low cost all-inclusive holidays, good roads, clean, well-run hotels—all these are on their way in Mozambique. It is recognised that the tourist industry in a world of increasing affluence has no limit. It may take a good few years, but Mozambique, blessed with an abundance of natural attractions, is one country whose slice of the tourist cake is going to get much bigger.



Another example of fine scenery.

A big step forward in primary education

By HUGH KAY

As late as 1958 it was true to say that 95 per cent. of the people of Mozambique were illiterate. Since then, the graph of primary education has rocketed upwards, but the test of Portuguese intentions will turn on the speed with which the Government now develops its secondary and technical grades, and the centres of higher studies.

There are two levels of primary schooling. Most African pupils, and some Asians and mulattos as well, go to Catholic mission schools, run with Government aid. They begin with three years of kindergarten, first and second grades. Here they learn the Portuguese language and the rudiments of the three Rs.

Then comes primary school proper: third and fourth grades, then a year in the qualifying class for entry into secondary school. The subjects are Portuguese language and history, the Christian ethic, handicrafts and agriculture.

Teacher training

Few pupils get as far as the qualifying class, but completion of the fourth grade can qualify a student for training as a teacher in Government primary "posts"—as opposed to full-blown primary schools. These posts have sprung up in scores of outlying villages, and keen young African teachers, by giving up their vacations, manage to keep a year or two ahead of their senior pupils.

White children, Asians and mulattos are supposed to dispense with kindergarten and go to Government primary schools with a five-year course. All primary students, whichever level they come from, are eligible for Government secondary schools, academic or vocational (that is, technical), provided they have passed their qualifying grade.

The trouble is that 13 is the maximum age for starting in primary school, while 14 is the maximum age for starting in secondary school. Many African children tend to start their schooling late, and do not finish the kindergarten course in time to qualify for further studies. In 1959, there were 392,796 children in this grade, and of these only 6,928 went to primary school.

Small percentage

The late Eduardo Mondlane recalled that, in a Government high school he visited in 1961, only 40 out of 800 pupils were Africans. Secondary schools were few in number and all were located in towns. Few African parents could afford the boarding fees, even though tuition was virtually free, and they certainly could not afford the private secondary schools, where tuition had to be paid for as well.

The bottleneck then, as now, was in teacher-training. In 1961 there were four training establishments, with 341 students and only 65 graduates each year.

However, whereas in 1958 only 300,000 children were at school, a third of the school-age population, the total has been doubled since. Thus one in 12 of the present population is in school, and about half of the 5-14 age group. As late as 1965, however, too many primary students were in "posts" rather than "schools," as many, in fact, as 75 per cent. (In Angola the figure was only 45 per cent.)

The latest available distribution breakdown relates to 1966, but the pattern has not substantially changed since then:—

PUPILS IN 1966-67

All primary	445,586
Secondary-Technical (including teacher-training)	15,541
Secondary-Academic ..	9,866
Middle-Technical	589
University studies	632
Various (including seminaries)	1,348
	473,562

In judging Mozambique's record it is fair to say that in 1960 the general illiteracy level for Africa as a whole was 81.5 per cent. and as much as 88.2 per cent. in West Africa. In the 5-19 age group, Mozambique was schooling 26 per cent. of the school age population in 1964, an improvement on Sierra Leone (16 per cent.) and Tanzania (21 per cent.). But Uganda showed 31 per cent., Congo-Kinshasa 39 per cent., Ghana 61 per cent., Kenya 43 per cent., and Rhodesia 54 per cent. As regards the figures for secondary level alone, the differences were smaller.

Schooling at primary level in Mozambique has made dramatic strides, and the great stress now is on technical schools. But secondary education generally is still at a high premium.

This may be partly due to fears that an educated élite will develop before the jobs are ready to give them employment: the political curse of other African states. But there is also the problem of taking secondary education out to the bush, with roads to be built, transport to be provided, and sophisticated buildings to construct.

The other major criticism is that Portuguese education is heavily European, with scant attention to African history and anthropology. It is true that African cultures tend to be lived rather than written, but the traditional heroic epic, passed from mouth to mouth, does not receive the attention it does in the African States.

The centre of university studies, opened in 1963 in Lourenco Marques, is extremely up-to-date and staffed by highly trained teachers. It is concentrating first on civil engineering, biology and physics, medicine and veterinary medicine, agronomy and now on language departments as well.

The standard of the university courses at Lourenco Marques is equivalent to that of Lisbon University, but this is to undergo reform; at present, Portuguese courses are too long, too theoretical, and involve too many subordinate subjects, and the Rector of the Centre, Dr. Veiga Simao, who secured his physics doctorate at Cambridge, is one of the most earnest reformers.

It may be said that there are political motives behind the postponement of faculties for law and political science. Yet the fact remains that Mozambique, like other African countries, is less in need of lawyers than of men who want to build dams and bridges, prospect for minerals and develop agriculture.

Top level intake

The country's political future will depend in no small measure on what is done with the African graduate. At present only 15 per cent. of the centre's intake is non-European: Asian, Chinese and African. There are doubtless many mulattos in the other 85 per cent., whose mixed origin is too distant to trace as such. But until the secondary grades and teacher-training receive an adequate boost, the African intake at top level is bound to be slow.

On an optimistic scale, the current Development Plan proposes to spend 2,700m. escudos on overseas education, more than five times as much as its predecessor.

Cashew nuts could soon be the top currency earner

By JOSE RAMALHO

Although it all started centuries ago as an experiment by the early Portuguese settlers along the coasts of East Africa and India, the cashew nut and its many by-products are a new-found source of wealth. They brought from Brazil the seeds of such crops as groundnut, cassava and cashew to test their adaptation to identical climatic conditions on the coasts of the Indian Ocean.

Apart from the scientific value of the experiments, there was a real immediate need to develop the then poor agricultural resources of Africa. The new settlements needed foodstuffs for themselves and supplies for the increasing Indian traffic.

The groundnut and cassava crops appealed to the Africans, who put them under intensive cultivation. The cashew nut tree, both as a means to prevent soil erosion and the purveyor of a strong drink, was allowed to grow wild and soon covered most of the coastal areas.

To-day, the cashew nut has grown into a multi-million business and is expanding at a fast pace. Soon it may become Mozambique's top currency earner.

In 1967, the province's exports of cashew, both raw and processed, amounted to 612m. escudos. Current forecasts show a spectacular upsurge that may well push up the export figure to over 1,500m. escudos in the next few years.

However, even this remarkable progress falls far short of the tremendous potential offered by this odd pear-shaped fruit. With an average production well below that of Mozambique, the Indian Union has an annual export trade of cashew kernel valued at the equivalent to 3,800m. escudos.

Though Mozambique is now waking up to the almost limitless possibilities of the cashew nut business, there is still a long way to go and much hard work before the province takes its rightful place as the No. 1 world producer and exporter of cashew products.

The 100,000-ton figure officially quoted as Mozambique's average annual production of raw nut corresponds but to a small fraction of the "real production," as it only covers the export and processing figures available to the statistics department.

It is estimated that more than 95 per cent. of Mozambique's cashew trees belong to Africans. Therefore, the annual crop depends to a great extent on the activity of the pickers, whose only incentive to work is the price being offered at the time for their crop.

Seemed oblivious

For more than three centuries Mozambique seemed quite oblivious to the economic significance of the cashew tree. It was only in 1935 that, faced with an insufficient production at home to feed their plants, the Indian processors turned to Mozambique as a source of supply of raw nut. Two years later, India was buying some 40,000 tons and in the five-year period from 1957-1961 the export of raw nut to India meant to Mozambique a loss of over 1,000m. escudos in hard currency.

Started during the last war as a primitive manual shelling and peeling operation, the processing of raw nut in Mozambique changed radically in 1962 with the introduction of the mechanical cashew processing system developed by an Italian company.

There are now in Mozambique eight licensed mechanical plants with a capacity of processing 85,000 tons of raw nut a year. At the same time, the manual processing plants have been given notice that they will have to change to mechanical systems or lose their licences.

The trend seems to be that with new and ever more sophisticated plants coming into operation, the full production of cashew nut will soon be exported as kernel.

At this rate it is not difficult to forecast that, in a few years' time, the cashew nut trade will by itself largely exceed the total figure of the main exports of Mozambique, which in 1967 amounted to an overall figure of 3,500m. escudos.

Present world demand is mainly concentrated on the almond as a "drinking accessory" and for confectionery. However, there are more than 300 patented uses for cashew by-products and the range is increasing all the time due to the research work carried out in some countries.

One of the more promising markets is for the cashew nut shell liquid, generally referred to as CNSL, an oil extracted from the raw nut during its processing. CNSL has high polymerising and friction-reducing properties and is widely used in the paint, chemical and plastics industries. Moreover, it has recently become one of the components of the fuel used in space rocket propulsion.

The market for cashew nut products being highly concentrated, there is still room to build up sales in new markets. At the moment, the largest kernel buyer is the United States with a consumer market taking about 40,000 tons per year. Cashews are mainly consumed in the U.S. as a "drink accessory" and the market is still growing.

Remarkably buoyant

Another encouraging factor is the cashew's price performance which has been remarkably buoyant. The New York price for "320 count" whole kernels is around 60 cents and prices should continue firm even with substantial increases in production.

In recent years Eastern Europe, especially the USSR and Eastern Germany, has imported large amounts of cashew and the market shows a decided trend to expand. An aggressive market promotion campaign in other parts of the world should prove very successful.

In its thrust to get to the top, Mozambique's first problem is now to work out a rational marketing system capable of attracting the "real production" almost entirely held by African tribesmen.

The growing demands of the modern mechanised processing plants are receiving the attention of the authorities and great strides have been made with the planting of millions of new trees. The ideal conditions along the coastal areas and the technical assistance of the Government experts should go a long way to raise the low productivity of the African held cashew trees which so far has been estimated at less than 50 per cent.

There is at the moment in Mozambique a strong current to set up a co-ordinating board, on the lines of the successful Cotton Board, to direct and supervise all the aspects of the cashew industry.

In the long range the chief beneficiaries of the new and exciting developments in the cashew industry will be the Mozambique Africans. The guarantee of a fair price for their crops, the thousands of jobs in the new plants, the technical and social assistance extended to them by the Government and the employers will mean a higher standard of living and a better future for millions of Africans.