PORT DEVELOPMENT: GROWTH, COMPETITION AND REVITALIZATION

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ABSTRACT

Port development along the Kenya coast has been important for many centuries and has provided the principal means of interaction between the Indian Ocean and the African interior. Some small ports remain locally important, but Mombasa is the dominant port, as well as the major urban and industrial complex in the coastal zone. The character and development of the port, and some of its present-day problems, are outlined. The idea of a free port at Mombasa or of a second deepwater port elsewhere on the Kenya coast are considered interesting but premature. Improvements in operational efficiency and in the competitive position of the port in an East African context are critically important.

INTRODUCTION

Ports and port cities have played a large part in the development of modern Africa, notably through their role as nodes in international maritime transport systems. Although often characterised in the past as gateway settlements from the standpoint of a colonising power intent on resource exploitation, coastal port cities also provided windows on a wider world for the societies and economies of coastal and interior Africa. Today, relationships between ports, cities and coastal zones are recognised as important and varied, reflecting a variety of contexts — environmental, economic, political — and a wide range of issues such as transport, employment and planning.

This review considers the ports of the coastal zone of Kenya, with special reference to Mombasa, and illustrates the interdependence of port, city and coastal region in terms of physical contexts, historical legacies, political problems and planning issues. It is based on the idea of a port as an essential element in a complex and dynamic transport infrastructure, a node in a multimodal system. The review also reflects the port selection process as an historical and continuing dynamic phenomenon that has yielded Mombasa

Figure 1 The network of transport services in East Africa

as the primary urban, transport and industrial node in the Kenya coastal zone. Some relevant physical factors and historical processes are outlined; the origins and growth of the modern port are briefly summarized; and some present-day problems and development issues are discussed.

PORT, CITY AND COASTAL ZONE

Located on the Indian Ocean coast of Kenya (Figure 1), Mombasa is today the most important port city between Port Said (Egypt) and Durban (South Africa) and the leading outlet for an international tributary region some 1.2 million km^2 in extent, inhabited by over 50 million people. Historically, Mombasa is the most successful long-term survivor in a process of settlement and port selection on the Kenya coast that has probably lasted about 2,000 years.

Relationships between Mombasa and the Kenyan national economy are in one sense straightforward because Mombasa is Kenya's only deep-water port and is, therefore, a critical element in linking the national and international surface transport systems. In another sense, however, with a fast-growing population approaching one million (Sabini 1994), Mombasa is overwhelmingly the primary urban and industrial node in the coastal region of Kenya and its dominance of this zone in socio-economic and political terms yields a wide range of complex issues ranging from water supply and employment to security and industrial decentralisation.

When looking at Mombasa and the coastal region, it is important to distinguish between the various administrative areas involved. Within Coast Province there are seven districts, some of which extend a considerable distance inland. Within Mombasa District, Mombasa town is the central urbanised area on the island and neighbouring mainland (although the boundaries of Mombasa District and the Municipality of Mombasa coincide). Two additional geographical concepts transcend these administrative areas. One involves the idea of a metropolitan Mombasa, including the town and much of Mombasa District; a second concerns the identification in physical and ecological terms of a coastal zone within which Mombasa is a major element.

THE PHYSICAL ENVIRONMENT

The extent to which a cityport can fulfil its developmental role in relation to its local and more distant hinterlands is conditioned by a number of factors. One of these is the physical environment which in the case of Mombasa and the Kenya coastal zone is generally advantageous. Defined on one side by the Indian Ocean and on the other by the rapid vegetational transition from the well-watered coastal forest/savanna mosaic to the dry semi-desert commonly known as the *nyika*, the Kenya coastal zone in a narrower sense is a low-lying area between 10 and 30 miles wide, with annual rainfall of over 1,000 mm in many places and some productive soils.

Today, from both the landward and seaward sides, this coastal zone is attractive to settlement, trade and economic development, and as a result is relatively densely popu-

lated. The zone is identified in human terms by a mixed settlement pattern which outside Mombasa comprises a variety of small port towns (Kilifi, Malindi, Lamu) and smaller communities linked by a north-south road, and an economy based on varied subsistence and commercial agriculture and on tourism.

In the past, the seasonal reversal of winds over the western Indian Ocean played a major role in the early development of navigation, trade and settlement along the Kenya coast. From November to March, the north-east monsoon brought sailing vessels from Arabia and India, some of which reached the coast of Tanzania, returning with the build-up of the south-west monsoon in April. From a maritime perspective, the coastal zone presented a relatively productive and not inhospitable environment. However, for long it was largely ignored by traders from the landward side. African precolonial trade between coast and interior was better developed in neighbouring Tanzania. In Kenya, early coastal trading settlements were to a substantial extent discouraged from developing trading links with the modern hinterland of Mombasa by the *nyika*, the dry wilderness across which there were few reliable routeways before the railway era.

A significant factor from the standpoint of modern port development on the Kenya coast is the existence of a series of drowned river valleys or *rias* resulting from Pleistocene changes in the relative sea level. Some, such as Kilifi, are too shallow or otherwise unsuitable for port development, but at Mombasa *rias* are a critical factor in the water site of the port. Mombasa Island, on which the town centre and many of the port facilities are located, lies between a complex double *ria* — Mombasa Old Harbour and Kilindini Harbour (Figure 2). Each of these two harbours has been developed for commercial purposes, but in quite different ways. Mombasa Harbour, being rather narrow and relatively shallow, provides shelter for smaller craft, while Kilindini Harbour (the 'place of deep water') provides modern deep-water facilities. The fact that Mombasa has been a seaport of significance in both medieval and modern times is largely due to the geographical juxtaposition on this site of two harbours contrasted in area, depth and capacity. These conditions have enabled the port to adapt itself successfully to functional and navigational changes over time. Moreover, site conditions do not present any insuperable obstacles to physical expansion in the foreseeable future.

HISTORICAL PERSPECTIVES

Today the Kenya coastal zone constitutes the maritime façade of a developing country of considerable economic potential, and from a national standpoint forms a vital, outward-looking link with the rest of the world. This spatial orientation is largely a product of relatively recent historical processes, for until the nineteenth century the coastlands were essentially, for trading purposes, part of the western shore of the Indian Ocean and its Arab-controlled thallassocracies, dependent upon the seasonal reversal of winds. Successive generations built up widely differing hierarchies of seaports, which comprised important if rather peripheral elements within the widespread network of trading towns and ports stretching in medieval times through south-western Asia to China (Broeze, Reeves & McPherson 1986; Hoyle 1983).

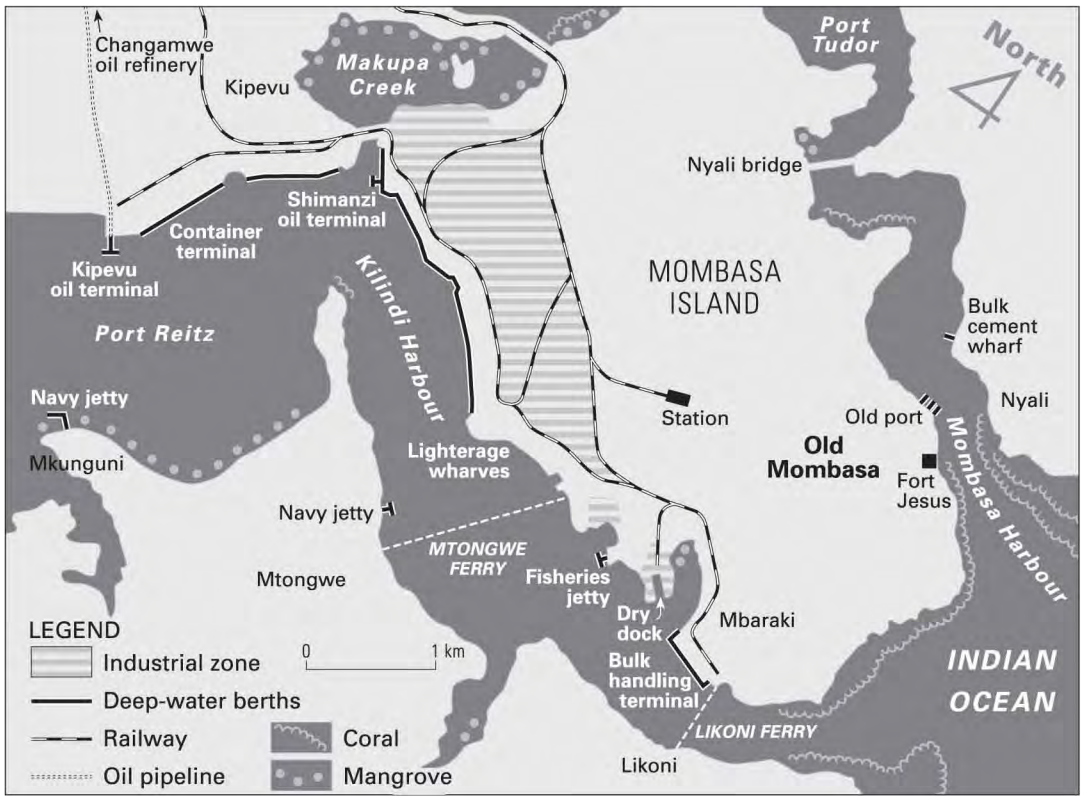

Figure 2 The port of Mombasa

The earliest surviving description of the external maritime trade relations of East Africa is to be found in the *Periplus of the Erythraean Sea* (Huntingford 1976), a guide to the commerce of the Red Sea and the Indian Ocean written at some time in the first or second century AD by a Greek trader living in Alexandria. The book describes a voyage along the East African coast and mentions, *inter alia*, the trading port of Rhapta which was subsequently described as a 'metropolis' in Ptolemy's *Geographia* (Stevenson 1932). The site of Rhapta has never been satisfactorily identified, but has usually been associated with the Rufiji delta in Tanzania.

Early medieval trading ports such as Manda, Mombasa, Lamu and Malindi were mostly located on defensive sites from which they were probably able to dominate varying areas of coast and hinterland, their fluctuating comparative importance reflecting their varying fortunes in trade and in warfare. The experience of Kilwa, the principal medieval port on the coast of Tanzania, was essentially similar. Although not mentioned in the *Periplus*, Mombasa Island is known to have served as a maritime trading post in the eleventh century and it began to take shape as a town with the Shirazi migrations (from southern Arabia and southern Persia) in the thirteenth century. Surprisingly, perhaps, there has been little archaeological investigation on Mombasa Island and we cannot rule out the possibility that a town or a port existed at an earlier date. As the nineteenth-century European explorer Richard Burton put it, "it is hard to believe that the Phoenician, Egyptian and Greek merchants would have neglected the finest harbour and the best site for trade upon the whole Azanian coast" (Burton 1872, Vol. 2: 37).

The later middle ages were marked by a much fuller development of Islamic civilisation, with rapid urban expansion and trade development especially in the fourteenth century, possibly associated with improved environmental and political conditions (Stiles 1992). Among settlements from this period along the Kenya coast that have not survived but have been excavated, the best preserved is Gedi, located 13 km south of Malindi. Gedi was not a seaport, but illustrates the character of the Arab colonial towns at the height of their prosperity. Founded in the late thirteenth or early fourteenth century, Gedi reached its apogee in the mid-fifteenth century and was finally abandoned in the early seventeenth century. Little is known of its history but evidence suggests that it had a large and relatively prosperous population, perhaps exceeding 15,000 (Kirkman 1954; 1956; 1964).

The full development of Arab settlements and their trade and culture on the Kenya coast in the fifteenth century, dominated by Mombasa, immediately preceded a period of decline. At the end of that century, and from the south, "the restless energy of western Europe intruded upon the East African coast like an unseasonable monsoon for which the inhabitants were totally unprepared" (Ingham 1962: 6). The Portuguese programme of African coastal exploration culminated in the celebrated voyage of Vasco da Gama to India in 1497-99. He was impressed by Mombasa, but received a warmer welcome at Malindi, where he erected a stone cross and found a pilot, Ibn Majid, to guide him across to Calicut. A few years later, in 1517, the Portuguese navigator Duarte Barbosa noted a degree of port-city interdependence at Mombasa: "Further on (...) there is an isle hard by the mainland, on which is a town called Mombaça. It is a very fair place, with lofty stone

and mortar houses, well aligned in streets (after the fashion of Quiloa) (...) This is a place of great traffic, and has a good harbour, in which are always moored craft of many kinds and also great ships (...)" (Dames 1918, 1921).

Soon the Shirazi town, on the eastern side of the island facing the Old Mombasa Harbour, was paralleled and eventually superseded by the Portuguese town of the sixteenth and seventeenth centuries. Although the present urban structure of the old town of Mombasa was largely shaped during Portuguese times, the overall effect of Portuguese intervention on the Kenya coast was negative, and Mombasa maintained an attitude of open revolt against their authority from the time of Da Gama's first arrival in 1497 until their final withdrawal to the south early in the eighteenth century. The impressive, formidable Fort Jesus stands now as the only substantial physical monument to their rule (Kirkman 1964).

The rising tide of Arab-controlled slave trading in the nineteenth century severely disrupted the economic and social fabric of the area (Nicholls 1971). Selected by the Omani Arabs as a regional emporium, the offshore island of Zanzibar (today part of Tanzania) was the chief nineteenth-century centre of innovation. The re-entry of Europeans on the East African scene in the later nineteenth century coincided with important technological changes: the opening of the Suez Canal (1869), the change from sail to steam as a means of propulsion of vessels, the rapidly increasing size of ships, and the growing importance of railways. A combined result of these innovations was that in early colonial East Africa arterial railways were built from specific port sites (notably Mombasa) selected for their ability to accommodate larger steamers in a context of increasing trade with Europe via Suez.

In Kenya, and indeed in eastern Africa generally, Mombasa was the principal beneficiary in this process whereby a traditionally fluid port pattern became crystallized as more capacious, sheltered, deep-water harbours replaced the minor inlets and open shorelines previously used by smaller ships. The intention to build railways, themselves powerful agents of innovation and economic transformation in the hinterlands, was the immediate cause of concentration of interest and activity on appropriate modern seaports, a process that took place in many colonial territories. Mombasa was particularly fortunate at this point in time, for its general geographical location and its specific site conditions enabled the Kenyan port city to establish and maintain a central place in the modern economic life of the coastal zone.

POLITICAL GEOGRAPHY

The coastal zone provided a problem of political geography that involved Mombasa and other East African seaports during the European colonial period (1880s-1960s). The East African *coastal strip* was defined, politically, as the zone lying approximately within ten (nautical) miles of the coast. For centuries the coastlands and offshore islands of East Africa were largely controlled by immigrant Arab traders, latterly through the Sultan of Zanzibar, and there existed for long a considerable degree of geographical unity, physical and human, reflected in historical circumstances and population conditions. Under British

colonial rule, however, the Zanzibar islands became a Protectorate whereas Kenya became a colony and Tanganyika (after 1919) a mandated territory.

With the coming of the Europeans to East Africa in larger numbers during the nineteenth century, the southern section of the strip (now in Tanzania) was ceded by the Sultan of Zanzibar to Germany in 1890, and thus became part of German East Africa and in 1919 of Tanganyika Territory. The Kenya section, however, administered by Britain, remained technically under the authority of the Sultan until 1963 (Melamid 1963). The situation of Mombasa within the Kenya section of the strip added point to the need to find a solution to the problem prior to Kenya's independence in 1963. A commission of enquiry reported that a majority of the inhabitants of the strip favoured union with Kenya (Robertson 1961). The *de jure* Arab rule of the coastal strip was thus brought to a peaceful end. This was quickly followed, early in 1964, a few weeks after Zanzibar's independence, by a political revolution against the new Arab government which also ended the *de facto* Arab rule in the former Protectorate.

THE RISE OF THE MODERN PORT

The point of departure for the modern port of Mombasa was the purchase in 1895 of land near Kilindini Harbour as a base from which to direct the building of the railway through interior Kenya to Lake Victoria. Using Mombasa as an initial base, Britain had assumed political control of Kenya in 1895, and (as elsewhere) a standard procedure was to consolidate that control with a railway to the interior from a selected port site (Hill 1949). As an established town, with a deep-water harbour of recognised potential, Mombasa was the obvious choice. Earlier, Captain Owen, in his account of the 1820s hydrographic survey of the East African coast, had written that "Perhaps there is not a more perfect harbour in the world than Mombasa" (Owen 1833: 412). Seventy years later, information was translated into action. "The port possesses great facilities for development as well as sites for warehouses and wharves of almost indefinite extension" (Molesworth 1899). "The most urgent necessity is a deep-water berth (...) [and] a comprehensive plan showing what will be the ultimate aim and object to be attained when traffic largely develops" (Gracey 1901).

From these beginnings, the port of Mombasa has grown throughout the twentieth century, beginning with lighterage wharves at Mbaraki and proceeding upstream from 1926 to 1958 with deepwater berths along the north-western shore of the island. From the 1960s to the present day, additional deepwater berths and various forms of specialised quayage including a container terminal and oil-reception facilities have been added on the adjacent mainland at Kipevu (Figure 2). Proposals have been made to extend these facilities, in the context of a maritime industrial development area, along the southern side of Port Reitz. The urban area, for long confined to the island, has gradually spread to the adjacent mainland on both the northern and southern sides and also north-westwards along the road/rail axis towards Nairobi.

It is clear from this historical outline that Mombasa was principally designed to be a rail-served port, but in recent years the railways have increasingly been losing business to

road transport operators. The introduction of inland container depots (ICDs) at Nairobi, Eldoret and Kisumu has to some extent moderated this trend, as the railways are required to facilitate the operation of the ICDs and full container loads or any traffic that must pass through the ICDs must, by agreement, be carried by Kenya Railways. It is also clear that in the course of last century Mombasa has assumed an overwhelming dominance on the Kenya coast in terms of port activity and urban development. Traffic through the smaller ports of Malindi and Lamu — which remain under the jurisdiction of the Kenya Ports Authority (KPA) — operates only at a very low level and involves mainly coastal trading and some fishing activity. The KPA presence in these locations is closely associated with preventive customs measures. Malindi and Lamu continue to fulfill important local and regional roles as trade and service centres and, like Mombasa, have become significant foci within the national and international tourism industries.

Table 1 Cargo throughput at Mombasa, 1981, 1990-95 ('000 dwt)

	1981	1990	1991	1992	1993	1994	1995
Imports							
+ Dry general cargo	1,342	1,675	1,620	2,178	2,310	2,611	2,825
+ Dry bulk cargo	718	518	462	650	463	1,319	517
= Total dry cargo	2,060	2,193	2,082	2,828	2,773	3,930	3,342
+ Bulk liquids	3,567	2,999	3,228	2,981	2,371	2,694	2,643
= Total imports	5,627	5,192	5,310	5,809	5,144	6,624	5,985
Exports							
+ Dry general cargo	784	1,350	1,163	1,230	1,208	1,197	1,520
+ Dry bulk cargo	748	557	320	462	881	262	232
= Total dry cargo	1,532	1,907	1,483	1,692	2,089	1,459	1,752
+ Bulk liquids	1,274	390	309	391	685	200	181
= Total exports	2,806	2,297	1,792	2,083	2,774	1,659	1,933
Total imports and exports	8,433	7,489	7,102	7,892	7,918	8,283	7,918
Total including transshipment	8,436	7,525	7,145	7,991	7,990	8,345	7,973

Source: Kenya Ports Authority

PORT THROUGHPUT

Table 1 indicates the general pattern of cargo throughput at Mombasa in recent years and shows an overall annual throughput of about eight million tonnes during the mid-1990s. The total volume of imports considerably exceeds that of exports, primarily as a result of the large quantities of crude oil imported. Specific commodity flows through Mombasa have shown considerable variation over time, as is normal in all ports, but the main dry-cargo exports fall clearly into two categories: agricultural primary products and semi-processed raw materials (Table 2). In the first group coffee and tea have traditionally been the most important items. Although coffee is the most valuable commodity exported through Mombasa, pride of place in terms of volume of exports has sometimes been taken in recent years (as in 1994) by cement. Soda ash from Lake Magadi is another heavy export item. Bulk oils are the most important item in the structure of import cargo throughput, primarily crude oil for processing at the Mombasa oil refinery. Oil products

Table 2 Principal commodities exported through the port of Mombasa, 1990-95 ('000 dwt)

	1990	1991	1992	1993	1994	1995
General cargo exports						
Coffee	312	239	240	158	254	222
Tea	198	177	220	271	206	139
Tinned fruits, vegetables & juices	84	71	66	97	76	69
Soda ash	34	29	15	25	103	60
Maize	127	27	7	11	40	48
Cement (in bags)	7	5	12	15	279	24
Sisal	29	14	32	22	29	18
Oil seeds	12	14	46	27	43	15
Beans, peas, pulses	69	23	7	19	2	3
Other	104	147	171	213	135	180
Total general cargo exports	976	746	816	858	1,167	778
Bulk cargo exports						
Cement	332	120	243	697	106	119
Soda ash	126	132	107	132	115	77
Fluorspar	80	32	83	52	41	20
Cement clinker	19	37	30	0	0	14
Bulk oils and liquids	389	309	390	685	200	181
Total bulk exports	946	630	853	1,566	462	411
Total exports	1,922	1,376	1,669	2,424	1,629	1,189

Source: Kenya Ports Authority

from the refinery are transported within the port's hinterlands by road and rail, and also by the pipeline to Nairobi and western Kenya which continues via Tororo into Uganda.

While most traffic passes through the port facilities located in Kilindini Harbour, the Old Port of Mombasa continues to handle a (modest) variety of commodities, exporting coffee husks, salt, mattresses, building materials and oil in drums and importing scrap metal, rubber and dried fish. A good deal of this traffic was until recently handled by traditional Arab *dhows* (nowadays motorized) and other coastal vessels, thus providing some continuity with Mombasa's historic links with the Middle East and India, largely but not exclusively on a legitimate basis. Characteristically the total volume of imports other than bulk oils is considerable and comprises a very wide variety of goods. Various types of vehicles — passenger vehicles, tractors, earthmoving equipment, trucks etc. — are imported from diverse sources, notably Japan, the Britain, Germany, the USA and the Middle East (especially Dubai). Containerised traffic has risen sharply in recent years, facilitated by specialized terminals and equipment at Kilindini and by the inland container depots (ICDs) at Nairobi, Eldoret and Kisumu. Container throughput is expected to rise from 155,000 TEUs (twenty-foot equivalent units) in 1996 to over 200,000 TEUs in 2005 (Mundy 1995). Destinations include not only Kenya but also extend to Uganda, Rwanda and eastern Congo.

The port of Mombasa today employs about 8,400 persons, all of whom are Kenyans, many of whom are migrants to the coast from interior parts of the country. Data on the ethnic affiliations of KPA employees are no longer published, being considered politically sensitive. Relations between the KPA and the local communities, notably through the Mombasa Municipal Council, are said to be cordial and constructive. There are, however, no available data on how much of the money the port generates goes into the

local urban or coastal economy as opposed to the national coffers.

A port is, in a sense, merely a servant of the societies and economic systems within which it is located and with which it is connected. Today, as throughout history, all ports survive and prosper by attracting traffic in a context of inter-port competition. Those which fail to do so stagnate and eventually decline. Just as a large city can function (in relation to its associated territories) in a generative or in a parasitic fashion, so also a port can act as an economic enabler or alternatively as a serious brake on economic progress. Yet a port cannot act independently as an engine of growth because it is essentially only one element within a complex interdependent economic structure (Macoloo 1995). Like any other part of the transport system, a well-equipped and efficient port can act as a facilitator encouraging development in various spheres. Equally, an inefficient or technologically outmoded port can cause retard economic growth throughout the area served.

The development of ports along the Kenya coast, and of Mombasa in particular, illustrates these ideas very clearly. All East African seaports have long had a reputation for low productivity and relatively high port costs for a variety of reasons (low volumes but great variety of cargo throughput, inefficient management and labour systems, corruption, congestion, the weather) and they still confront the challenge of achieving a smooth and efficient flow of goods through their facilities. Where exclusive port-hinterland systems are established, as has commonly been the case in East Africa for much of the twentieth century, these problems matter only as economic depressants through higher prices and other disincentives to growth. But in a context of real inter-port competition, as is increasingly becoming the case in East Africa today, positive steps need to be taken to enhance the competitive position of a port so as to attract new traffic through greater efficiency and to avoid loss of trade to alternative port gateways.

Many of the current problems of the port of Mombasa are associated with a recent history of inefficient management, low productivity and decreasing competitivity. The Kenya Ports Authority (KPA) has for too long been operated as a highly politicised organization, resulting in inefficiency, staff demoralization and a reactive rather than a proactive attitude to development (Macoloo 1995). In this context, a number of revitalization measures have been widely recommended. One is that, as in many modern ports around the world, cargo-handling operations (especially the container terminal) should be privatized so as to encourage refurbishment and achieve greater efficiency levels. The Kenya Government was initially rather unreceptive to this notion, preferring to keep port operations, through the KPA, under its direct control.

Port efficiency can be measured in a variety of quite complex ways, but the overall average cost per tonne of goods handled over a specified period is normally accepted as a reasonably reliable parameter. Port tariffs are set by the KPA, in the light of market circumstances, but major changes require ministerial approval. The relatively poor performance of Mombasa in recent years in this context, expressed through high port charges and low productivity, is a major factor in the attempts being made by Uganda to channel some of that country's overseas trade through the port of Dar es Salaam, despite the longer distances involved in using the Tanzanian railway system and the train ferries recently reintroduced on Lake Victoria (Hoyle and Charlier 1995). Revitalization policies

at Mombasa aim to recapture lost traffic and to re-emphasise the port's role as a major regional transport hub. These policies include, specifically, the manipulation of tariffs in order to enhance the port's competitive position vis-à-vis extra-national customers; and, more broadly, the rationalization of all aspects of resource utilization so as to enhance efficiency improvements in all spheres in order to ensure sustainable competitiveness.

There are signs that much-needed reforms are under way. In the context of government policy initiatives announced early in 1996, strategic parastatals (including the KPA) are undergoing some restructuring. The arrival on the KPA scene in March 1996 of a new Executive Chairman, Mr Robert Brenneisen (a German-Swiss industrialist with a highly successful track record at the Bamburi cement company) was widely welcomed. The privatization of some port operations is accepted as an appropriate element in the restructuring process. Under the terms of an agreement signed on 1 September 1996 with the UK port of Felixstowe, the management and operation of the Kilindini container terminal is being undertaken by a British company. Port storage charges have been doubled in order to encourage customers to move their goods through the port more rapidly; outdated equipment is being replaced; bureaucratic procedures are being streamlined; productivity — as measured by container movement rates, for example — is rapidly improving; and a new competitive attitude towards the extra-national hinterland, notably an economically resurgent Uganda, is apparent.

A FREE PORT?

During the mid-1990s some consideration has been given, again, to the idea that Mombasa might become (or include) a free port. The general concept of free ports, and the pursuit of the entrepôt functions of trans-shipment, storage and re-export of goods, go far back in history. Free zones and free port development were long seen as part of wider policies aimed at attracting port traffic. However, port development has increasingly been felt to have a potentially important role in stimulating regional economic development and employment, and this has led to a rapid growth of free trade zones designed to attract industrial and commercial development. In some cases, especially in developing countries, free ports have been established primarily to encourage industrial exports; in other cases, especially in North America, the main objective has been to increase employment, frequently related to the manufacturing or processing of goods ultimately imported. Both the export processing zones and the foreign trade zones have proved generally successful, although their impact has varied (Pollock 1981).

A free port (or zone within a port, sometimes in the more limited form of an export-processing zone or EPZ) is thus a well-established device involving a defined area where equipment, materials and goods are introduced free of duties and taxes, the goods being then stored (in a commercial free port) or processed (in an industrial free port) and re-exported. The objective is to produce relatively cheap commodities which, being competitive on world markets, will succeed commercially and thus create employment, produce revenue and generally stimulate the economy. The successful establishment of a free port clearly requires modern infrastructure and equipment, and a proper legal framework,

in a context of efficient manpower training and aggressive marketing.

At Mombasa, plans were introduced in the later 1970s to develop new deep-water port facilities on the south side of Port Reitz (Figure 2), and a free trade zone was then proposed in this context. Preliminary work was done on this project but little progress ensued. The idea of a free port was revived in 1995 by President Moi, who is said to have had in mind the well-known success of Mauritius, Dubai and Singapore. Although the idea of a free port seems initially attractive, it should be noted that some successful industrial countries (notably Japan and the UK) do not utilise this economic strategy, and that the most successful modern free ports are associated either with very experienced industrial countries (such as the USA and Germany) or with newly-industrializing countries of the New Pacific (such as Singapore, Korea and Taiwan).

To be successful, a free port must have efficient administration, well-defined operational procedures, strict separation of tax-free traffic and traffic subject to customs regulations, and must be free of congestion. Some of these preconditions do not fit easily with the current image of Mombasa. Basic issues include: whether the free port would be operated by the KPA or by an independent organization; whether the entire port of Mombasa would become a free port or whether only a part of it would be so designated; and whether the free port would be of the commercial or the industrial type. Initiatives of this kind can be counter-productive as well as expensive to establish, and the lead-time to commercial profitability can be quite long. If the establishment of a free port at Mombasa were to be approached positively and efficiently, such an innovation could conceivably provide a welcome catalyst for growth and for the revitalization clearly needed in the port today. On the other hand, a lukewarm and inefficient approach, open to corruption and mismanagement, would be largely a waste of time and money and would merely add to the country's catalogue of misdirected development efforts (Macoloo 1995). A limited, well-run commercial free zone within the port area might work successfully, but a large industrial free port is considered at present to be too expensive, too ambitious and inappropriate to Kenya's present-day economic circumstances and needs.

A SECOND DEEP-WATER PORT?

The port function remains central to the urban and regional economy of Mombasa and the coastal zone, but there is some anxiety that too high a proportion of economic activity is concentrated within Mombasa Municipality and District. The essential development axis in modern Kenya is the multimodal transport axis linking Mombasa with Nairobi and the Kenya Highlands, and in developmental terms the coastal zone axis linking Mombasa with Malindi and Lamu is of secondary significance.

In theory, a national or regional port hierarchy is a dynamic phenomenon which may gain or lose major constituent elements in the course of time. This has happened on the Kenya coast in the past, but not during the twentieth century. Elsewhere in modern Africa, new ports of various kinds have been established in several other countries in recent years, sometimes in the context of a major regional development programme as at Tema in Ghana (Hilling 1966), San Pedro in Côte d'Ivoire (Charlier 1995) and Richards

Bay in South Africa (Weise 1981; 1984). Other new ports have been developed largely as mineral-exporting terminals; examples include Saldanha Bay in South Africa (Weise 1981; 1984) and Nouadhibou in Mauritania (Toupet 1970). In Kenya the possibility of establishing a second deep-water port as a basis for a new urban and industrial growth pole within the coastal zone has been under discussion since the 1970s (Kenya 1977). The virtually complete dependence of Kenya for modern port facilities upon the port of Mombasa is a sensitive issue in political and strategic terms, and the creation of alternative coastal growth centres would accord with the Kenya government's broad strategy of development diffusion.

The site selected for detailed consideration is at Manda Bay, on the north Kenya coast near the historic island port of Lamu (Figure 3). The site offers a splendid, sheltered deep-water harbour and extensive areas of level land for development where a new industrial port could be created at relatively low cost. Provided that adequate hinterland communications were established — clearly a vitally important condition — Manda Bay could become a basis for a new growth pole of considerable long-term potential. Although the arguments in favour of such an innovation seem attractive, those against have hitherto proved more powerful. In the absence of any large-scale industrial traffic generator, it seems likely that the industrial prospects of a new port would be limited. The possible negative effects of a major port-industrial zone, relatively close to the world-renowned tourist centres along the coastal zone, notably Lamu, may also provide a disincentive to development.

In this respect the proposed port contrasts with most other new cityport growth poles in modern Africa, where a specific industrial *raison d'être* has provided an essential stimulus for port development. The processing of iron ore at Saldanha Bay (South Africa), Nouadhibou (Mauritania) and Buchanan (Liberia), the treatment of timber at San Pedro (Côte d'Ivoire), the aluminium industry at Tema (Ghana) and the phosphate developments at Lomé (Togo) all provide examples of motivating industries without parallel in the Kenya case. The arguments in favour of Manda Bay rest primarily on the socio-economic, political and strategic desirability of developing a neglected corner of the national territory with limited resource endowment and also, to some extent, on the perceived need to provide a solution to actual and potential problems associated with port and urban congestion at Mombasa.

Any review of issues involved in urban and regional planning in the coastal zone must take into account the overwhelming dominance of Mombasa as the country's only deep-water port and the coastal zone's only major urban-industrial centre. The question of whether, or when, a second deepwater port should be built is not at present a high priority in political terms but should be a matter of continuing, open debate with special reference to the precise locations under consideration, and to the eventual integration of any selected site within the Kenyan space economy as a whole. On balance, the construction of such a port (and associated urban and industrial areas) is desirable in terms of broad, long-term strategies; but questionable in terms of more immediate, specific problems.

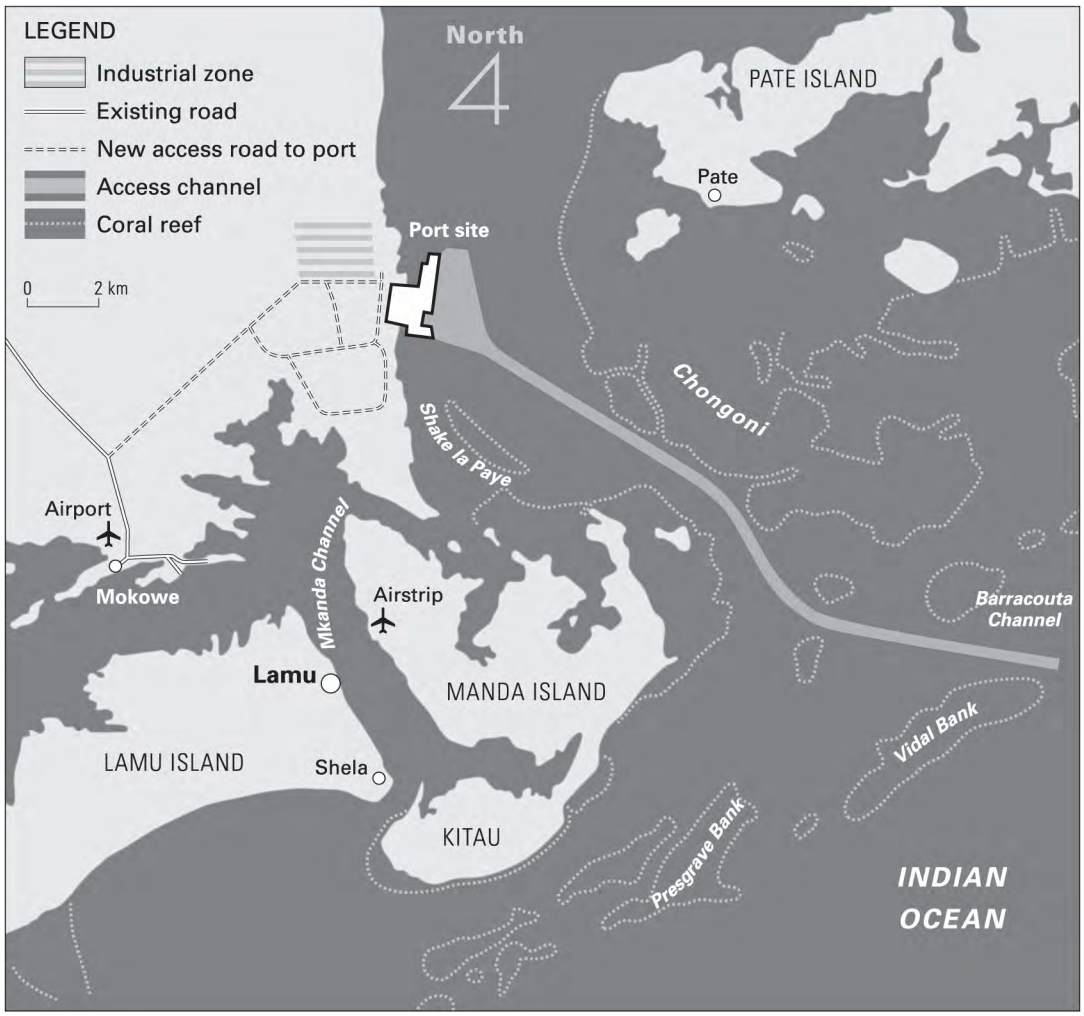

Figure 3 The proposed port of Manda Bay

The Kenya Government appears still to consider the idea interesting but premature. The overall verdict on the Manda Bay proposal must, therefore, be that in the short and medium terms the idea is economically unsound, although it would present few if any serious engineering problems. The site is ideal, but the broader situation is disadvantageous. The time is not yet ripe, given that global trends in maritime transport are towards increasing port concentration, not dispersion. In a longer-term development perspective, however, circumstances may change.

PORT-CITY DEVELOPMENT

As a major cityport, Mombasa is conscious of its dominant position within the Kenya coastal zone and its major role within the national Kenyan economy. Like many modern cityports of colonial origin and development, Mombasa was once a political capital. From 1895, when British control over what is now Kenya was firmly established, to 1907, two years after the railway from Mombasa to Lake Victoria had been completed, Mombasa served as colonial political capital. It became clear, however, that a more centrally located capital would serve far better the interests of the colony as a whole, and especially the interests of the European settlers in the highlands of the interior.

Mombasa therefore quickly lost its national capital status, and has subsequently been regarded by Nairobi as a useful, subservient but sometimes troublesome functional appendage. Today Mombasa believes, with some justification, that it is somewhat undervalued, as a port and as a city, within the Kenyan state. As a cityport of national and international significance, Mombasa has developed an international airport, but has not yet been accorded city status and has not yet acquired a university, both of which are long overdue in view of the substantial and diverse demographic and economic bases of the municipality and district.

A number of further inter-related issues deserve emphasis, some of which concern specifically the port-city of Mombasa, but most of which relate to the coastal zone as a whole and its regional and national dimensions and relationships. There is clearly a perceived need to clarify relationships between Mombasa and its region, distinguishing between administrative units and geographical areas. There is some confusion between the municipal, district and regional areas, as well as with the concept of a metropolitan urban-industrial zone. There is a need for — and an increasing awareness of — a closer scrutiny of relationships between port and city and between cityport and region. Similarly, the further development of Mombasa as a cityport in the service of the Kenyan economy, would be enhanced by an improvement in relationships with the central government and, in particular, by government perceptions of the role of ports in the development process.

Many of the issues surrounding the port of Mombasa and its role in development and in the economic life (at local, regional, national and international levels) are controversial and sensitive. Most are not unusual in a global sense. What is unusual, however, in an African context, is the peculiar relationship in Kenya between an inland political capital city and a coastal port-city, both well entrenched in their respective roles. Very few

coastal countries in tropical Africa have this arrangement (Cameroon is another example). In the longer run, the revitalization of the port of Mombasa and the enhancement of its competitive position requires a reformulation of the relationship between capital city and port-city, and a more enlightened view in the political capital of the role and significance of the port function in the context of economic development.

Among the most critical issues of concern to those who live and work in the coastal zone, and those who have the responsibility for designing planning strategies, the specific problem of assured supplies of water of good quality is paramount. This question links together the context of increased pressures in a rapidly expanding city with major issues like housing policy, problems of pollution derived from port, industrial and urban activities, and a generally increasing awareness of environmental questions and responsibilities. Beyond this, one of the most complex questions in both urban and rural parts of the coastal zone concerns land occupancy and land tenure, invariably a difficult problem in a multicultural society with deep roots and a strong attachment to land resources. Infrastructural problems of increasing concern include the provision of modern, efficient transport systems; as a whole, the coastal zone is over-reliant upon road transport, notably on private cars and on bus services that are increasingly ubiquitous but sometimes less than efficient. Urban and local rural roads have been improved greatly in recent years, but still constrain mobility. The major axis parallel to the coast, however, still relies on ferries to link Mombasa with the southern part of the coastal zone (a high-level bridge has been discussed but rejected on grounds of cost); and the major national transport axis is, of course, the Mombasa-Nairobi route used by rail, road and pipelines (Kenya, 1989a; 1989b; 1994).

The development of the Kenya coastal zone as a major national and international tourist destination area has brought many benefits in terms of infrastructural provision — roads, bridges (as at Kilifi), local air services — and an increased environmental awareness expressed, for example, in the establishment of marine national parks and in the close attention now being given to the conservation of the urban fabric of the traditional core areas of Mombasa, Malindi and Lamu (NMK 1990). Tourism is regarded in Mombasa and throughout the coastal zone, as indeed throughout Kenya, as a very valuable if rather sensitive component of the economy. It would be difficult to overemphasize the importance of tourism to the Kenyan economy, for in some recent years this industry has replaced coffee exports as the country's principal earner of foreign exchange. There is, however, a continuing need for increased harmonization between the demands of tourism and the needs of other elements in the local economy.

CONCLUSION

A wide variety of issues are involved in port development on the Kenya coast. Three essential points worth reiteration are that the port of Mombasa fulfills a key function in the urban, regional and national economies; that after a period of uncertainty, there are clear signs of movement towards enhanced efficiency and a more realistic appreciation of the port's critical role; and that the port of Mombasa and its development must figure as

one of the highest priorities in any regional development strategy for the coastal zone.

In a wider context, Mombasa illustrates several aspects of the inter-relationships between cityports, coastal zones and African development. The impressive expansion of individual port cities which has occurred during the twentieth century has played a vital role in promoting mutually beneficial interlinkages between African countries and the global economy. The port system has made available to world consumers a variety of resources essential to economic growth. The bulk transport of minerals, the export of agricultural produce and the dramatic rise in energy imports, notably crude oil, have become widespread components of African port throughput structures. Mombasa clearly reflects these general trends.

These trends have not affected the African cityport system evenly, however. Some countries, cities and port authorities have made impressive investments in infrastructure, making their ports attractive to new generations of ships, and cityport growth poles such as Mombasa have become especially important for African development. The quality of transport links between ports, regions and hinterlands have also, of course, been highly significant (Hoyle 1988). Those cityports enjoying the best rail, road and pipeline access have been able to attract an increasing proportion of maritime traffic and have also been able to promote the introduction of inland container depots (ICDs) as a means of improving hinterland transport efficiency. The implementation of more efficient road/rail communications between ports and hinterlands is a necessary planning strategy for developing a more efficient port system. At Mombasa, increased efficiency of operation both in the port itself and throughout its hinterlands would bring great benefits. The privatization of some port operations, such as container handling, will substantially enhance efficiency by improving security and by streamlining outmoded bureaucratic procedures.

The African cityport system as a whole is a dynamic phenomenon, constantly changing in response to a variety of factors on the landward and seaward sides. Through the centuries the essential pacemakers have been the maritime factors. New technologies of ship design and cargo handling have led to successive eras of cityport evolution, and modern cityports have become an integral and important part of the continent's economy, at many different scales. Africa's seaports and cityports are continually involved, however, in a process of inter-port competition. Decision-making by ship operators and hinterland transport companies as well as by commodity producers and consumers, yields a port selection process with advantages for some port cities but disadvantages for others.

Political factors, too, affect the ways in which ports are used in numerous ways: the complex surface transport systems which Africa has inherited from the colonial past continue to shape present-day traffic flows; governments of inland states manipulate commodity flows in their anxiety to preserve access to ocean ports; and instability and warfare, notably in Angola and Somalia, continue to prevent the use of some seaports for normal economic purposes. Having survived and developed as a seaport of significance over many centuries, Mombasa clearly demonstrates the importance of a wide range of factors affecting port growth, the critical role of the port function in national and regional economic development and the need to maintain and enhance the port's competitive

position when looking towards the land and maritime transport systems of the twenty-first century.

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REVIEW DETAILS

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