

INDUSTRIALIZATION

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ABSTRACT

This review presents a picture of the industrial situation in Coast Province from both temporal and spatial perspectives and with emphasis on the post-independence era. It describes the industrialization of the region in terms of industrial structure and performance, industry-supporting infrastructure and institutions, and future directions. Industrialization in the region has always been concentrated in Mombasa town. Despite government policies aiming at more geographical dispersal of the industrial sector, Mombasa's dominance has only become more pronounced during the past 15 years. There is potential for small-scale industrial development in the other five districts of the region, but this requires the removal of the many impediments now present.

INTRODUCTION

Industrialization is a fundamental factor in economic development. It represents the spread of industrial techniques of organization and production in an endeavour to actively control and manipulate the physical environment to the benefit of the society. Industrialization then contributes to the satisfaction of basic needs of the population, the exploitation of existing natural resources, the creation of jobs, the establishment of a base for developing other economic sectors, the creation of a basis for assimilating and promoting technological progress, and the integration of the economy and the modernization of the society.

An important part of Kenya's industrialization strategy has been to widen the geographical dispersal of the benefits of industrialization. In the pre-independence era, industrial growth occurred mostly in Nairobi and Mombasa because these towns constituted the main markets for industrial goods. The early status of these towns as administrative and commercial centres with a developed infrastructure constituted an important localization factor. At a later stage, their industrial development became self-generating in that it provided markets not only for consumer goods but also for industrial goods and

services. This accounts for the fact that no less than 60% of the labour force engaged in (formal sector) manufacturing found employment in the two large cities by the late 1960s. This percentage has hardly changed since then, being 58% in 1996 (Kenya 1997: 67). Industrialization in areas outside the two metropolises of the country is based primarily on the processing of agricultural, livestock and forest produce for the domestic market. Industries located in rural Kenya barely account for 20% of employment in manufacturing. The remaining 20% is accounted for by activities in other urban areas such as Thika, Eldoret, Nakuru and Kisumu. With a few exceptions, these industries operate in fields where economic and/or technical considerations favour a location close to raw materials such as sugar cane, tea, coffee, sisal and timber resources, among others.

For a region to be considered industrialized or industrializing, industry's contribution to GDP and employment should be high and rising, viz. the sector's contribution to GDP should be above 25% (of which more than 60% should originate from manufacturing) and 10% or more of the region's employment should be in industry (Sutcliffe 1971: 23). In Kenya, industry's contribution to GDP is barely 15%, while industry-related employment is less than 10% of total employment in the country. By such benchmarks, Kenya still has a long way to go.

KENYA'S INDUSTRIAL POLICY

The establishment of industries in Coast Province was influenced by many factors. In the pre-independence period, leading factors included transportation networks comprising mostly of the harbour, railways and roads; the confinement of Asians in urban locations during the colonial period; and availability of markets. Most of these factors account for the growth of Mombasa town as the leading industrial centre in the region.

In the post-independence era, deliberate efforts were made to promote industries while bearing in mind the need for regional balance. The approaches used to disperse industries away from major towns towards rural areas included: direct government equity (joint-ventures), loan investment, loan guarantees and subsidies; fiscal and regulatory measures; and provision of land, infrastructure and housing (Mureithi & Masai 1983: 76). The first approach helped to establish industries that use primary inputs such as sugar cane, wood, pulp and paper, and cement, among others. Since the government was the facilitator, costs to the treasury were often high. Most of the investments were large-scale in nature and had strong linkages with the agricultural sector and rural areas. In the case of the second approach, the government used incentives and disincentives in favour of locating industries away from major urban centres. Such (dis)incentives included protection using both tariffs and quantitative restrictions, concessions such as duty remissions and refunds, export compensation, extension work by government ministries, subsidized inputs, investment credit allowance, local loan capital at low interest, wage differentials, etc. Again, these fiscal and regulatory measures implied considerable direct and indirect costs to the treasury. In the third approach, the government provided rural access roads, water, sewage, electricity, housing and industrial estates through treasury funding. The beneficiary firms were under no obligation to yield control rights on their investments.

These locational policies tended to favour large and medium-scale firms. In the case of Coast Province, there was limited success in dispersing industries away from the major urban centre based on the three approaches above. A common phenomenon at the national level is that the policies contributed to overwhelmingly non-indigenous control and ownership as well as promotion of some resource-based and even strategic industries. Unfortunately, this resulted in a variety of ailing projects associated with the production of furfural, ethanol, fertilizer, fluorspar and dehydrated vegetables.

Though considerable private investment in industry has been realized over the years, invariably, private investors have chosen branches of industry and locations that allow them to interact with creditors, customers, government officials, friends and family and also to maximize returns while minimizing production costs. This largely explains the pattern of location of industries in Coast Province (Masai 1982: 35)

THE STRUCTURE OF THE COASTAL INDUSTRIAL SECTOR

Table 1 gives an aggregated picture of the types of industries and the levels of industrial employment in the formal sector for 1996 and 1980 for Coast Province as a whole as well as for each of the six districts. In 1996, there were 534 formal sector establishments with an employment level of 45,463 in industry and industrial services in the province. Compared with the figures of 1980, this represents a modest growth of 8.5% as far as the number of industrial establishments is concerned, though the growth in employment is much more substantial (81%). Tables 2 and 3 reveal a substantial decline of the number of very small enterprises — i.e. with 1-4 workers — during this period, which has contributed to the modest growth of the total number of enterprises in the region. Employment in the category of very small enterprises increased only very modestly. Undoubtedly, this decline is being compensated by a growth of micro-enterprises in the informal sector (or *Jua Kali* sector as it is called, literally meaning 'fierce sun', i.e. business in the open), but no statistics are available on that.

The activities which offer most employment are all in the manufacturing sector: metal and metal products, food, beverages and tobacco, and chemicals and chemical products. The construction sector also employs a considerable number of workers. In the more recent past, informal sector manufacturing has become more prevalent in food and beverages, textile and clothing, wood and furniture, and metal fabrication and engineering industries. Under 'industrial services' the leading manufacturing-related service activities are repair of motor vehicles and motor cycles, and electrical repair shops.

Mombasa District

Mombasa town is the hub of industrial activity in the entire province. In 1980 as well as 1996, it accounted for almost 90% of the establishments. Its share in the provincial employment in the formal industrial sector increased even from 85 to 90% during this period (Table 1). This indicates that the government's policy towards a more equal geographical distribution of the industrial sector has not been successful in the coastal region.

Table 1 Industrial establishments and industrial employment by type of industry and district, 1996

	INDUSTRIAL ESTABLISHMENTS (no. of establishments)							INDUSTRIAL EMPLOYMENT (no. of workers)						
	Mom-basa	Kilifi	Kwale	Lamu	Tana River	Taita Taveta	Coast Province	Mom-basa	Kilifi	Kwale	Lamu	Tana River	Taita Taveta	Coast Province
• mining and quarrying	6	-	-	-	-	6	12	1,003	-	-	-	-	103	1,106
• manufacturing	283	13	7	4	-	8	315	32,886	2,493	477	65	-	50	35,971
– food, beverages and tobacco	48	4	1	3	-	4	60	9,275	977	58	19	-	32	10,361
– textile etc. ^a	67	1	-	1	-	2	71	3,068	4	-	46	-	13	3,131
– wood and wood products	23	2	-	-	-	-	25	375	61	-	-	-	-	436
– paper etc. ^b	28	1	-	-	-	-	29	834	9	-	-	-	-	843
– chemicals and chemical products	31	1	-	-	-	-	32	3,218	909	-	-	-	-	4,127
– non-metallic mineral products	7	-	1	-	-	-	8	1,676	-	277	-	-	-	1,953
– basic metal industries	7	1	-	-	-	-	8	8,422	449	-	-	-	-	8,871
– metal products etc. ^c	53	2	5	-	-	2	62	5,746	54	142	-	-	5	5,947
– other manufacturing industries	19	1	-	-	-	-	20	272	30	-	-	-	-	302
• electricity, gas and water services	1	2	-	-	-	-	3	1,217	365	-	-	-	-	1,582
– electricity and power	1	2	-	-	-	-	3	1,217	365	-	-	-	-	1,582
• construction	123	6	1	-	-	2	132	3,768	244	30	-	-	10	4,052
– special trade contractors	43	2	-	-	-	-	45	760	122	-	-	-	-	882
– general trade contractors	80	4	1	-	-	2	87	3,008	122	30	-	-	10	3,170
• industrial services	61	4	-	2	-	5	72	2,155	52	-	434	-	108	2,749
Total 1996	474	25	8	6	-	21	534	41,029	3,154	507	499	-	271	45,460
Total 1980	442	19	10	3	1	17	492	21,423	2,240	787	3	15	645	25,113
Increase 1980-'96 (%)	7.2	31.6	-20.0	100	-100	23.5	8.5	91.5	40.8	-35.6	>100.0	-100	-58.0	81.0

Notes: a. Textile, wearing apparel and leather industries.
b. Paper and paper products, printing and publishing.
c. Fabricated metal products, machinery and equipment.

Sources: Kenya 1980; 1996

Table 2 Industrial establishments by district and size of establishment*, 1980 and 1996

	size: 1 - 4		5 - 19		20 - 49		50 - 99		100+		Total	
	year: '80	'96	'80	'96	'80	'96	'80	'96	'80	'96	'80	'96
Mombasa	217	132	97	157	48	84	32	41	48	60	442	474
Kilifi	12	4	5	8	-	7	-	1	2	5	19	25
Kwale	3	-	-	-	5	6	1	1	1	1	10	8
Lamu	3	2	-	2	-	1	-	-	-	-	3	5
Tana River	-	-	1	-	-	-	-	-	-	-	1	-
Taita Taveta	4	9	2	9	8	2	-	1	3	-	17	21
Coast Province	239	147	105	176	61	100	33	44	54	66	492	533
Increase '80-'96 (%)	-38.5		67.6		63.9		33.3		22.1		8.3	

* Measured in number of workers.

Source: Kenya 1980; 1996

Table 3 Industrial employment by district and size of establishment*, 1980 and 1996

	size: 1 - 4		5 - 19		20 - 49		50 - 99		100+		Total	
	year: '80	'96	'80	'96	'80	'96	'80	'96	'80	'96	'80	'96
Mombasa	356	372	963	1627	1569	2731	2285	2925	16250	33377	21423	41032
Kilifi	16	14	58	101	-	225	-	59	2166	2725	2240	3124
Kwale	3	-	-	-	146	172	54	58	584	277	787	507
Lamu	3	6	-	17	-	46	-	-	-	430	3	499
Tana River	-	-	15	-	-	-	-	-	-	-	15	-
Taita Taveta	6	24	28	95	233	59	-	93	378	-	645	271
Coast Province	384	416	1064	1840	1948	3233	2339	3135	19378	36809	25113	45433

* Measured in number of workers.

Source: Kenya 1980; 1996

Growth in the number of businesses is largely due to growth in Mombasa. Especially the small (5-19 workers) and medium-sized (20-49 workers) establishments increased considerably in number; likewise the employment in these categories (Tables 2 and 3). In absolute terms, however, employment growth primarily occurred in the large-scale sector, where it more than doubled during the 1980-1996 period, despite a modest increase of the number of enterprises. Existing large-scale enterprises managed to expand substantially and the average number of employees per enterprise increased also, notably from 48 in 1980 to 87 in 1996.

The suitability of Mombasa as industrial location is enhanced by several factors, namely: the natural harbour for import and export business; a railway line and roads linking Mombasa with the rest of Kenya and Eastern Africa (implying a good distribution network serviced by several long distance transport firms); an international airport; high class tourism facilities; and a well-developed banking industry in the town with more than eleven banking and financial institutions. The presence of large-scale enterprises in oil refinery, cement and steel rolling justified major infrastructural developments thereby creating incentives to start support industries as well as warehousing and storage (specialized facilities for cement, grains and bulk liquids) at Mbaraki. Beyond the dominance of the island (based on oil refining, food processing and manufacture of metal and steel products), the mainland now has an export processing zone.

The district has potential for marine industries associated with local boat building and repair, dry docks and fisheries as well as small-scale pottery production and coconut processing. For future industrial development, there is need for: promotion of private investment to create employment for the rising population in Mombasa town with emphasis on indigenous entrepreneurs and joint ventures with foreigners where possible; identification by the Municipality and the District Development Committee of suitable sites for the construction of *Jua Kali* sheds; provision of credit to small-scale entrepreneurs to expand their activities including encouraging more NGOs to assist small businesses with credit; promotion of awareness about available facilities and potential for industrial development; establishment of cooperative societies, especially in the informal sector covering *Jua Kali*, handicraft and *makuti* (leaves of the coconut palm used for roofing) marketing aspects; training of entrepreneurs; and strengthening, expanding and improving facilities and services provided by financial institutions in the district. Overall, there is need for improved efficiency, Kenyanization, promotion of exports and expansion of the monetary economy.

Kilifi District

In Kilifi District, a total of 25 establishments were identified in 1996 which employed 3154 workers. The situation changed only marginally between 1980 and 1996 when the number of establishments increased by 31%, and that of workers by 41% but from a very small base (Table 1). Compared with all other districts, Kilifi had the highest average firm size, but this is largely due to two large-scale enterprises with over 900 employees each, one specialising in food, beverages and tobacco and the other in chemical products. The remaining industries were based on processing of agricultural, livestock and forest

products such as milk, fish, bakeries, sawmilling and furniture. Only four firms with an employment level of 50 or more were in manufacturing-related services, notably laundry and cleaning services and electrical repair work.

Most industrial activities are located in urban centres that provide supportive infrastructure such as water, electricity, roads and telephones. Over half of the industrial and commercial activities were in Malindi Division (which meanwhile has become a district), with a total of 20% in Malindi town. In spite of the presence of institutions such as Kenya Industrial Estates (KIE), the Industrial and Commercial Development Corporation (ICDC), Kenya National Trading Corporation (KNTC), Kenya National Chamber of Commerce and Industry (KNCCI) and commercial banks, industrialization is yet to pick up. The industries with potential include cashew nut processing, apple processing, coconut oil extraction, ginnery, textile weaving and spinning, glass making, timber and furniture, paper, steel rolling, sisal fibre extraction, salt works and cassava starch extraction.

The district's development objectives continue to include rural industrialization, creation of industrial employment opportunities, creation of markets for primary products as well as stimulation of their further production, while raising incomes of local entrepreneurs (Kenya 1989b; 1994b). Over the past three decades, very few cottage and small manufacturing industries have been established. KIE was expected to put up a Rural Industrial Development Centre (RIDC) complex to deal in various products. It was also hoped that cottage centres located in market and rural areas with small capital investment, low production capacity and high employment impact would be established.

Kwale District

In Kwale District, a total of only eight firms employing 507 workers were identified in 1996, a decline compared with ten and 787, respectively, in 1980. There were no manufacturing-related service firms. One firm in food and beverages (the Ramisi Sugar Factory), employing almost 600 persons in the early 1980s, collapsed and employed only 56 workers in 1996. Other industrial activities in this area included production of copra and fibre at Gazi, mango fruit and vegetable processing at Gazi and Waa and industrial lime at Ngombeni and again Waa. A variety of micro-industrial activities include *makuti* and palm leaf handicraft at the family level, tailoring, shoe repair and carpentry. There is a shortage of masons, plumbers, vehicle repairers and even bookkeepers.

There are prospects for crop processing covering cashew nuts, bixa and mangoes and there is considerable potential for the establishment of cottage industries and a variety of small manufacturing and handicraft activities. Improvement in business is constrained by lack of credit; hence, there is need to encourage the establishment of banks and development finance institutions to mobilize rural savings and to extend credit facilities in the area. In the late 1980s, KIE and other development finance institutions were expected to extend loans to promote carpentry workshops, posho mills, welding and joinery firms and bakeries. The government was expected to license manufacturers and to promote policy and institutional reforms that would allow trade and commerce to play a dynamic role in the generation of economic growth and social development (Kenya 1989c).

Lamu District

The figures for Lamu District indicate that there were only six establishments employing about 500 workers in 1996 (Table 1). The largest firm, with no less than 86% of all formally employed workers in the district, was in industrial services. During the 1970s and 1980s, the only manufacturing activities in the district included cotton ginning (which served both Tana River and Lamu Districts), coconut and simsim oil processing, soap making and a bakery. Handicraft activities in the informal sector included wood carving, furniture making, boat building and repair, mangrove cutting and basket making. Production opportunities continue to exist in leather goods (hides and skins processing), metal swords, cement blocks, sawmilling, embroidered caps, tailoring, bakeries, fish processing, salt extraction, cassava milling and starch production, and maize and rice milling, mango fruit processing and minor industrial repair activities (Kenya 1989d).

In the early 1990s, tourism was the only flourishing industry. The German Assisted Settlement Project (GASP) is developing *Jua Kali* sheds in Amu, Mpeketoni and Witu. Similarly, there is a Rural Electrification Programme from Kilifi via Garsen to Witu, Mpeketoni and Mokome which is expected to stimulate industrial development.

Tana River District

No industrial activities were reported in 1996 for Tana River District. Over the years, the District Development Committee has been urged to explore opportunities for small manufacturing and cottage industries, with the thrust of activities to be centered on Hola, Garsen and Madoga. Unfortunately, there has been lack of investment opportunities, entrepreneurial skills and banking facilities to mobilize rural savings and to provide credit. Although the fishing sector was active in Garsen between 1984 and 1989, there were no efforts to promote fish processing industries.

Between 1989 and 1993 the main constraints to development were perceived as the traditional land tenure system hindering the issuance of title deeds, low income levels, absence of the cooperative movement, poor infrastructure, lack of credit facilities and lack of water. The district had only three small-scale industries in tailoring, carpentry, metal work and shoe making. A Nyayo sheds programme was recommended for ten market centres and in 1989-1993, two *Jua Kali* sheds were set up at Hola and Garsen. Potential exists for agro-industries such as cotton ginneries, rice milling, bakeries, posho mills and mango processing. Similarly, industrial potential exists in the livestock sector (Kenya 1994e).

During the early 1990s, the economy of the district remained largely non-monetized, off-farm employment opportunities were scanty and small-scale industries were conspicuously absent (except for one small industry in Galole). There was a shortage of commodities in the area. The emphasis of the Ministry of Commerce and Industry is on trade development through issuance of loans and training of entrepreneurs in good business management.

Taita Taveta District

In 1996, Taita Taveta was the third district in the region in terms of industrialization, after

Mombasa and Kilifi. Still, there were no more than 21 establishments employing 271 workers in the modern sector in that year (Table 1). In terms of formal industrial employment, the district experienced a drastic reduction in industrial activities in the past 15 years. In 1980 three establishments employed more than 100 workers, but in 1996 not a single establishment reached that number (Table 3).

In the early 1990s, notable manufacturing activities included oil processing, gem stone mining, leather crafts, metal fabrication and panel beating, tailoring and garments manufacturing, agricultural feeds production, sisal fibre processing, carpentry/joinery (roofing tiles), maize milling, garages, radio repair shops, jaggery plants, clay works, printing presses, laundries and bakeries (Kenya 1994f). Most of these are based in Voi, Wundanyi, Mwatate and Taveta. Sisal from the area is exported to Egypt, South Korea, Portugal, Pakistan and Ivory Coast, while a small quantity is consumed locally.

INFRASTRUCTURE FOR INDUSTRIAL DEVELOPMENT

As outlined above, the industrial sector in the coastal region is primarily concentrated in Mombasa District. Although the successive Development Plans of the other five districts stress the need for (rural) industrial development and potential for small-scale industries certainly exists (Kenya 1989b-f; 1994b-f), the obstacles are formidable. One of the major impediments concerns the undeveloped infrastructure (outside the narrow coastal strip and the Mombasa-Mariakani nexus). According to recent studies of the World Bank (1994 and 1995), Kenyan roads pose the most serious problem, followed by electricity, security, telephones, water, waste disposal, freight and human transport and air and sea port services, in that order. These services are perceived to deteriorate due to inadequate maintenance arising from public sector inefficiency, inadequate government revenue and corruption. Also, efforts should be increased to train manpower to become technically qualified. Land adjudication and registration need to be conducted to allow the use of title deeds in seeking and obtaining credit. The issue of shortage of capital to purchase industrial machinery and equipment, acquire industrial premises and provide working capital needs to be addressed by development finance institutions such as ICDC and KIE as well as by NGOs such as Kenya Rural Enterprise Programme and Kenya Women's Finance Trust.

Mombasa District is better linked to air, water, rail, road and pipeline networks than the other five districts, which have a mix of classified and unclassified roads and experience difficulties in transporting farm produce to marketing centres — particularly the perishable types that require faster and effective transportation. Mombasa being the port of entry to Kenya and to the hinterland (Uganda, Rwanda, Burundi, Eastern Congo, Southern Sudan, North Eastern Tanzania and Ethiopia) requires an efficient port and cargo handling facilities for both imports and exports.

Air transport at the Coast has strong linkages with tourism. Moi International Airport and airstrips at Malindi and Lamu have received a facelift to enable them to cope with increasing human and commodity traffic.

All the administrative headquarters of the six districts are served by automatic (STD)

telephone facilities and postal services. Unfortunately, the STD facility is not available in other parts of the districts and the frequency of telephone breakdowns is high especially during the rainy seasons.

Access to fresh water for industrial and human use is becoming increasingly difficult, particularly in Mombasa. Exploitation of ground water is hampered by pollution from industries, septic tanks and pit latrines. Mombasa District receives most of its fresh water supplies from neighbouring districts such as Mzima Springs in Taita Taveta District, Marere River and Tiwi Boreholes in Kwale District and Sabaki River in Kilifi District. The rest of the province has adequate surface and groundwater resources, though these are under-utilized.

On the question of energy, electricity sales in Coast Province increased from 586.2 million kWh to 657.3 million kWh during the 1989-1993 plan period, representing an increase of about 12% (Kenya 1994g: 204). Mombasa District accounts for 70% of the power needs of the province, which is partly due to large industries such as Bamburi Cement Factory and the petroleum refinery at Changamwe. In light of the rapidly increasing demand, the need to promote rural electrification is now strongly felt. In the early 1990s, the government constructed step-down stations and feeder facilities at Rabai, Likoni and Shanzu and is expected to speed up the rural electrification process. Tana River is the only district in the province which is not connected to the national grid and it relies on privately run generators.

Finally, firms faced with deteriorating infrastructural services often opt for self-provision. The likelihood increases with firm size and location. This is most noticeable in Mombasa where public services are most stretched. Self-provision is limited to services subject to exclusivity and appropriability. Security and freight transport are more subject to self-provision (the latter being common in food industries for timely delivery of industrial raw materials and final products both of which are perishable).

INSTITUTIONAL NEEDS FOR COASTAL INDUSTRIAL DEVELOPMENT

As mentioned earlier, the government made deliberate efforts to promote industrialization while bearing in mind the need for regional balance. The approaches used included direct government equity (joint-ventures), loan investment, loan guarantees and subsidies, fiscal and regulatory measures, and provision of land, infrastructure and housing. Institutional support also consists of finance, management and technical assistance (including trouble shooting), skills training and marketing assistance.

At the level of financial assistance, several organizations provide long and short-term loans and equity to support industrial establishment and development. The Industrial and Commercial Development Corporation (ICDC), the Development Finance Company of Kenya (DFCK), together with its subsidiary, the Small Enterprises Finance Company (SEFCO), Kenya Commercial Bank (KCB), the Industrial Development Bank (IDB) and Kenya Industrial Estates (KIE) support industrialization in the Province as well as elsewhere in the country.

KCB has many fully fledged branches, sub-branches and mobile centres which consider loan applications from new and existing small and medium-scale industries. Attention is paid to ability to locate in rural areas, generate or save foreign exchange, use local resources and create job opportunities. In Coast Province, the majority of the beneficiaries are located in Mombasa District.

Development finance institutions such as ICDC, DFCK, SEFCO, KIE and IDB, in varying degrees promote rural industrialization and dispersion of industries. Use of local raw materials and generation of maximum employment per unit of investment capital are key considerations for supporting projects. Loan assistance is directed towards agricultural processing and other activities in food, metal, textile, wood and leather, among others. Compared with other areas in Kenya, (potential) entrepreneurs in Coast Province have not been aggressive in seeking support from such institutions and did benefit less from their services.

KIE supports projects in industrial estates and Rural Industrial Development Centres (RIDCs) and has operations in all the six districts in spite of the predominance of Mombasa. It helps to prepare financial feasibility studies as well as to control procurement of machinery and equipment after loans are approved. Together with the other finance institutions, KIE offers management, supervisory and implementation advisory services for small-scale industries. ICDC and IDB also target medium and large-scale industries.

At the level of management and technical assistance, KIE through its extension service department offers services related to business management, book-keeping, marketing and technical matters. This is done through short courses and consultancies in clients' workshops. It trains manufacturers located in the industrial estates and RIDCs in business planning, basic accounting, budgeting, marketing, production planning and control, costing and purchasing. It also offers advice on import licensing, opening of letters of credit, tendering and public relations activities.

KCB prepares feasibility studies and advises on business policy, organization methods, project finance, market research, management and systems design covering accounting, control, inventories, purchasing, salaries and so on. The above forms of assistance are more prevalent in Mombasa than in the other districts.

Technical services offered mostly by KIE include repair of machinery, manufacture of dies and tools, selection of equipment and preventive maintenance. The Kenya Industrial Research and Development Institute (KIRDI) is also available for trouble shooting in factories and helping to develop new industries based on local materials (clay and ceramics, vegetable oils, bakeries, as well as textile, leather, and food processing, among others). However, the impact of technical assistance institutions in the province is negligible and mostly concentrated in Mombasa.

Through the Directorate of Industrial Training and other funding programmes, the government sponsors technical training in national polytechnics and in other technical training institutions. Private organizations — mostly non-governmental organizations and religious groups — also carry out training of technicians for existing industries and for self-employment.

Finally, with regard to marketing assistance, limited institutional arrangements exist to

assist local industries to dispose of their products. Most firms have poor marketing strategies and limited information on existing marketing opportunities. Firms also have limited information on availability of raw materials and sometimes import certain inputs when the same can be obtained locally at cheaper rates. Local distributors in Mombasa are mostly non-indigenous citizens. The distribution of most essential commodities is handled by the Kenya National Trading Corporation (KNTC).

Export marketing exists in a number of industrial product lines. For example, handi-craft cooperatives undertake exporting with the assistance of the Ministry of Commerce and Industry. There is still need for training on such marketing matters as product development, invoicing, packaging and export procedures.

CONCLUSION

The industrial sector in the coastal region is highly concentrated in Mombasa town on account of the advantages it enjoys as the region's largest sea port. Industrial development in the other districts is generally quite modest and primarily based on the processing of agricultural, livestock and forestry products. Towns in Kwale, Taita Taveta, Tana River, Kilifi and Lamu which were initially developed as administrative and distributive centres now constitute rational choices for location of industries based on availability of raw material. The level of industrialization is still low with minimal diversification in the range of activities and limited employment opportunities. However, there is potential for industrial development in the region.

For future industrial development of the area, forward and backward linkages need to be identified and promoted within the context of improving the mechanisms and processes of allocating and utilising existing scarce resources. Better identification, formulation and implementation of projects based on natural and human resources and suitable technology can help to improve the role of the industrial sector in the province.

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REVIEW DETAILS

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Masai W.S. (2000). Industrialization. In Hoorweg J., Foeken D. & Obudho R. eds. *Kenya Coast Handbook: Culture, resources and development in the East African littoral*. (pp. 211-221). Hamburg: LIT Verlag