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CHAPTER 23

THE UTILIZATION OF THE NAMIB DESERT, SOUTH WEST AFRICA

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The Namib, a cool coastal desert of southwestern Africa, a nearly rainless area virtually devoid of vegetation, was occupied in prehistoric times by primitive hunting and gathering peoples who sometimes herded small flocks of goats and cattle. Modern developments focus chiefly on two ports that serve the better-settled interior and are the bases for a fishing fleet. Of lesser importance are scattered mining operations, both subsistence and commercial grazing, and a rapidly expanding tourism.

Physical Setting

The Namib Desert parallels Africa's Atlantic Coast from Mossamedes in Angola across the full length of South West Africa to the mouth of the Olifants River in the Cape Province of South Africa — a distance of nearly 1,200 miles (fig. 23-1). Its width is much less, seldom exceeding 100 miles, and probably averaging between 60 and 80 miles. Its eastern border in the north and center is the foot of the Great Western Escarpment, atop which more humid lands prevail; but in the south,

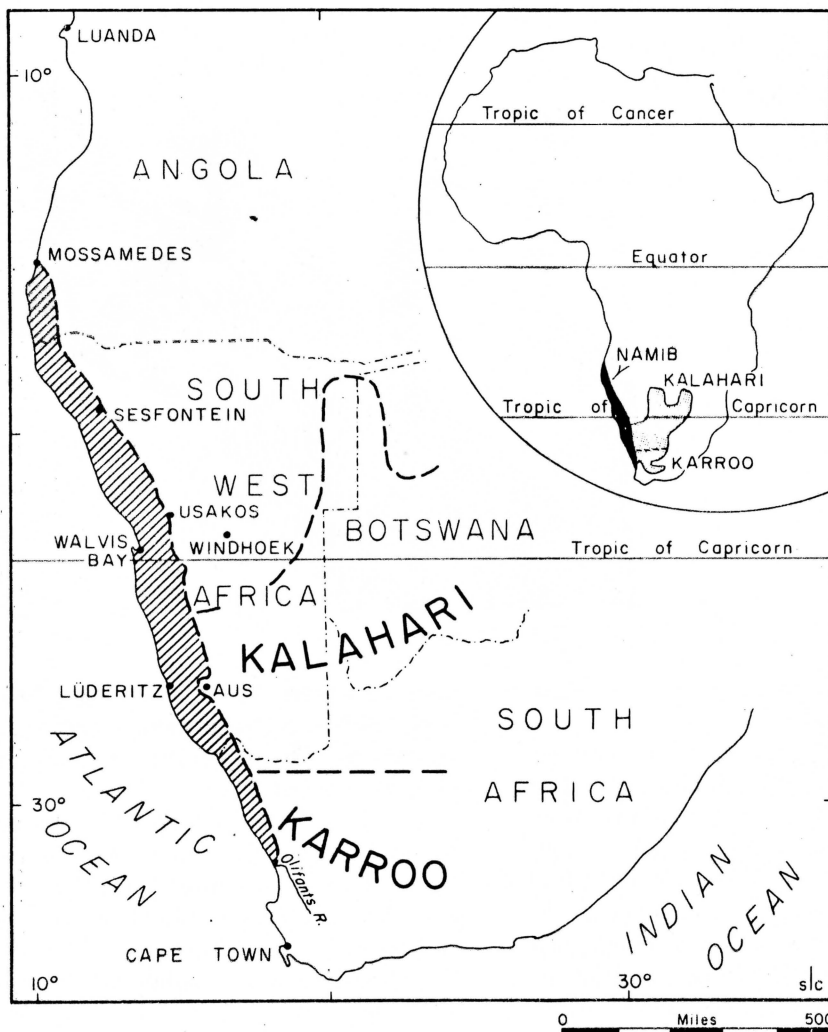
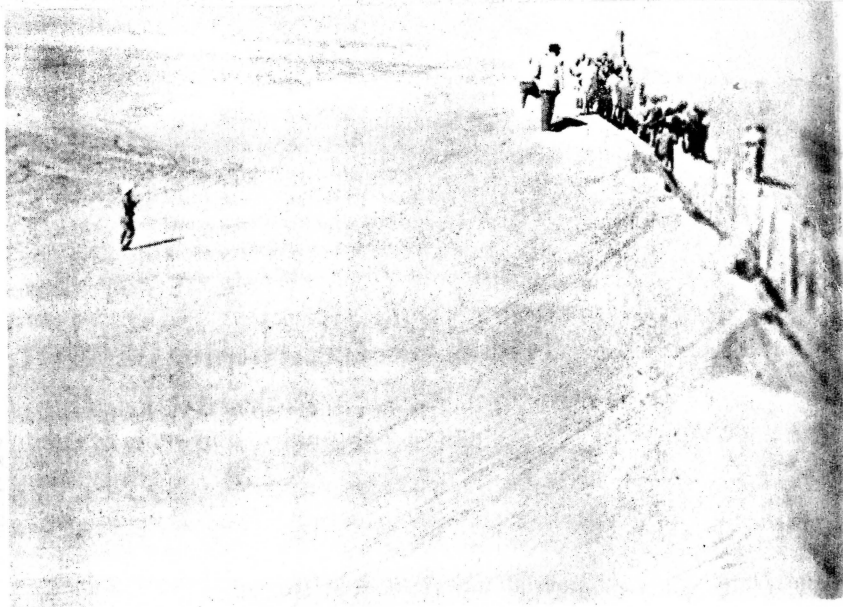


Fig. 23-1. The Namib Desert.

Fig. 23-2. Landforms of the Namib.



a gradual transition merges the Namib with the Kalahari and Karoo Deserts of the interior.

Climate. Climatically, the Namib is a contradictory area: it is almost rainless, yet its air is normally at or near the saturation point, and fog is very common. Temperatures in the coastal area are mild at all seasons, ranging between a maximum of 67°F and a minimum of 58°F in the warm season (December) and between 57° and 46°F in the cool (July). Inland, more continental conditions prevail, with summer temperatures reaching the eighties each day and dropping into the low forties on the average winter night. At the coast, humidity is at 100 percent for 19 hours per day in summer and for 11

hours in winter. At the inner edge of the desert, the air is much drier, fog is virtually unknown, and the humidity seldom exceeds 50 percent. This is nevertheless fairly high for a desert region.

Violent weather is practically unknown. Rare thunderstorms bring the precipitation, which averages less than two inches annually inland, and about one-half inch at the coast. Strong winds blow a few days a year from the interior, bringing heat and discomfort to the coast. But storms such as characterize midlatitude areas are totally unknown.

Landforms. The Namib is characterized by several distinct types of landforms: a vast sand sea, monoto-

nously flat plains of gravel and bedrock, mountains of bare rock, and areas with surfaces fretted into strange sandblasted forms.

Most of the desert consists of a broad platform, eroded into bedrock, of monotonous flatness, and rising in a very gradual slope from the coastline to an elevation of some 3,000 feet at the foot of the escarpment. South of the tropic, much of this platform is veneered with sand, in the form of sheets, waves, and dunes, the latter sometimes exceeding 800 feet in height. Scattered sand areas also occur in the northern third. Elsewhere, the rock platform is sometimes mantled with a thick layer of water-laid gravels, often cemented with gypsum. Over large areas, the bedrock itself (largely mica-schist, granite, and gneiss) comprises the surface.

In the southern and central portions, mountains rise above the smooth platform only as isolated individuals and short chains. In the north, the platform is narrower, and in some areas a broad belt of mountainous terrain intervenes between the platform and the escarpment. Most of the mountains are rugged, steep-sloped, and almost soilless.

Cut below the platform in the northern half of the Namib are canyons of intermittent streams, which extend westward from the escarpment toward the sea (fig. 23-3). Steep-sided and rugged in the extreme, these canyons nevertheless have broad flat floors which, although subject to attack from sudden floods, have some potentiality for irrigated agriculture.

Vegetation. In general, the Namib is a barren waste, with very sparse vegetation. Large areas, notably the gravel flats, the bedrock platform, and the dunes, are almost totally barren. In the zone of heaviest fog near the coast, especially in the south, low succulent bushes grow scatteredly. Along the eastern border, a thin to moderate cover of annual grasses appears in most years, supporting for a time herds of antelopes, zebra, ostrich, and their attendant predators. Riparian vegetation, largely in the canyons of the major streams, consists of acacia trees and various shrubs, usually growing in a broken, scattered pattern.

Soil. Over the mountains, bedrock platforms, canyon sides, and dunes, soil is essentially absent. On the gravel flats and in coastal areas, high alkalinity, salinity, or presence of gypsum, renders the soil toxic to all but the hardiest halophytes. Only on the interior plains and some river bottoms are arable soils to be found.

Water Supply. Potable water is found only as subflow beneath streambeds — chiefly of the larger streams that rise in the rainier plateau east of the escarpment. In some cases, dissolved salts render the water unpleasant. In other cases, such as the Kuiseb and the Koichab, which supply Walvis Bay and Lüderitz, the quality is good to excellent. Untapped waters probably occur in association with other streams, especially those that terminate in the great sand dunes south of Walvis Bay and those that flow to the sea across the northern Namib.

Before the introduction of Koichab water to Lüderitz in 1969, that port was supplied entirely by thermal distil-

lation of seawater, using coal brought by rail from the Transvaal.

Experiments made in the time of German colonial administration at both Swakopmund and Lüderitz indicated a great water-producing potential in the moisture content of the air. Thin copper sheets, exposed to the air, had such rapid radiational heat loss after sunset that their temperature dropped quickly below the condensation level, and considerable quantities of atmospheric moisture were condensed upon them. This resource has never been utilized.

Settlement History

Before its occupation by Europeans late in the last century, the Namib was sparsely occupied by primitive native peoples. Small wandering bands of Saan or Strandloper (Beachrunner) Bushmen subsisted by strand-gathering and hunting, and by the gathering of tubers. Because of the scarcity of both food and water, the population density was low. Small bands of Topnaars, a Nama (Hottentot) subtribe, lived along the lower Kuiseb River, getting water from shallow wells in the river bed, grazing their flocks of goats and herds of cattle on the

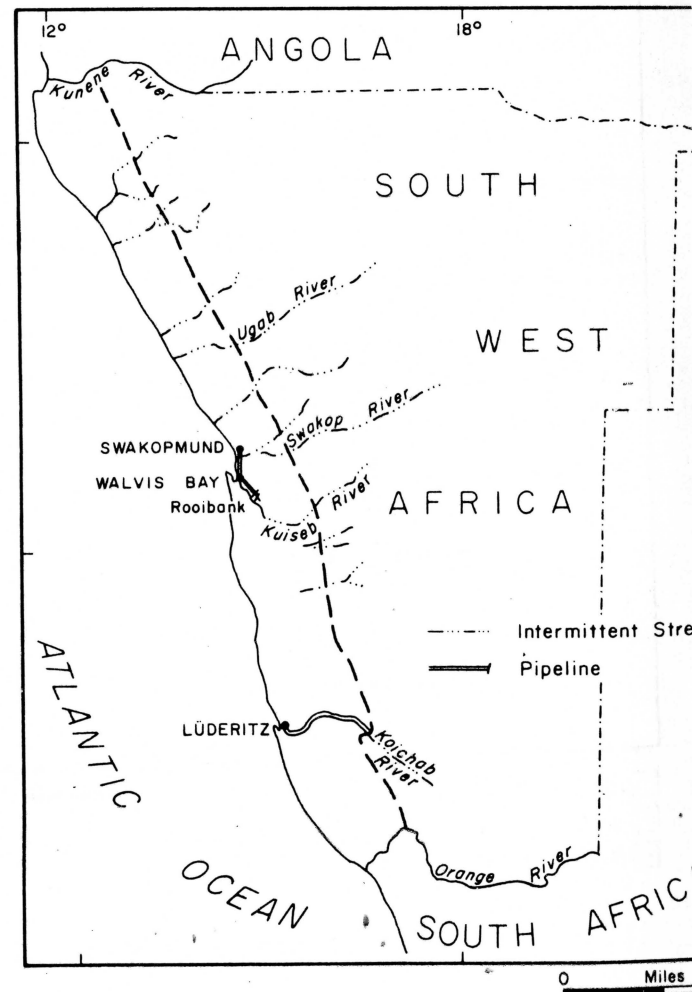


Fig. 23-3. Namib hydrography.

limited riparian vegetation, gathering nutritious *narra* seeds from melons growing amid the dunes, and fishing in the shallow coastal lagoons.

Between 1484, when a Portuguese expedition first explored the Namib coast, and 1876, when the British laid claim to Walvis Bay and established a customs post there, little of lasting importance occurred in the Namib. At Walvis Bay, whalers, many of them from New England, early maintained temporary bases. By the 1870s, traders of several nationalities were bartering for ivory and hides with the tribes of the plateau, and hauling their goods by ox wagon to and from Walvis Bay.

In 1884, Germany formally proclaimed a protectorate over the whole of South West Africa (except the British enclave at Walvis Bay). Because the only deep-water harbor on the entire coast was in British hands, the Germans of necessity built an artificial harbor nearby at Swakopmund. From it, a railroad was constructed across the desert to the interior, where a commercial grazing and mining economy was soon established.

Swakopmund grew rapidly during the first couple of decades of German control. It had an important port and

transportation function, with the attendant administrative functions. In addition, the cool conditions prevailing at the coast during the summer proved attractive to Germans sweltering in the heat of the interior. Early in the German period, there was initiated the custom of moving the seat of government from Windhoek to Swakopmund for the period December through February, which in turn established the port as the social capital of the territory during those months. Curiously, too, Swakopmund established a brewery, which gained a very high reputation for its product, in spite of the fact that the quality of the local water is so bad that it is barely drinkable at times. Water for the brewery was, at first, brought from Germany by ship; later, for some forty years after World War I, it was brought by railroad tank-car from Walvis Bay, which in turn obtained it by pipeline 23 miles from the underflow of the Kuiseb River.

Lüderitz, established by a Bremen merchant in 1884 continued as a minor port until the early years of the twentieth century. At that time, in the construction of the rail line connecting it with the interior, diamonds were discovered, bringing on a mining rush in the desert and a short-lived boom at the port.

Post World War II Situation

Since World War II, South West Africa has enjoyed a period of growth, development, and prosperity that has advantageously affected all segments of its population: the manifestations of this are clearly evident in the coastal desert area (fig. 23-4).

Fisheries. The cool waters of the Benguela Current, flowing northward along the Namib coast, are particularly rich in plankton, making this one of the richest fishing grounds in the world. Its potentiality was rather recently realized, however, with the result that the fisheries have undergone a striking development in the last two decades.

The most important fish taken is the pilchard or sardine. Formerly these were almost entirely canned, but in recent years world demand for fish oil and fish meal has resulted in an increasing proportion being allocated to those products. In 1966, 72,000 tons were canned, but 175,000 tons of fish meal and 34,000 tons of fish oil were produced. Since the early 1960s, there has been increasing exploitation of the whitefish population, especially hake. While some of the fisheries are shorebased, operating chiefly from Walvis Bay, a great proportion of the catch is made by vessels of many foreign nationalities, some operating in conjunction with factory ships which completely process the fish at sea, producing frozen fillets, canned fish, fish meal, and fish oil. In many cases the operations are highly efficient, with the schools of fish being located by scouting planes or helicopters and tracked by sonar, and with the catching done by fleets of smaller vessels which deliver their catch to the factory ship.

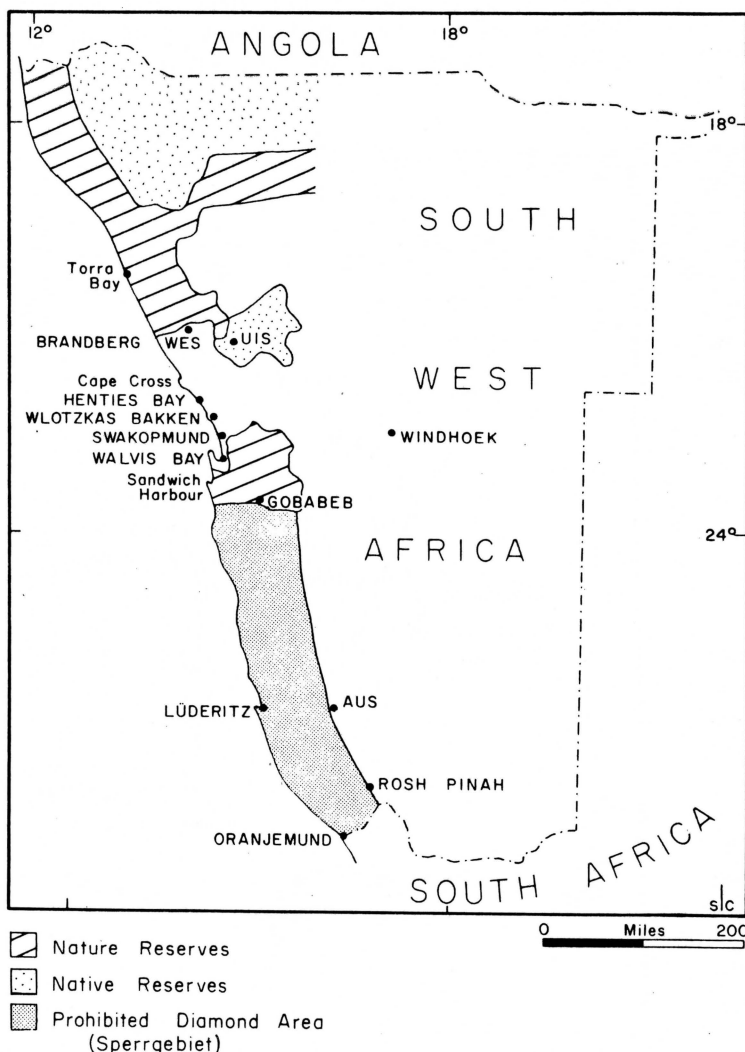


Fig. 23-4. Namib land allocations.

The rock lobster or crayfish industry, based chiefly at Lüderitz, exports large quantities of live lobsters, canned lobster meat, and frozen lobster tails.

Some of these products are marketed within South West Africa and South Africa, but the bulk of them are marketed overseas, in almost every part of the world.

Port and Urban Developments

Walvis Bay. Walvis Bay has the only harbor on the South West Africa coast accessible to deep water vessels. The harbor is naturally sheltered from all but northwest winds and swells by a long sandspit (Pelican Point) built from the southward. Beyond that, however, the place originally had little to recommend it. The margins of the bay are extremely shallow, with mud flats extending far seaward; fog is prevalent; and sulphurous submarine emissions cause severe damage to paint, hardware, and seawater distillation apparatus.

Today, however, a dredged channel makes it possible for large freighters and tankers to come alongside the modern, efficient wharves. From the center of the city northeastward, fishing factories line the shore of the bay, each with its own wharf for the unloading of the catch through a suction line that conveys the fish directly into the factory. Within, the fish are cleaned, cooked and canned, or cleaned and frozen, or converted directly into fish meal or fish oil, depending upon the kind of fish and the state of the market. Thanks to the rainless climate, sacked fish meal is stored out-of-doors alongside the factories, sometimes for months, until it is transported by truck to the deepwater wharves for loading onto a freighter. Fish oil is stored in large tanks, which resemble petroleum storage tanks, until transferred by pipeline to seagoing tankers.

The port also functions in various relationships to the foreign fishing vessels working offshore. Ships of many nationalities call there for watering and provisioning, for repairs, for hospitalization of injured or ailing crew members, and for transshipment of their catch to other vessels for transport to markets. Industries accessory to the fisheries are located at Walvis Bay, including rope and net supply firms, marine engine companies, a marine railway, and instrument installation and maintenance firms.

As the only deep-water railhead of the territory, Walvis Bay serves as the principal entryport for the interior. In addition to fish products, exports are chiefly minerals, wool, hides, and pelts, destined for all parts of the world. Imports consist chiefly of manufactured goods, petroleum, and foodstuffs, chiefly from northwestern Europe and the United States. The bulk of the ocean traffic of the port is overseas, although some coastwise traffic is carried on, chiefly with Lüderitz and Cape Town.

As a city, Walvis Bay has a most unprepossessing physical situation. It sprawls on a mud flat at the mouth of the Kuiseb River, which has repeatedly flooded it during years of extraordinary rainfall on the interior plateau a hundred miles or more to the eastward. It is

subjected to much wind, drifting sand, a high frequency of fog, high humidity at all times, which results in much mildewing, and salty soil, which makes gardening impossible. Many of these handicaps have been overcome, or even used to advantage, however: the roads are surfaced with salt dug from the nearby salt pans and mixed with clay, and the deliquescent impurities in the salt extract moisture from the air and keep the road surface firm and slightly moist; dikes hold out the floods; the municipality has erected a stout fence along the windward side of town, which catches the drifting sand in its eddy, thereby creating a "municipal sand dune" more than thirty feet high and several miles long; and soil is brought from the plateau atop the escarpment more than one hundred miles away to be used for lawns and gardens.

The original buildings of the towns were raised on stilts to evade the floods and the drifting sand. Today, well-built modern homes, some with attractive yards and gardens, spread far out from the center of town, evidencing both the rapid recent growth of the community and its prosperity: a reflection of the expansion of the fisheries and the growing trade through the port.

The European (white) population today numbers about 5,500, and the total population (all races) about 18,000. In accordance with the prevailing custom throughout southern Africa of separating the residence areas of the various ethnic groups, the Coloreds (mixed bloods) have their own section, Narraville. Most of these people are Cape Coloreds (Malay, Hottentot, White mixtures from the vicinity of Cape Town) engaged in the fishing industry, both on the boats and as foremen in the fishing factories, and the high wages received by them are reflected in the quality of their homes.

The labor force employed in the fishing factories consists largely of Ovambo males, Bantu (Negro) tribesmen who came from their homeland astride the South West Africa-Angola border to work for twelve or eighteen months under a voluntary cash-wage contract. They are housed in compounds (barrack-style housing with group feeding arrangements) operated by the cannery or by the municipality. Other Ovambos constitute the labor force of the wharves. The Bantu population of the city totals 10,835, of which 8,579 are Ovambo.

The water supply for Walvis Bay is derived from wells tapping the underflow of the Kuiseb River at Rooibank, 23 miles to the southeast, where the river is still confined to a well-defined channel. It is delivered to the city (and on to Swakopmund) by pipeline. The quality is good, and the amount sufficient to supply the city to several times its present consumption of over one million gallons per day.

Petroleum products reach Walvis Bay by sea, but coal comes by rail from the Transvaal. Packaged and canned foods come from overseas by ship and from South Africa by rail. Some fresh vegetables are available from small farms on the Kuiseb Delta and in the lower reaches of the Swakop River valley, and some fruit comes from the northern interior of the Territory, but most of the

fresh food supply comes in by rail from South Africa.

In short, except for its water, all of the supplies of Walvis Bay are obtained from great distances; and most of the goods handled at the port have originated at great distances and have yet a great distance to travel to their ultimate destinations. Even the fisheries utilize the port for their operations merely because it happens to be nearby. The town merely occupies space in the desert — a desert in which it has no real interest of any sort. However, the desert poses certain restrictions and conditions upon the community, to which the city has to adjust or adapt. And thus the desert has imparted a certain atmosphere and character to the city which sets it apart from other port and fishery communities in more “ordinary” environments.

Lüderitz. In many aspects, Lüderitz is a small-scale replica of Walvis Bay; but it has many strongly distinctive characteristics. Its harbor is well sheltered from all seas, but its rocky islets and submerged bedrock reefs prevent its use by larger vessels. A twenty-foot channel has been dredged to the wharf, but larger vessels must be worked from lighters in the bay.

The chief role of Lüderitz is as the base for the rock lobster or crayfish industry. Boats based here operate for several hundred miles along the rocky coast, as well as on some offshore sea-mounts. The catch is handled in canneries and freezing plants, and the product is shipped by coaster to other ports (Walvis Bay and Cape Town) for transshipment, or loaded from lighters onto larger vessels in the bay. As a cargo port, the role of Lüderitz is minor; its hinterland is poor, and such trade as generates there is more likely to be handled by Walvis Bay or Cape Town. Its inland connections are via a rail line and a single graded road.

The town has a most irregular pattern, rambling in an elongated fashion along the much indented coastline and up over rocky hills that border the bay. Roads are narrow, crooked, and sometimes steep. The town is plagued by high winds, dust, sand, and all-pervading dampness. It has long been inadequately supplied with water produced by thermal distillation of seawater, but since May 1969 an abundant supply of freshwater has become available from the underflow of the Koichab River through a 67-mile pipeline across the Namib.

Lüderitz has a population of about 7,000: 2,400 Europeans, 1,600 Coloreds, and 3,000 Bantu (largely contract laborers at the factories).

Swakopmund. Although it was the chief port of the Territory during the German time, Swakopmund ceased to exist as a port shortly after the take-over of the country by South Africa in 1915. A rail line constructed from the German railhead at Swakopmund across the dunes to Walvis Bay resulted in the immediate transfer of all port functions to that place, with its better harbor and facilities. Today the harbor facilities at Swakopmund are entirely dismantled and/or silted up. The old Customs House is a museum, and the office of the main shipping line is a school hostel. The lighthouse (emblem

of the town, appearing on the town seal) still functions — but as one of the navigation aids for Walvis Bay. Only two industries exist at Swakopmund: a tannery and the brewery. The resort function will be discussed later.

Möwe Bay. At Möwe Bay, a minor indentation in the rocky coastline 250 miles north of Swakopmund, a future harbor development is being considered. Its purpose would be to serve certain mining areas of the adjacent desert, and as a fishing harbor with fishing factories; it is also possible that it might be connected with a larger hinterland by a transdesert rail route. Water is available in considerable quantity from the underflow of two rivers in the vicinity.

Mining

Diamonds, produced in South West Africa only in the Namib, constitute by far the most important mineral product in the territory. Except for sporadic “discoveries” at other coastal points, all are produced in the south, and almost entirely in the extreme south. The diamonds are alluvial, being found in beds of gravel, usually under a considerable overburden of sterile materials. The large-scale operation thereby necessitated in diamond recovery, together with the desire for close control over production and sales, has resulted in the concentration of the entire operation under one corporation: the Consolidated Diamond Mines (CDM). Because of the high value and light weight of the product and the resultant ease of theft (combined with the difficulty of rescue operations for retrieving “poachers” stranded in this extremely arid region), the entire diamond-bearing area and much of its surroundings has been proclaimed a Prohibited Area (*Sperrgebiet*), totally closed to public entry at all times. Diamond sales are completely controlled by the government, and illicit diamond buying (IDB) is one of the most heinous crimes that can be committed in South West Africa.

The CDM company town of Oranjemund, at the mouth of the Orange River, is the center of diamond mining operations. It is a highly developed, progressive, modern community, with a good water supply from wells near the river, and with gardens supplying fresh produce. Offshore dredging operations for the recovery of diamonds from the sea bed have been carried on, partly under American capital and direction, since the mid-1960s.

The history of mining of metals in the Namib is similar to that the world over. Some mines have been operated recurrently since about 1890, working when market prices are high and wages low, and closing at other times. Many are very remote, posing great problems of transportation — both of supplies to the mine and of ore from it. Scarcely a year passes without the discovery of another “spectacular” deposit, many of which prove to be quite worthless.

Important operations include the Rosh Pinah mine (zinc) in the remote southern Namib near the Orange

River, eighty miles from the coast; and the Uis and Brandberg Wes mines (tin and wolfram) near the inner edge of the Namib 120 miles north of Swakopmund.

Semiprecious stones have been mined sporadically at various places during the last couple of decades. Most operations are seriously handicapped by the problems of supply, transportation being poorly developed in many areas.

Large-scale production of salt is carried on in the coastal pans and lagoons north of Swakopmund, using modern mechanical equipment. Approximately 2,500 tons of guano are produced annually by scraping that bird excrement from the rocky islets off the coast between Walvis Bay and Lüderitz; and another 1,000 tons is removed annually from an artificial "Bird Island" (a wooden platform) between Walvis Bay and Swakopmund.

Oil prospecting has been carried on in various parts of the Namib and the adjacent sea bed for a few years without success. Obviously, the discovery of oil reserves would be of great value to the country, which now has to import all of its petroleum products from overseas.

Grazing

Vast areas of grasslands appear in most years along the eastern margin of the Namib. On them, since time immemorial, great herds of game have grazed. Today these have been replaced, in part at least, by domesticated animals — chiefly cattle and karakul sheep.

The cattle, raised chiefly for beef, are usually driven overland (trekked) to the nearest rail line and shipped thence to markets in South Africa alive. Karakul sheep are raised for the wavy pelts of the newly-born lambs, which must be killed and skinned in the first 24 hours of life if the pelt is to be of marketable quality (soon thereafter the curl tightens, becoming kinky and hence valueless). This removal of the lamb before it begins nursing eliminates a major drain on the ewe's vitality and allows her to exist and reproduce on grazing too meager for ordinary sheep raising. Quality of the pelt is determined genetically by the ram, and the breeding is carefully controlled by the European ranch owner. The flock grazes under the watchful eye of a native shepherd, who carefully collects lambs as soon as they are born. Skinning and curing is done at the ranchstead. Pelts are sold either to itinerant buyers or through marketing cooperatives, ultimately making their way to the London auctions. The flock is also sheared annually, the coarse wool (used chiefly for carpeting) being shipped overseas from Walvis Bay and Lüderitz.

Before the advent of the Europeans, these desert margins were almost unused, owing to the lack of water. Beginning in the German time, ranches (farms, in local parlance) of 10,000 to 25,000 hectares were developed by European settlers, who, after developing water resources by drilling wells, have been able to carry on commercial grazing. Unfortunately, particularly during the wetter cycles, this practice has been allowed to

extend too far westward into the arid zone, and many ranchers have suffered acutely from the inevitable droughts. All of the outermost row of ranches should be bought back by the administration and added to adjacent game reserves, present or future.

Ranching here is similar to modern ranching in the western United States and in Australia, except for the presence of the karakul and the use of native herders. Travel is by truck, pick-up or land rover; drilled wells are pumped by windmill and/or diesel or gasoline engines; ranges are usually fenced; animals are dipped, inoculated, sprayed, and otherwise protected against parasites and disease; and a predominantly cash economy prevails. Ranch houses are modern, with running water, paraffin (kerosene) refrigerators, and are usually served by telephone. Children of school age live most of the year in school hostels in some larger town (such as Swakopmund or Windhoek) and return home only for the longer holiday periods. Native workers and their families occupy dwellings of their own construction, either in the immediate vicinity of the European rancher's home or at the detached outposts where the particular herd for which they are responsible is grazed. They receive cash wages plus a weekly ration of food, and keep their own flocks and herds as well.

In the northern half of this marginal area, semi-nomadic native herders seasonally graze their flocks of goats and herds of cattle. Over large areas, watering points are very widely scattered, and much potential grazing goes untouched. Some new water sources have been developed by the administration, but much of their extensive water-seeking efforts in the area have proven fruitless. The population density (both of herds and of humans) accordingly remains low. Some of the better-favored areas were occupied by European ranchers earlier in the twentieth century, but have been bought back by the administration within the 1960s and added to the existing native reserves.

These native herders live under tribal organization and on a purely subsistence non-cash economy. Their cattle are a small wiry native stock, and while some herders have crossed their animals with improved strains provided by the administration, many have refused to do so, preferring to keep the blood lines "pure." The people live chiefly on the milk of the cattle, which is prepared in several ways, but not on the meat: the numbers of cattle are expressive of the owner's social status, and cattle are slaughtered only ceremonially. On the other hand, goat meat is commonly eaten. Several tribes are represented here: Ovahimbas and Ovatjimbas (Herero splinter groups), Damaras and Namas (Hottentots). Most of these groups have been in the general area for at least a century, and consider it as their traditional grazing ground.

Agriculture

Agricultural development is restricted, occurring only on the floodplains of two of the rivers: in small patches

on the Kuiseb delta near Walvis Bay and on the lower Swakop River near Swakopmund. Most of these patches are small, being scarcely more than large gardens. Much could be done, as about the settlements of the Topnaars on the Kuiseb, where water and fairly good land are both available. It is, however, not in the tradition of these people to carry on irrigation agriculture. Were this the Arab world, water would be lifted from the shallow wells by *shadouf* or *saqia*, and lush gardens would flourish on the floodplain. But here, goats graze at will, seeking out edible shoots on the already overgrazed riparian vegetation.

Dry-farming is nowhere attempted, and rightly so, since the combination of deficient rainfall and thin soils would make such an attempt disastrous.

Transportation

Two rail lines traverse the Namib (fig. 23-5), both being attenuations of the rail net of South Africa, operated by the South African government on the "standard" (3.5-foot) gauge of that system. One line connects

Lüderitz on the coast with the main line at Seeheim, near Keetmanshoop, in the interior. The other crosses the Namib in a northeasterly direction from Walvis Bay and Swakopmund to Usakos and eventually to Windhoek. Daily passenger trains operate on both lines, as well as freights.

A tarred road crosses the Namib from Usakos to Swakopmund and Walvis Bay, roughly paralleling the rail line. A graded road, usually fairly well maintained, parallels the Lüderitz rail line, and a similar road extends south near the coast from Lüderitz to Oranjemund. Two graded and maintained roads cross the desert from Windhoek to Walvis Bay and to Swakopmund. Another skirts the inner edge of the desert from the Windhoek-Walvis Bay road southward to the Lüderitz road and continues southward to the mining camp of Rosh Pinah. Three graded roads cross the north-central portion of the desert: one from Usakos directly to the coast at Henties Bay; one from Outjo directly to the coast; and one from the vicinity of the Brandberg Wes and Uis mines diagonally across the desert southward to the coast. A salt-surfaced road runs north up the coast from Swakopmund for about 140 miles. There are no roads of any sort in the area between the Kuiseb River and the Lüderitz rail line, seaward of the north-south road mentioned above, and only a few unmaintained truck trails in the northern desert.

Regular air services connect Walvis Bay with both Windhoek and Lüderitz, and Lüderitz with Alexander Bay, in South Africa at the mouth of the Orange River. There are a number of scattered strips, usually unmanned, for administrative and emergency purposes.

Recreation and Tourism

The cooler summer climate remains the chief reason for the existence of Swakopmund. Since the early years of the German time, the administration of the territory has moved its offices from Windhoek to the coastal town for the midsummer period, and with it comes much of the social life of the country. The town's population soars from its permanent figure of about 2,400 Europeans to more than 7,000 during Christmas week, when every hotel room, municipal bungalow, and pension is full, and people are even housed in railway sleeping cars parked at the railway station.

The town retains a quite Germanic atmosphere in many ways: German foods are served in the restaurants and cafes; German music sounds from loudspeakers at the beach; German books and magazines predominate in the shops; many of the buildings, with their half-timbering, their towers and turrets, balconies and ornamentation, seem to belong more on the shores of the Baltic than the edge of the Namib; and in the language heard and the clothing seen on the streets, the high quality of the Scientific Society, the energy and drive of the people, the performances in the theaters, a Germanic culture and attitude prevails.

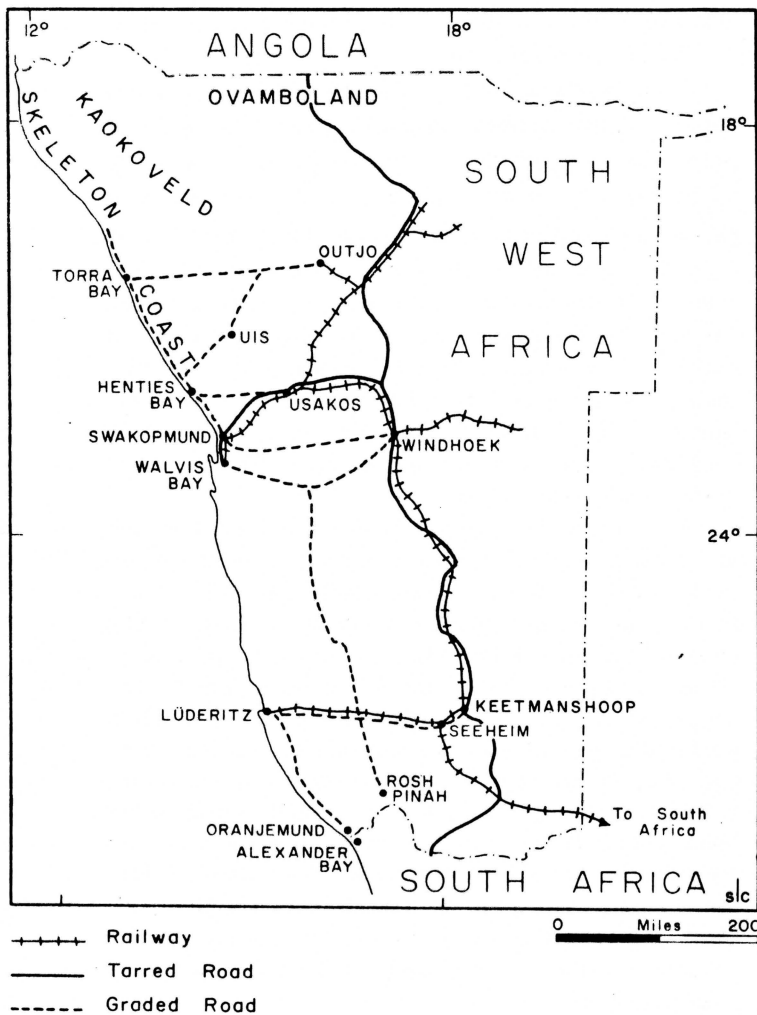


Fig. 23-5. Namib transportation routes.

Poor quality of water long plagued the town (Swakopmunders, long used to their salty coffee and tea, were widely reputed to salt these beverages when served them in other towns!), but the recent connection by pipeline with Walvis Bay's high quality water supply has quite altered the situation. Reconstruction and remodeling of some of the town's hostels, development of the municipal bungalow "colony," and the opening of new cafes, combined with the general prosperity of the territory, increased leisure time and a shorter work week, the paving of the main road across the desert, and the filming of several motion pictures in the adjacent desert have resulted in greatly increased popularity of Swakopmund.

The Skeleton Coast stretches north from Swakopmund to the Angola border — foggy, bleak, and barren. For over a century, it has been notorious for its shipwrecks and the sufferings and deaths of the voyagers cast up on its shores. Virtually inaccessible by either land or sea, it was seldom visited by anyone. During the 1960s, however, the construction of the coastal road and the road from Usakos directly to the coast have made the area accessible, and its cool moist summer climate and excellent sports fishing have made it attractive to many inlanders. Many camp out along the coast, while others have built structures ranging from crude, simple shacks to very comfortable houses. Two communities, Henties Bay and Wlotzkas Bakken, have developed rather amorphous agglomerations of scattered bungalows and embryonic commercial developments.

The Department of Nature Conservation and Tourism of the South West Africa Administration is beginning to exert controls over certain portions of the Namib coast, and to constructively plan for its development in an enlightened manner. Camping areas are being designated and regulated. The northernmost of these is at Torra Bay, about 180 miles north of Swakopmund, near the point where the road from Outjo reaches the coast. Sandwich Harbour, 25 miles south of Walvis Bay, a popular fishing spot, much frequented by residents of the port city, is also under the department's supervision.

Lüderitz has considerable attraction for the residents of the southern interior — an area of great summer heat and dryness. The remoteness of the town, its poor access road, and the inadequate water supply (later remedied) have been serious handicaps to its development.

Nature Reserves. A large part of the Central Namib, easily accessible to both Walvis Bay and Windhoek, has long been a proclaimed game reserve (fig. 23-4). It is, especially along its eastern border, the natural grazing ground for large flocks of springbok, gemsbok (oryx), zebra, and ostrich for at least part of the time — they are exceedingly mobile and migrate over long distances. These forms of wildlife have suffered great decimations from both drought and illegal hunting between the late 1930s and the mid-1960s. Little control was main-

tained over the area due to lack of both personnel and financing, as well as the fact that game was generally considered to be unlimited and inexhaustible. The area is now well controlled, and rest camps, nature education, and research programs are being developed. In addition, the scientific research station of Gobabeb is situated within the area.

The northernmost part of the Namib within South West Africa (the Skeleton Coast and the Kaokoveld) is quite inaccessible and almost completely undeveloped. A narrow belt along the coast is designated as a nature reserve, and the remainder is Native Territory.

The Future

Since Walvis Bay and Lüderitz exist solely because of their dual roles as bases for the fishing fleet and ports for the interior, they are particularly sensitive to any forces that affect these functions. Thus any overseas situation that increases or decreases the foreign trade of South West Africa affects the prosperity of these ports; and their growth, even their very existence, depends upon the continued prosperity of the rest of the territory and the continued existence of reservoirs of merchantable fish in the neighboring ocean. The prosperity of the territory fluctuates with the price of karakul (a luxury item on the world market, and subject to the whims and fads of fashion), local droughts, and the presence of certain cattle and sheep diseases (an epidemic of foot-and-mouth disease in 1960–62 caused a total cessation of animal exports). It seems almost inevitable that the fish population will decline markedly in the near future. Overfishing will undoubtedly deplete the reserves. South West Africa has imposed stringent quotas and closed seasons upon its fishing industry, but the operations of the large foreign fleets offshore go on without control. No international organization controls fishing on the open seas; thus far, meetings to consider the fisheries situation in this region have attracted only a few of the participants, with the large operators being conspicuously absent.

Mining will probably continue to be carried on in its present sporadic, intermittent fashion, with little change, barring the possible discovery of oil.

Agriculture has little potentiality in the Namib, due to a lack of both water and soil suitable for cultivation. Even with large-scale, long-distance diversions of water, agriculture does not seem likely to increase greatly in importance in the future. There is always the possibility of gardening developments, either hydroponic, or using the system developed by the University of Arizona at Puerto Peñasco in Mexico and Abu Dhabi in the Arabian Trucial States (Hodges, Chapt. 7 herein); but even these would be greatly reduced in efficiency by the incidence of coastal fog in the very areas where the need is greatest.

Grazing should be rigidly curtailed throughout the Namib and its border areas. In good years, large areas

can be safely grazed; but to encourage ranchers to settle in the area is exceedingly dangerous, since it means that they and their herds will also be there in drought years, with consequent excessive damage to both the land itself and its vegetative cover, as well as the impoverishment of the people involved. It is far better to rigidly resist any attempts at "taming" the marginal areas, and to let them revert to their natural state, thus preventing the waste of both the natural and the human resources.

On the other hand, tourism and recreation can be developed far beyond their present state, allowing them to replace grazing as the major use of the land and field of employment. On an intra-territorial basis, the annual "urge to the sea" produces a great potential for Swakopmund, which can use more and better hotels and additional entertainment facilities. The first 150 miles of Skeleton Coast north of Swakopmund have great potentials for further development as a recreational area. However, careful planning and control are needed to prevent the creation of a recreational slum, dotted with shacks and littered with debris. Semi-residential communities should be designated, planned, and controlled by administration authorities, with minimum standards of housing set and maintained. Camping areas should be designated, provided with water and sanitary facilities, and properly maintained; indiscriminate camping should be forbidden; and hotels, motels, and rest camps with good facilities should be provided. Carefully selected coastal reserves should be established and stringently regulated, as is done at the Cape Cross seal colony, to protect the fish, seals, birds, and flora of this unique coast.

Tourism from the rest of southern Africa and from overseas can be attracted in a large and profitable way if the proper attractions and accommodations are provided. The various aspects of local color should be preserved and even accentuated, ranging from the Teutonic image of Swakopmund to the colorful garb of the local native women. The great game herds of the inner

border of the desert should be preserved and enlarged by natural reproduction and should be made available to tourists through road improvement, air strip construction, and the provision of strategically placed rest camps. More areas should be designated as Nature Reserves: all of the southern Namib, from the ocean eastward to the escarpment, and including some of the present farms (but excluding, of course, the Sperrgebiet); and all of the northern Namib, beyond the Ugab River, from the coast to the inner edge of the desert in the central Kaokoveld. Such vast empty unspoiled areas have a great attraction in our modern world, and as such can become a real economic resource. Closed to indiscriminate public entry and left entirely underdeveloped, these reserves could be opened to carefully regulated safari-type expeditions operated basically for tourists. All shooting of game, collecting of minerals or artifacts, or interference with local native groups should be prohibited. At the same time, the Kaokoveld natives should be encouraged to continue their use of the area for grazing — to do otherwise would disrupt their economy and their seasonal migrations and at the same time would deprive the tourist of the opportunity of visiting their camps.

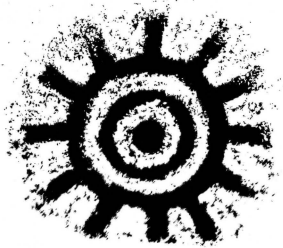
The Namib, despite its extreme physical handicaps, has a modest potential for future development, but only if handled carefully to prevent the destruction of those features which are attractive yet exceedingly fragile.

* * *

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