- DENIS, J. (1964): Addis Ababa, Genèse d'une capitale impériale. Rev. Belge de Géogr. 88, 3.
- GRIAULE, M. (1934): Un camp militaire Abyssin. Journ. de la Soc. des Africanistes IV.
- Guida dell'Africa Orientale Italiana (1938), Cons. Turistica It. Milano.
- HABERLAND, E. (1965): Untersuchungen zum äthiopischen Königtum. Studien zur Kulturkunde Bd. 18, Wiesbaden.
- HAMMERSCHMIDT, E. (1967): Äthiopien, Christliches Reich zwischen Gestern und Morgen. Wiesbaden.
- HORVATH, R. J. (1968): Towns in Ethiopia. Erdk., XXII, 1.
- -, Von Thünen's isolated state and the area around Addis Ababa, Ethiopia. Ann. Ass. Am. Geogr. 59, 2.
- JENSEN, AD. E. (1954): Wandlungen in Abessinien. Geogr. Rdschau 6.
- KARSTEN, D. (1969): Traditionelles Handwerk in Südäthiopien. In: W. BUDER und E. ULICH (Hrsg.): Alte Wege – Neue Straßen. Addis Abeba.
- KULS, W. (1957): Addis Abeba. Entstehung und Entwicklung der äthiopischen Hauptstadt. Paideuma VI, 6.
- -, (1958): Beiträge zur Kulturgeographie der südäthiopischen Seenregion. Frankf. Geogr. H., 32. Jg.
- LEVINE, D. N. (1965): Wax and Gold. Tradition and innovation in Ethiopian culture. Chicago u. London.
- MARIAM, M. W. (1965): Some aspects of urbanization in pre-twentieth century Ethiopia. Eth. Geogr. Journ. III, 2.
- MATZNETTER, J. (1966): Das Entstehen und der Ausbau

zentraler Orte und ihrer Netze an Beispielen aus Portugiesisch Guinea und Südwest-Angola. Nürnb. Wi. u. Soz. geogr. Arb. 5.

- MEISSNER, H. G. (1967): Das Entwicklungsland Äthiopien. Köln.
- MICHAEL, A. W. (1967): Some thoughts on the process of urbanization in pre-twentieth century Ethiopia. Eth. Geogr. Journ. V. 2.
- PANKHURST, R. (1965): Notes on the demographic history of Ethiopian towns and villages. Eth. Observer IX, 1.
- SCHIRMER, P., TEISMANN, R. (1968): Aspekte des Verstädterungsprozesses in Entwicklungsländern. Arb.-Ber. des Ibero-Amerika-Instituts für Wirtschaftsforschung an der Univers. Göttingen H. 3.
- SCHWARZ, G. (1959): Allgemeine Siedlungsgeographie, Berlin.
- STRAUBE, H. (1963): Westkuschitische Völker Süd-Äthiopiens, Stuttgart.

### Statistische Quellen:

- Central Statistical Office: Statistical Abstract 1964, 65, 67 u. 68. Urban surveys in Ethiopia. Report on a Survey of Soddo u. a. 1967. Survey of major towns in Ethiopia = Statistical Bulletin 1. 1968.
- Imperial Ethiopian Government, Ministry of Public works: Housing Study Vol. I. 1967.

### TOWARDS URBAN DEVELOPMENT IN SWAZILAND\*

### With 12 figures

#### G. WHITTINGTON

Zusammenfassung: Ansätze zu städtischen Entwicklungen in Swaziland

Die in ihren Folgen überaus wichtige Idee vom Wohnen in der Stadt ist in Afrika schon von den weißen Siedlern eingeführt worden, doch ist es in Swaziland erst in jüngster Zeit zu städtischen Entwicklungen gekommen. Swaziland hat bislang nämlich weder über ausgedehnte Bergbaugebiete noch über große, marktorientierte Agrargebiete verfügt und deshalb auch kein leistungsfähiges Verkehrsnetz besessen. Die ersten Ballungszentren haben sich hier ähnlich wie in der benachbarten Republik Südafrika entwickelt. Sie haben ursprünglich rechteckige Grundrisse und scharf gegeneinander abgegrenzte Rassenviertel gehabt. Hier sind jedoch in jüngster Zeit Veränderungen eingetreten. Es gibt insgesamt sechs städtische Gebiete, von denen zwei, nämlich Mbabane und Manzini, in eine dominierende Rolle hineinzuwachsen scheinen, während die anderen auf Grund der Veränderungen und der Unzulänglichkeiten des Verkehrsnetzes Verfallserscheinungen zeigen. Der jetzige Zustand des Stadtwesens in Swaziland läßt vermuten, daß das Land die im Modell von FRIEDMANN festgelegten Voraussetzungen für einen Wirtschaftsaufschwung erfüllt hat.

The penetration of Africa south of the Sahara by white traders and settlers brought many new features into the landscape. One of the most significant and far-reaching was the introduction of the concept of urban dwelling and the concomitant development of urban centres. Few areas apart from West Africa and the Batswana zone of southern Africa had any similar indigenous development. The growth of urban centres was stimulated by Africa's involvement in European trade. The sub-Saharan zone was and still is largely a primary producer. This function led to the development of urban centres on the coast to act as exportimport centres and others in the interior for collecting produce, for administration or for mining activity. This essentially primitive pattern is only today beginning to be altered by the appearance of industrial activity which as PRED<sup>1</sup> has shown is intimately bound up with urbanisation processes.

Due to the social factor of white colonial attitudes and the physical factor of surface physiography, many southern African towns within the orbit of former British domination exhibit similar features of layout.

<sup>\*</sup> The author would like to acknowledge the financial support from the Carnegie Trust for the Universities of Scotland which made possible the field work necessary for this paper. Thanks are also due to Dr. G. Murdoch and Mr. O. Theunissen who gave invaluable aid in Swaziland.

<sup>&</sup>lt;sup>1</sup>) PRED, A. R., The Spatial Dynamics of U. S. Urban-Industrial Growth, 1800–1914 (M. I. T. Press, Cambridge, Mass., 1967).

It will be useful to establish these here as they provide a yardstick against which realities and particularities of urban development in this zone can be judged.

Although apartheid as a term is of only recent wide acceptance it does express a concept which had been long recognisable in British colonial attitudes in Africa. In urban terms this meant a distinct separation of the quarter occupied by whites from that occupied by blacks. Such quarters were usually divided one from the other by a buffer zone or so-called 'cordon sanitaire'. This was frequently occupied by the lowerlying land near the river and also at a later date by railway and industrial growth - both developments occurring there as a result of the frequent difficulty of obtaining large areas of land with low slope values elsewhere. Both the European and, when order was brought to it, the African quarter were laid out, in as far as the surface physiography allowed it, in a gridiron pattern. Through the European quarter runs the main district road, usually wider than others in the quarter, and this provided the centre of attraction for business and commercial activities.

Over much of southern Africa rivers are incised into the land surface to a greater or lesser degree. In most instances, due to needs of water supply and ease of movement, urban centres grew in river valleys. To avoid the low temperatures of the valley bottoms in winter, when cold air drainage under high pressure conditions is severe, and the high humidities of summer, the white quarter of the town was most often sited on a spur. The most desirable locations within the town lie either along the main road or higher up the slope; the former where commercial needs were concerned and the latter where residential considerations were paramount. The African quarter therefore had no choice but to grow on the less attractive site, one which became progressively worse as smog conditions have increased in severity due to industrial growth and the burning of low-grade fuel in the African domestic hearth.

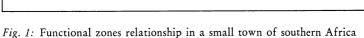
Figure 1 sums up these characteristics and it is against this selective framework that analysis of actual urban development in Swaziland can be made. Before that can be attempted however it is necessary to provide further background information about that country.

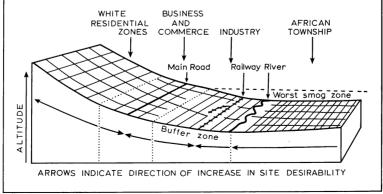
### Urban Beginnings

At an early period in the colonial era the likelihood of an area supporting an urban centre depended upon its having port facilities or important mineral deposits or a colonial government which needed administrative control points. The growth of the railway network tended to accentuate this pattern for these lines of communication usually just joined the ports with the interior administration and mining towns. Thus it came about that areas remote from the railway and without outstanding resources to offer were those that lagged behind in urban development. This led to the "islands of development" 2) pattern in Africa, islands with a well-developed infrastructure surrounded by large zones of territory with almost none. Due to the size of African states it was rare for whole territories not to have at least one important "island" - not the least reason being the need during the colonial era for an administration centre of some size, even if the territory overall was poor in resources.

Such a fate however befell the former British High Commission Territory of Swaziland. The complicated political history in this part of south-east Africa during the nineteenth century led to this tiny state remaining as an undeveloped zone lying in the triangle between Lourenço Marques, Johannesburg and Durban. Its one hope of development in this period lay in the building of a harbour at Kosi Bay and a line of communication from it to the Witwatersrand through

<sup>2</sup>) GREEN, L. P. and FAIR, T. J. D., Development in Africa (Witwatersrand University Press, Johannesburg 1960).





Erdkunde

the heart of the country. This hope never reached fruition due to bad relations between the British and the Boer Republic. As a result economic development was stifled and the few agglomerations of buildings that existed in Swaziland had no stimulus to grow into urban centres. Today however as a result of a different British colonial policy which came into existence at the end of the second world war, of the intrusion of Japanese interesses into Swaziland leading to the building of a railway line<sup>3</sup>), and of a general feeling by South African financiers that Swaziland was potentially viable, urban development is now making a start.

The Swazi nation had always had one nucleated centre, the seat of the Paramount Chief, since their arrival in the territory in the eighteenth century. This centre was in the Middleveld in the lower part of the Ezulwini valley. The first European settlement in this area was by a German, Bremer, who in 1885 opened a store and hotel. Close to this trading point and near the Swazi Royal Kraal there was created in 1890 the Provincial Headquarters of the British, Boer and Swazi governmental representatives. A village gradually developed around the government offices and when the Boers assumed the administration of the Territory in 1895 the village of Bremersdorp was already in existence. In 1900 it was destroyed by a Boer commando and when peace came the governmental function was relocated in what was felt to be a climatically healthier environment in the Highveld. Thus there appeared another centre to join a rebuilt Bremersdorp, this time growing around a tin miners' camp and trading station which had been started near the Mbabane River in 1887.

In 1886 prospecting activities in the area near Barberton had led to the start of Piggs Peak village. In the east the Lebombo Mountains provided a healthier site than the Lowveld for a village on the route from Lourenço Marques to the Swazi Highveld and from 1890 onwards the village of Stegi grew. In time these centres were joined by others: the need for administrative centres led to the creation of Hlatikulu in 1903 and to the development of Piggs Peak. Goedgegun in the south became a centre for the marketing needs of the Afrikaner settlers in that zone and Havelock (1937) developed in the north west as a result of the mining of asbestos deposits. These centres, apart from the Royal Kraal at Lobamba, were the sole nucleated centres in Swaziland until after the second world war and were even at that time very small. Today as a result of unprecedented capital investment and economic development there are signs that urbanisation is now adding its problems to those already existing in the newly independent country. Some of the original centres have grown, some are perhaps decaying, while new ones are also making their appearance (Fig. 2).

# The Present State of Urbanisation

Of Swaziland's population of 374,697 (1966 census), 17 per cent can be considered urban dwellers 4). In common with the prevalent pattern in southern Africa the majority of the Europeans (69 per cent) and the Eurafricans (55 per cent) live in the towns. Of the foreign Africans<sup>5</sup>) resident in the country 36 per cent are urban dwellers - this contrasts strongly with the Swazi themselves of whom only 15 per cent reside in towns. This latter figure is a clear indication of the backwardness of urban development in Swaziland although there are strong indications that an upward trend is now coming into existence. Between 1956 and 1966 the total population of Mbabane rose from 3700 to 13,803. A further feature which Swaziland shares with other southern African states is that Africans dominate urban population totals; in 1966 the urban dwellers were 85 per cent African, 12 per cent European and 3 per cent Eurafrican<sup>6</sup>).

There are at present six proclaimed townships in Swaziland, each of which has its Urban Area Board. In addition to these there are four other centres which by Swaziland standards may be classed as urban in that they provide some services for large agglomerations of people – the mining centre of Havelock, the two main centres in the sugar-growing areas of Tshaneni-Mhlume (1950) and Big Bend-Ubombo (1962), and the wood-pulping centre of Bunya.

# The Proclaimed Townships

The six proclaimed townships today are in varying stages of development which in most instances arises from their relationship with the main areas of economic growth. The future of these townships is even more varied, largely as a result of this growth, and it will thus be useful to discuss each of them in turn.

S t e g i. – This township lies at 784 metres in the Lebombo Mountains and has a population of 3400. It is sited on a north-facing spur which radial drainage has nearly isolated from the rest of the Lebombo dip slope. This part of the post-African surface has slopes rarely in excess of  $3^{\circ}$  and thus this particular area is well suited to nucleated settlement. In addition

<sup>&</sup>lt;sup>8</sup>) WHITTINGTON, G., "The Swaziland Railway", Tijdschrift voor Economische en Sociale Geografie 57 (1965), pp. 68–73.

<sup>4)</sup> Many of the African urban dwellers are only temporary residents. Those leaving are quickly replaced by incomers and so the total of 17 per cent remains constant.

<sup>&</sup>lt;sup>5</sup>) There are large numbers of foreign Africans in Swaziland, mainly from Moçambique and the Republic of South Africa. Their ethnic composition is: – Zulu 7600, Tonga and Shaangane 3500, Basuto 1000, Xhosa and allied tribes 1000, others 2800.

<sup>&</sup>lt;sup>6</sup>) All population figures are for 1966 unless otherwise stated.

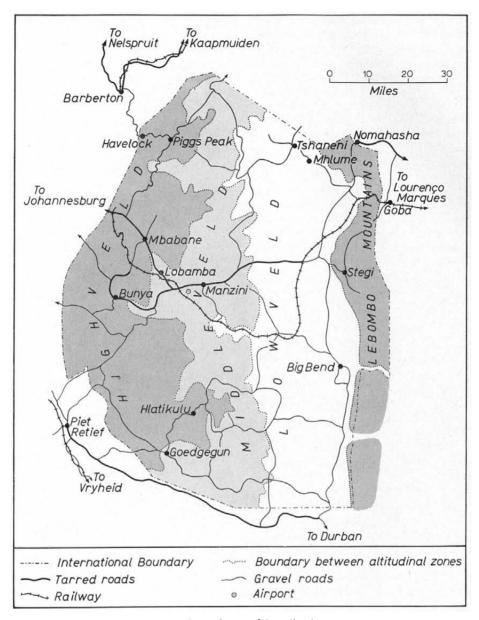


Fig. 2: General map of Swaziland

it provides a zone which extends for a considerable east-west direction without interruption by the many stream courses which are developed here, the sides of which have slopes of between  $17^{\circ}$  and  $20^{\circ}$ . This has not only meant the development of an easy line of movement across the Lebombos but also allows it to come to a point on the escarpment crest where slopes down to the Lowveld are about  $7^{\circ}-10^{\circ}$ ; the usual slope value of the escarpment,  $17^{\circ}-20^{\circ}$ , provides a formidable barrier to the development of movement lines.

Stegi's location was brought about by two factors. Firstly a town was bound to grow somewhere in this area, for through it ran the main communication line from the heart of Swaziland to the port of Lourenço Marques. Secondly, the altitude of this area gave it a distinct climatic advantage over the Lowveld to the west which also until very recently was endemically malarial. Until 1964 Stegi had a triple function. It was the administrative centre for the now defunct Stegi District; it acted as a service centre for the farms and ranches of the Lowveld; and thirdly, it was the first township in Swaziland on the line of road communication from the railhead at Goba in Moçambique to the rest of Swaziland. As a result it became the main point from which many products, especially petroleum, imported through Lourenco Marques, were distributed throughout Swaziland. Today however the distributive function has gone, due to several recent developments. The opening of the Swaziland railway in 1964 meant that heavy, bulky materials imported via Lourenço Marques no longer needed to be transferred to road transport at Goba and delivered to Swaziland markets via Stegi. In the same year the main customs entry point from Moçambique was also changed. The rather difficult road from Goba over the Lebombo Mountains to the Swaziland Lowveld was replaced by one leading to Nomahasha on the north-east boundary and thence along roads of easy gradient through the Lowveld. Thirdly, the emergence of the Lowveld, one of the main features of Swaziland's economic development, has not meant a great growth of Stegi as its service centre. This function has in fact declined due to the emergence,

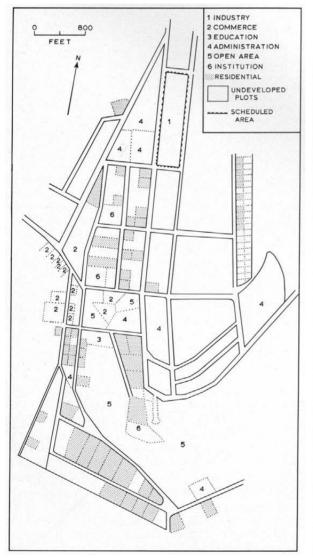


Fig. 3: The land use of central Stegi

made possible by the eradication of malaria, of rural population nodes in the two main sugar-growing areas.

Today the township resembles many a village in the Republic of South Africa [Fig.  $3^7$ )] – a series of dirt roads, an agglomeration of stores and two hotels and a mixture of European bungalow dwellings and undeveloped stands. Much of the area is scheduled for residential, commercial and industrial development but the future of this development seems uncertain. Stegi now not only lies off the main communication lines but is also eccentric in the country. The continued need for an administrative centre for Lubombo District will mean that Stegi will retain this one of its earlier functions and as a result the new residential township development on the outskirts will perhaps be the only development the town will undergo.

<sup>7</sup>) "Institution" in Fig. 3 and where used in all succeeding Figures refers to land occupied by such buildings as churches, hospitals, prisons and army barracks.

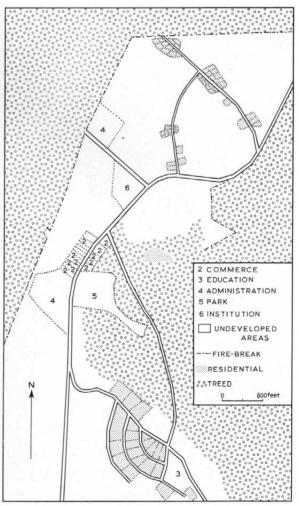


Fig. 4: The land use in the township of Piggs Peak

Piggs Peak. - Situated in the extreme north west of Swaziland and with a population of 1900 this township is even less developed than Stegi. Its origin can be traced to 1886 and the need of a trading centre in this area during the active mineral prospecting period. The end of this period would have left Piggs Peak without any real function but for the growth of British administration and its need of a centre to control the north-western part of the Territory. Thus the continued existence of the township was confirmed and in the period after the second world war it also became one of the headquarters of the forestry activity which has been so marked a feature of Swaziland's recent economic resurgence. At present the township presents the appearance of a clearing in a sea of patula pine (Fig. 4).

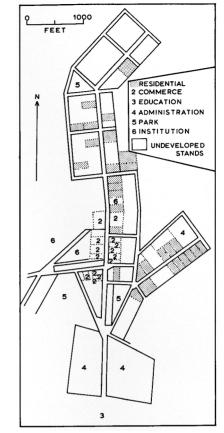
Piggs Peak is a three-nuclei township: in the south a European residential centre with a school; in the centre a collection of stores, a bank and a bus station; and in the north a mainly Swazi housing area adjacent to which there has recently been some development of administration buildings. In the north west of Swaziland slope values are commonly of the order of  $15^{\circ}$  and so lines of communication have necessarily to follow river valleys. Thus communications between Piggs Peak and the rest of Swaziland are difficult due to tortuous roads, a condition which is aggravated by high summer rainfall totals (1270–1524 mm). Furthermore until recently the township looked almost entirely towards Barberton in the Transvaal as its nearest larger town rather than Mbabane. This has been due to the railhead at Barberton which links with the Johannesburg-Lourenço Marques line at Kaapmuiden, and to the existence of Indian stores in Barberton which allow a wider choice and cheaper buying of provisions. This latter point has led to a retarding of the retail function in Piggs Peak. Like Stegi this township is kept alive by the function it serves as the administrative centre for the Hhohho District but it has a distinct advantage over Stegi in having the large area of exotic forest around it. As a result two sawmills are sited in the township, thus providing additional sources of employment.

Hlatikuli. - This township originated as recently as 1903 as the administrative and social welfare centre for the former Hlatikulu administrative District. In 1963 the District was abolished and Hlatikulu lost the main reason for its existence. The present township population is only 1300. It occupies a site similar to that of Stegi in that it lies on a spur which has been almost isolated by stream action from the main mass of Mt. Hlatikulu (1505 m). Not only does the spur provide a route for the Goedgegun-Manzini road but its 7°-10° slopes provide one of the few areas along its line for even restricted township development.

Figure 5 shows the centre of the township with its largely European residential stands and its commerFig. 5: The land use in the township of Hlatikulu

cial core which, in common with Stegi and Piggs Peak, consists of a variety of stores, a South African Railways transport depot, a bank, a post office and a Swazi market ground. The area in which Hlatikulu lies is remote from the developed core of Swaziland. With the removal of its administrative function only its retail facilities, a school and a government hospital will ensure its continued existence. Its growth potential is clearly limited and the existence of Goedgegun 27 kilometres to the south means that even its retail function is challenged.

Goedgegun. - This was the last of the proclaimed townships to come into existence, not being founded until 1920. It occupies a col between the headwaters of the Nzongweni and Nyamane Rivers. The floor of the col has slope values of the order of  $3^{\circ}$  and has provided one of the few points where township development could take place while still remaining in close contact with the road system which is forced to keep to the ridges in this area of highly accidented relief. The proximity of this township to the Transvaal is revealed by the fact that 60 per cent of the European population speak Afrikaans as a first language whereas in the rest of the country's towns and villages only 22 per cent of their occupants use that language. Even more than Hlatikulu the township is



remote from the centre of Swaziland and is strongly orientated both culturally and economically to the Transvaal rail link town of Pietretief.

Goedgegun serves as a market centre for the farmers of this area and has, in addition to a maize mill, a tobacco co-operative in its centre (Fig. 6). Its population is 2000, of which over 80 per cent live in the African township of Mathendele which lies to the north west of the town centre. To the service, education and hospital functions which the town possesses there has recently been added, upon the redrawing of the country's administrative boundaries, that of administering the newly created (1963) Shishelweni District. The stimulus this will give to residential building should do much towards removing the empty stands in the centre of the town. At present Goedgegun holds a position between that of Hlatikulu, Stegi and Piggs Peak on the one hand and Manzini and Mbabane on the other.

M a n z i n i. – In 1885 Bremer started his trading store-cum-hotel in the Swazi Middleveld in a gap between two ridges of highland and on a left-bank tributary of the Usutu, the Mzimnene. Slope values in this area are  $2^{\circ}-3^{\circ}$  and only increase on approaching the Lugoba Ridge in the north and the higher land on the left bank of the Mzimnene River to the south east. To the west of the town, an area which will be examined in greater detail later, there is a large zone with slopes highly favourable for urban development because the ridges between the right-bank tributaries of the Mzimnene and the Usutu provide land in which slopes of  $2^{\circ}$  are seldom exceeded.

With the destruction in 1900 of the village which had accreted around Bremer's store governmental

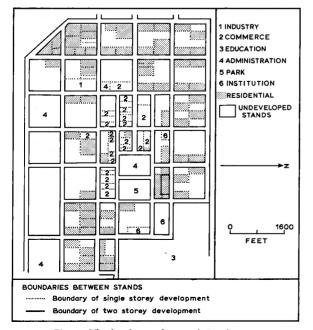


Fig. 6: The land use of central Goedgegun

function was removed from this Middleveld zone. The village was rebuilt and has slowly become the commercial centre of Swaziland. It lies in an important agricultural zone and straddles the major road route through Swaziland from Lourenço Marques to the Witwatersrand. It served the greater majority of the farms in the Middleveld and Lowveld and acted as the administrative centre for the former Manzini District.

Until the end of the second world war the town was confined to the originally laid out gridiron centre. Since 1945 there has been considerable change. The name has changed to Manzini, by which the Swazi originally knew the area, most of the stands in the town centre have been occupied and a variety of light industry has come into the south west of the town centre. To its other functions Manzini has added that of education. The Roman Catholic Church runs several schools and Swaziland's teachers' training college is situated just to the north of the town. The added employment opportunities led to an increase in the population (6,081 excluding Kwaluseni and Matapa) and especially of the Swazi element (4,387). Developments stemming from this increase in employment and population stand out quite clearly for they provide a strong contrast with the original town centre. The old gridiron form has been abandoned and the new townships are being developed in a style reminiscent of inter- and post-war building in Britain with its crescents and culs-de-sac (Fig. 7).

The density of the housing in the new townships and also its type is a good index of the incomes of the people who live there. In such areas as Trelawney Park and Fairview (Fig. 7), in which houses are never more than one per ten thousand square feet, the buildings are of the usual southern African bungalow type, roofed with corrugated iron or asbestos sheeting. Townships like Zakhele or Ficksburg have a higher building density and are occupied largely by lower grade Swazi civil servants, government employees, or artisans who are often Portuguese citizens from Moçambique. Houses in these areas use the same building materials, usually cement blocks, but with more stereotyped ground plans.

The centre of Manzini is now changing also as the economic growth affecting the country makes itself felt. Old properties are being demolished and replaced by more modern glass, steel and concrete structures. That hallmark of dynamic urbanisation in southern Africa, the multi-storeyed building, is also making an appearance along with tarred roads. The residential part of the town core shows the feature which distinguishes urban development in Swaziland from that in South Africa: the form of the urban beginning was often the same but, despite townships like Trelawney Park and Zakhele being occupied by white and black respectively, the former practice of racial segregation

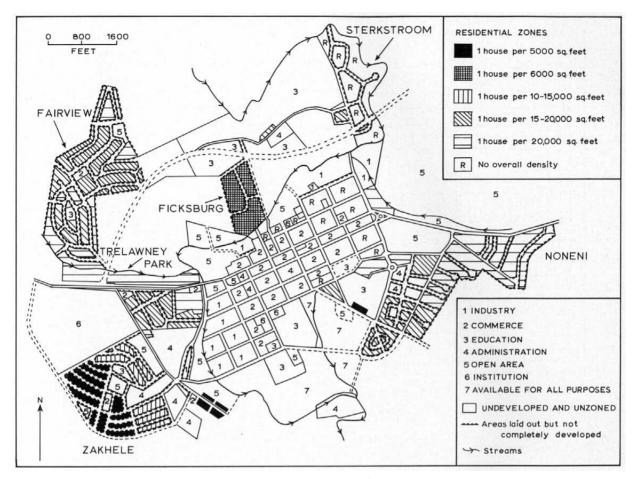


Fig. 7: The Urban Area of Manzini

in dwelling areas is beginning to disappear. This characteristic will be returned to later.

The future development of Manzini is bound up with the overall development of this zone of the Middleveld and the arrival of the railway. This topic will therefore be discussed after the capital town has been examined.

M b a b a n e. - In the Highveld to the north west of Manzini lies the political capital of Swaziland, Mbabane. The town originated around a trader's store in an area in which slopes of about 3°, confined within an area at the confluence of two of the Little Usutu's tributaries, the Polinjane and Mbabane Rivers, provide a strong contrast with the slopes of  $15^{\circ}-20^{\circ}$ common over the Highveld in this area. This site and access via cols to the Umbeluzi drainage system to the north allowed the development of a supply centre for the tin miners who were among the earliest of the European exploiters of the Highveld. The transfer of the Territory's government from Bremersdorp gave Mbabane an assured future despite its restricted site. With the increase in investment in the country over the last twenty years the town has grown greatly,

especially areally, for the most common density of the houses in the European zone is one to every 20,000 square feet. Similar changes to those that have taken place in Manzini have also occurred here - the renewal of property, the appearance of multi-storeyed buildings, the tarring of roads and the setting up of industry (Fig. 8). The overall residential development in Mbabane has been greater than in Manzini, a feature accounted for by the large number of government employees in the political capital. This led to the development during the late fifties and early sixties of this century of the townships of Kent Rock, Selection Park, Sandla and Old Residency (Fig. 9). Most of these reflect the differing earning capabilities of the white and black sections of the population. For example Selection Park houses many of the white government employees whereas Sandla houses the black. But the total segregation which marks South African towns (achieved or aimed for) is not to be found in Mbabane. The township of Old Residency (1962-1965), for example, houses blacks and whites.

The houses to be found in the Mbabane Urban Area reflect both the standards and the wealth of their

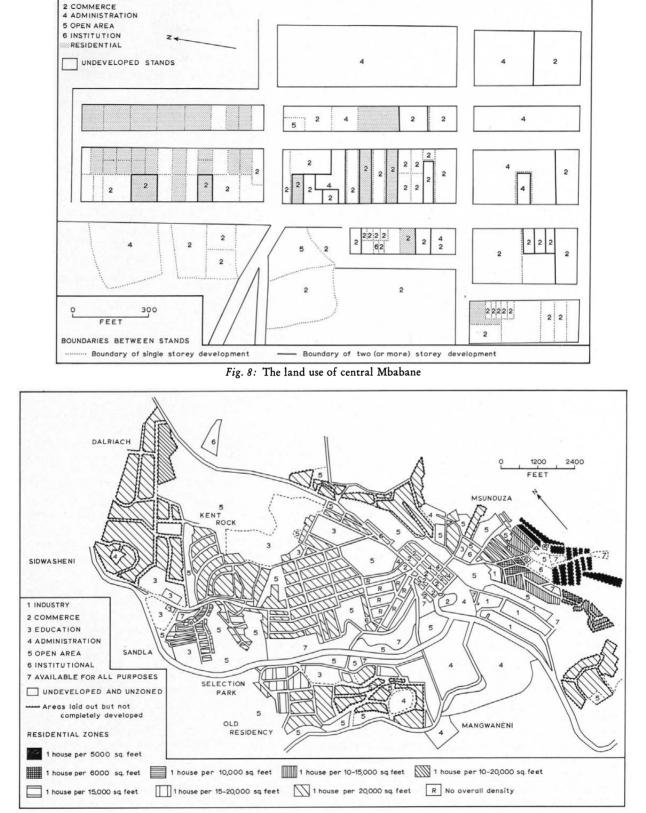


Fig. 9: The Urban Area of Mbabane

varied occupants. As in the rest of Swaziland the white population mostly live in bungalows with the ubiquitous corrugated iron as a roofing material. There has of late in Mbabane as in Manzini been some development of flats built of concrete, steel and glass. The variation in the whites' houses is more in size than in any other way, whereas the Africans' houses vary greatly. Their houses in Sandla are smaller and less well equipped (for example often ceilingless versions of the standard bungalow occupied by the whites), while those in Old Residency are of equal standing with those occupied by whites. The greatest variations in African housing are to be found in Msunduza, the worst elements of which are sometimes also found in Mangwaneni.

Msunduza, lying across the Polinjane River from the original centre of Mbabane, started its existence as a "native location". In this area were built a series of government houses for occupation by lower grade Swazi civil servants and government employees. In time the number of these houses grew, while the availability of employment and the attractions of urban life drew Swazi to Mbabane and brought into existence a shanty area of Msunduza. This has also occurred in the Sidwasheni and Mangwaneni areas but it is more concentrated in Msunduza due to its greater proximity to the town centre, the availability of water standpipes and the presence of African stores. The houses in the immediate area of the planned part of Msunduza are perhaps the poorest anywhere in Swaziland. This area provides an extremely difficult site for the land rises steeply  $(20^{\circ}-25^{\circ})$  from the Polinjane River to the summit of Flat Rock Hill. Thus houses are built on terraces cut into the hillside which usually means that their rear walls are exceedingly damp and the whole housing zone is threatened with erosion during the rainy season. Mud walls plastered on to a wooden framework and roofed with corrugated iron form the best of the houses, but any material from beaten-out cans to materials abandoned on building sites and rubbish dumps is used. The traditional round shape has been abandoned in favour of the square used in European buildings. The difficulty of finding a level site for building the small, two-roomed shacks, even after terracing, has led to their being crowded together and to access to them being gained by exceedingly precipitous and narrow paths up the rock-strewn hillside. Such paths act as erosion channels and the shacks themselves are threatened by the erosion of their steep-sided terraces. The occupants have attempted to thwart this by planting Napier grass on the edges of the terraces. Besides the difficulty of site acting as a crowding factor there is also the need to be near a water supply and such is only obtainable from standpipes in the regularly laid out areas of Msunduza. Lack of building space also leads to the elimination of gardens and thus the dwellers in this area have become more urban than most towndwelling Africans in that they have totally abandoned maize-growing. In such crowded conditions sanitation becomes an acute problem.

In the area to the south of Msunduza, in Mangwaneni and in Sidwasheni further squatter zones are to be found and constitute Mbabane's peri-urban zone. These however on the whole contrast strongly with the shanty zone of Msunduza. Their sites are less steep  $(4^{\circ}-6^{\circ})$  and because they are more remote from the town centre they are not so crowded. There is a tendency under these conditions for the housing areas to be nearer in appearance to rural house clusters. In most instances the traditional round shape has been abandoned in favour of the square form but the houses are better constructed, with less makeshift materials in their construction and with roofs in most cases made of the traditional reed thatching. Furthermore in these peri-urban areas gardens are attached to each house in which fruit-trees, maize and vegetables are grown and some small livestock is the rule. In such areas water supply is the major difficulty and lack of sanitation facilities is a health problem.

## Other Agglomerated Centres

Apart from the six proclaimed urban areas the only other centre of population of any size is Havelock in the north east of the country near Piggs Peak. This is a company town with a population of 4,600. It was founded in 1937 following upon the decision to exploit the asbestos deposits. A European residential zone is overshadowed by the large complex of disciplined rows of dwellings for the Swazi miners. The town has a post office and a bank, situated in buildings belonging to the mining corporation. The whole centre is similar in character to the multitude of such centres associated with plantation or isolated mining communities in southern Africa. Into this same category come the other centres of population which have come into existence as a result of private and Colonial Development Corporation investment since 1945: Bunya in the afforested Highveld, concentrated round the woodpulp mill and with a population of 6,100; Big Bend-Ubombo with 6,200 inhabitants and T s h a n e n i - M h l u m e with 6,400 inhabitants, each associated with largescale irrigation schemes and the milling of sugar or rice. None of these centres approaches any of the six proclaimed townships in the services it provides. Each is an agglomeration of large bungalows occupied by senior company employees, small two-roomed dwellings for Swazi workers and a trading store. Only in Tshaneni has there been any attempt to lay out the town and here the Colonial Development Corporation has constructed a gridiron of wide gravel roads and large stands.

# The Future of Urbanisation

The investment that came into Swaziland in the post-war period was bound to lead to a growth of agglomerated centres in the country. This has added the problem of urbanisation to the country's other problems. That this problem exists is shown by several factors - the need for Urban Advisory Committees, discussion on the need for urban dwellers to pay rates, the problem of squatters and the appearance of unemployment in a country where until recently only underemployment has been known. One of the most serious problems facing the urban areas is that of squatting such as occurs at Noneni in Manzini or Msunduza and Sidwasheni in Mbabane. Control of this problem is not merely a matter of forbidding the building of shanties, even where they are occupied by Swazi not essential to the urban labour force. Under the complicated land tenure of Swaziland<sup>8</sup>), Swazi Nation Land, in which the urban areas are embedded, provides equal communal rights for any Swazi. Thus there grew on such land the shanty townships and in such instances there is at present no administrative machinery to prevent this undesirable growth of the peri-urban fringe. Not only are the shanty towns a potential danger to health but their inhabitants have been unable to come to terms with the different nutritional aspects 9) existing in the town areas.

Aspects of the future of the various population agglomerations can be examined by reference to Figures 10 and 11. Figure 10 shows the location, number and size of all the private companies in Swaziland which employ over 50 workers each. Pre-eminent in this situation is the Lowveld where the Tshaneni-Mhlume and Big Bend centres employ the largest number of workers in such industries in the country. These concentrations of workers are however the result of the spread of irrigation in the Lowveld and the fact that the headquarters of most such companies are in the towns mentioned. The nature of employment is on a narrow basis and unless other light industrial processes come into the area it is difficult to see how the present population agglomerations will grow further. This same remark applies to Bunya which ranks immediately after the two above-mentioned centres in total employment figures.

By far the most promising centres as far as continued growth is concerned are Mbabane and Manzini. These two both have a greater number of individual employers than those centres already discussed, thus making their employment more broad-based. The totals employed are much lower than in the Lowveld irrigation and Highveld forestry centres because the government employees are not included in the figures shown on this map. If accurate apportionment of such employees among the various centres were possible it

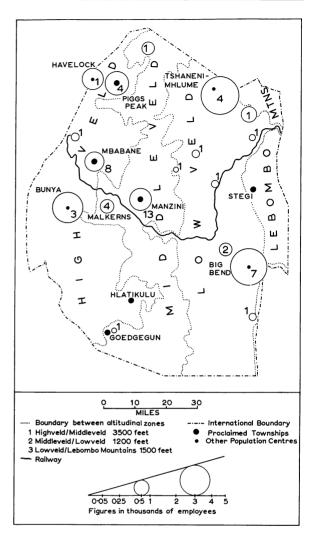


Fig. 10: The distribution of industries in Swaziland each of which provides employment for fifty workers or more. The size of the circles is proportional to the number of employees at each centre and the figures refer to the number of separate employers at each centre.

would be these two towns that would gain appreciably in their employment totals. The continued growth of Mbabane is certainly due to its position as political capital of the country.

The growth rate in Mbabane, however, is likely to be much less than in Manzini due above all to the alignment of the railway. Mbabane besides being at some distance from the railway also has a constricted site whereas Manzini is much more happily placed. Lying to the west of Manzini are the Swazi National School Centre at Kwaluseni and the main airfield of Matsapa. It is in this vicinity that the railway crosses the Usushwane River in an area of fairly level ground (80 per cent is 1 in 20 or less) and where the first hydro-electric power project in the country has been undertaken. This area, known collectively as Matapa,

<sup>&</sup>lt;sup>8</sup>) WHITTINGTON, G. and DANIEL, J. B. McI., "Problems of land tenure and ownership in Swaziland", in THOMAS, M. F. and WHITTINGTON, G. (eds.), Environment and Land Use in Africa (London 1969), pp. 447–453.

<sup>&</sup>lt;sup>9</sup>) JONES, S. M., A Study of Swazi Nutrition, Institute for Social Research, University of Natal (1963).

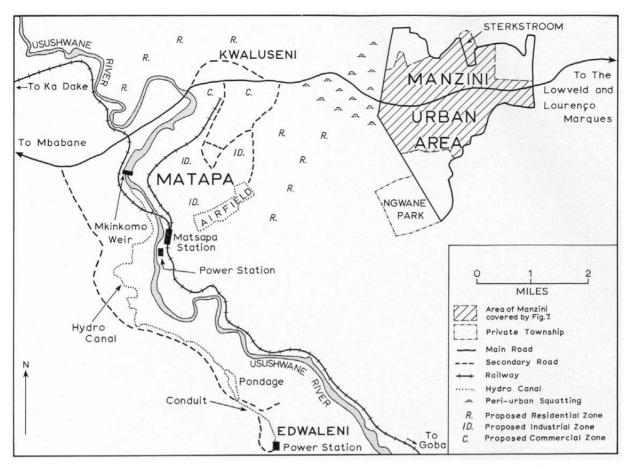


Fig. 11: The major urban growth point in Swaziland - the Manzini-Matapa zone of the Middleveld

is scheduled for the major growth of industry in Swaziland. Areas of land here have already been zoned for industrial, commercial and residential development (Fig. 11). The pull effect of the railway, noticeable in all countries where a newly-introduced railway passed near old-established urban centres, has begun to show here. The Matapa-Manzini area is destined to become the strongest growth point in Swaziland. Already three new factories are operating on the industrial site. The future of Manzini's development is complicated by the emergence of Matapa. It seems most probable that it will become the residential area for the higher income group of the local community and that Matapa and Manzini will fuse to become the country's largest urban unit.

## Conclusion

The period since 1945 has seen many changes in Swaziland. Most of these can be laid at the door of the great prosperity occurring in the Republic of South Africa which has led its financiers to look for new areas of capital investment. This, together with some help from the Colonial Development Corporation, started a wave of development in Swaziland which was bound to have repercussions on the agglomerated centres of population already existing in the country. Furthermore the cutback in the employment of foreign Africans in the coal and gold mines of the Republic <sup>10</sup>) has meant that a considerable number of Swazi likely to desire urban life and to find employment most suited to their foreign-acquired skills in urban areas are now permanently in the country. The loss of employment in the Republic is one of the main reasons for the unemployment that exists in the Swazi towns, for most of the limited amount of skilled and semi-skilled employment in the towns is in the hands of white Portuguese or foreign Africans.

Early in this paper reference was made to a theoretical form for the small southern African town (Fig. 1). How does the urban area in Swaziland stand in relation to this form? This has to be examined in an historical sense. The original form of the Swazi town was similar in all its broad aspects to those

<sup>&</sup>lt;sup>10</sup>) Most recent figures for Swazi employed in the gold and coal mines of the Republic are: (1962) 9,200, (1963) 6,980, (1964) 6,690, (1965) 5,672, (1966) 4,928, (1967) 4,825.

noted in Figure 1: the gridiron centre (Figs. 3, 5, 6 and 8), the variation in land values, the location of the central business district and the distinct separation of black and white zones (Figs. 7 and 9). But in recent years due to the absence of racial segregation in Swaziland there has been a move away from this theoretical form, especially in relation to residential segregation based on skin colour. This has gone furthest in Mbabane where the large number of government employees has created a group of people financially able to live in the same standard of housing regardless of skin colour. At present therefore Figure 1 needs modifying inasmuch as the highest class residential area is occupied by both black and white. There has however been no reciprocal movement into the lowest class residential area, e. g. across the Polinjane River in Mbabane, by whites. Thus a basic difference has come into existence between the Swazi town and its South African counterpart. But the change is less significant in Swaziland than a similar one would be in South Africa. There, where the black : white ratio is about 4:1, such a change would mean a mixture of ethnic groups throughout the residential zones of the towns. In Swaziland, the black: white ratio of about 50:1 means that movement of white people down through the whole of the residential class zones would be of little significance even if it were to occur.

This paper has been entitled "Towards Urban Development in Swaziland" in order to highlight the immaturity of this phenomenon within the country. The present pattern of urbanisation will now possibly undergo strong changes due to:-

(1) the removal of colonial authority and unexpressed but inherent attitudes towards apartheid;

(2) the introduction of a railway line which will cause changes in the effect of the transport net;

(3) the immeasurable factor of recent independence.

An examination of urban development in so far as it has gone has been kept primarily at the descriptive level. Until more data, and especially more accurate data, are obtainable and until the urban process has proceeded further it is impossible to predict with any great conviction the trends of urban growth in Swaziland. Not even fields of influence are clearly defined yet (Fig. 12) and this fact alone is indicative of the state of urban development – a state which suggests that Swaziland is still moving towards "urban takeoff". However by an application to Swaziland of a hypothesis distinguished elsewhere it is possible to indicate certain lines of potential development.

Swaziland's economy is at a stage which suggests that it could be fitted into period two of Rostow's model  $^{11}$ ) – that of "preconditions for take-off". However this model is not really sufficient for an examination of the economy in a southern African

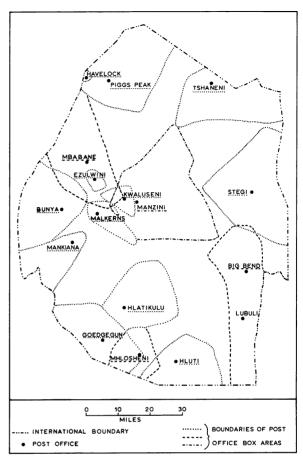


Fig. 12: The distribution of post offices in Swaziland and the area that each serves by means of post office boxes. The shape and overlapping nature of some of the areas show the strong influence that the larger centres have, especially Mbabane and Manzini. A new post office with boxes has been opened at Lubuli since this survey was carried out. The estates and stores in the areas outside the post office box zones are served by a private bag system.

situation due to the existence there of a dual economy. As far however as the state of urbanisation is concerned Swaziland fits well into period two of Rostow's model. We find the same conditions as FRIEDMANN<sup>12</sup>) disclosed for Venezuela – a population predominantly in small towns and isolated farmsteads and a small development of major urban centres which exist chiefly to allow regional commerce and administration.

A comparison of the development, potential and spatial structure of Swaziland's economy with the same factors in Venezuela suggests that FRIEDMANN'S hypothesis<sup>13</sup>) concerning these conditions is correct in

<sup>&</sup>lt;sup>11</sup>) Rostow, W. W., The Stages of Economic Growth (Cambridge 1960).

<sup>&</sup>lt;sup>12</sup>) FRIEDMANN, J., Regional Development Policy: A Case Study of Venezuela (Cambridge, Mass., M. I. T. Press. 1966).

<sup>13)</sup> Ibid.

as far as the different stages of development reached allow such a comparison to be made. There are signs that Swaziland is leaving the stage of preconditions for take-off. FRIEDMANN showed in Venezuela that when this took place urbanisation involved "the appearance of a small number of urban-industrial areas having a high potential for further development and leading to the focalisation of demographic and social energies upon themselves". These conditions are displayed now by Mbabane and Manzini-Matapa. Furthermore he showed that economic stagnation and decline took place in laterally obsolescent areas on a "periphery". This is well exemplified by Stegi, Hlatikulu and, to a lesser degree, Goedgegun. His final conclusion for signs of the emergence from "preconditions for take-off" has however not yet been achieved in Swaziland. He sees in this period :-

- (a) a multiplication in the number of urban centres;
- (b) the emergence of a functional hierarchy of cities;

(c) the organisation of the economy into a system of interrelated market areas.

The latter condition will no doubt be fulfilled and there are signs of its fulfilment already in existence. An investigation into the theoretical number of urban centres which a national unit such as Swaziland could support would be of great interest in testing the first two points of this part of the analysis. The recent nature of the intrusion of the railway into Swaziland makes the appearance of new urban centres feasible but their place in any future hierarchy, like the hierarchy itself, is a matter for further research at a later date, when spatial organisation within the overall economy has been taken to a greater degree of development.

Thus this paper is best viewed as a preliminary statement on the urbanisation process. In time this will need reviewing by more rigorous methods against the background of information provided here -a statement which might well be held to be true concerning the methodology of much African geography.

# WINDHOEK – EINE STADTGEOGRAPHISCHE SKIZZE <sup>1</sup>)

Mit 8 Abbildungen, 4 Bildern, 1 Luftbild und 8 Tabellen

### Jürgen Bähr

#### Summary: Windhoek - an urban geographic sketch

Before it was occupied by German troops, Windhoek was only a periodic settlement of a few indigenous families and the mission. Because of the favourable geographical location on the only route linking the northern and southern parts of the country the German government established a garrison in 1890. While the period up to the First World War - interrupted only by native uprisings was a time of growth and expansion for the town, the poor economic situation and political instability between the wars led to stagnation in the development of Windhoek. A second phase of growth began only after 1950, stimulated by the switching of economic emphasis to trade, commerce, mining and industry and the improvement of road links to other parts of the country. The strong areal expansion of the town was accompanied by a surge in population from 20 598 (1951) to 67 100 (1968). However, white inhabitants in Windhoek still outnumber the indigenous and coloured population. While in the inner city only the separate entrances in all public buildings hint at the fact that the co-existence of white and black is regulated by precise ordinances and laws, the new residential areas outside the centre for indigenous and coloured people are, under the principes of the apartheid policy, fully separated from those of the whites.

In contrast to the one-sided facilities of the service centres in the farm zone of South West Africa, the capital is marked by a multiplicity of functions: Windhoek is the seat of the most important organs of administration, the distribution and delivery point for the whole country of many essential commodities. Part of the farm production of the immediate area is processed in the dairy or the preserves plant. The specialist shops and department stores of the town offer the visitor better shopping possibilities and a wider choice than in the small country settlements and Windhoek is the dominant centre for the provision of social and cultural needs for all the inhabitants of South West Africa.

Gerade in dünn besiedelten Erdräumen haben die wenigen Städte für das Umland eine weitaus größere Bedeutung, als man nach ihrer Einwohnerzahl erwarten dürfte. Das trifft auch für Windhoek zu, die Hauptstadt Südwestafrikas. 1966 zählte die Stadt zwar nur etwa 60 000 Einwohner (32 000 Weiße), bei der geringen Bevölkerung Südwestafrikas (610 000, davon 96 000 Weiße) bedeutet das aber, daß hier fast  $10 \ensuremath{^0}_0$  der Landesbewohner und genau ein Drittel aller Weißen lebten. Wenn man außerdem berücksichtigt, daß es in Südwestafrika daneben nur noch eine Stadt mit mehr als 5000 weißen Bewohnern – nämlich den Hafen Walfischbucht (6400 Weiße) – gibt, wird dar-

<sup>&</sup>lt;sup>1</sup>) Der Verfasser hielt sich 1965/66 acht Monate in Südwestafrika auf und konnte während dieser Zeit die Stadt Windhoek mehrfach aufsuchen. Im wesentlichen galten die damaligen Untersuchungen allerdings farmwirtschaftlichen Fragen. Ihre Ergebnisse sind in den Bonner Geographischen Abhandlungen Heft 40 veröffentlicht.