

'Contextual analysis provides the necessary departure point for the design. A comprehensive understanding of historic and prevailing conditions allows for a response relevant to site, operation and control.'

CONTEXT STUDY

2

2.1 THE MAPUTO CORRIDOR

A Development Corridor is a merger between transport corridors and spatial development initiatives. A transport corridor provides the infrastructure for movement of goods and people, and connects areas of economic activity with sea ports for export.¹

Development Corridors are found throughout Africa. They are about a long term access to Education Infrastructure, Health Infrastructure, Entertainment Infrastructure, Service Infrastructure, Transport Infrastructure and Electricity & Water infrastructure etc.

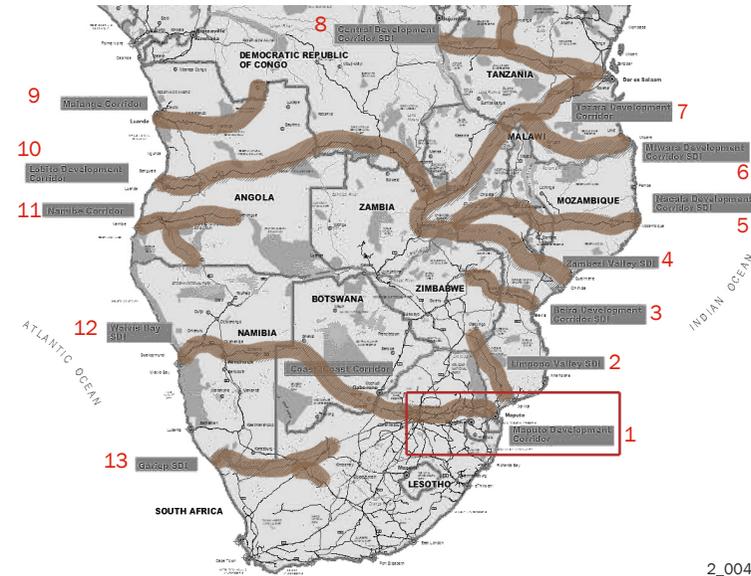
South Africa is one of the leaders of export on the African Continent, and for our gain, the Maputo Corridor is one of the more important networks. Many NGO's have stakes in the corridor, and facilitate the operations between Government, funders, operators, exporters, and local enterprises. All gain economically from the development. The Maputo Corridor does not limit opportunity to its extents, but it provides the opportunity for smaller sub corridors to develop in surrounding provinces, in both South Africa and in Mozambique

The 4 key principles of the corridor include:

- _the rehabilitation of Infrastructure networks, including road, rail, land ports, sea ports, and telecommunications,
- _to maximize investment in the potential of the corridor,
- _to maximize social development and employment opportunities,
- _to ensure sustainability by developing policies, and strategic frameworks.

The 3 key objectives of the corridor at this stage are:

- _to encourage cargo owners to commit to work together to overcome the remaining constraints.
- _to address the Border post inefficiencies, increase operational hours, and improve infrastructure, and
- _to address transport services, including rail and shipping terminals, and road networks.²



2_004

Development Corridors in Africa

- | | |
|-----------------------------------|--------------------------------|
| 1 Maputo Development Corridor | 8 Central Development Corridor |
| 2 Limpopo Valley SDI | 9 Malange Corridor |
| 3 Beira Development Corridor SDI | 10 Lobito Development Corridor |
| 4 Zambezi Valley SDI | 11 Namibe Corridor |
| 5 Nacala Development Corridor SDI | 12 Walvis Bqay SDI |
| 6 Mtwara Development Corridor SDI | 13 Gariiep SDI |
| 7 Tazara Development Corridor | |

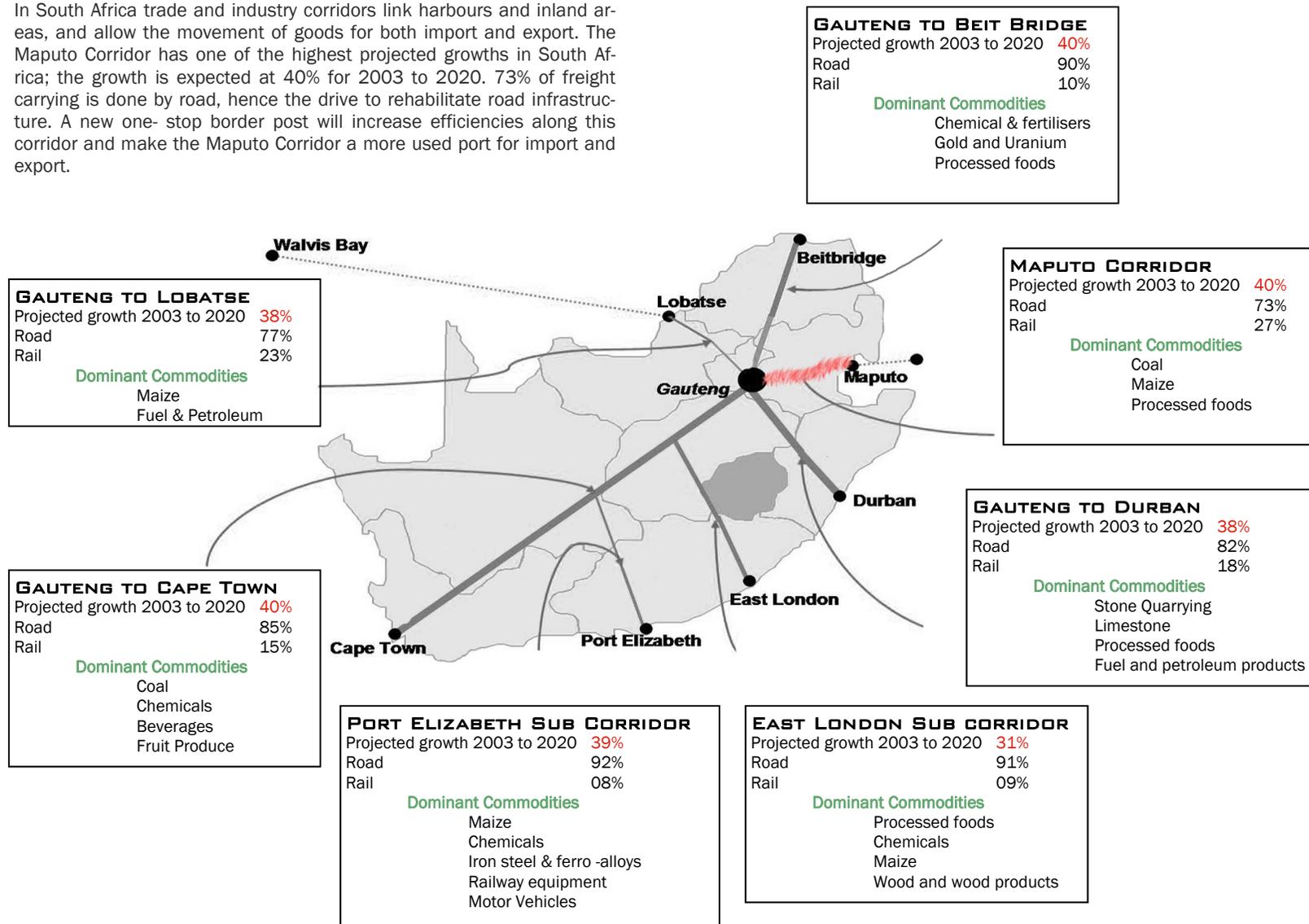


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In South Africa trade and industry corridors link harbours and inland areas, and allow the movement of goods for both import and export. The Maputo Corridor has one of the highest projected growths in South Africa; the growth is expected at 40% for 2003 to 2020. 73% of freight carrying is done by road, hence the drive to rehabilitate road infrastructure. A new one-stop border post will increase efficiencies along this corridor and make the Maputo Corridor a more used port for import and export.



2.2

LOCALITY

South Africa has an extensive land borderline, there are 52 land border posts, shared with 6 other countries- Mozambique, Zimbabwe, Botswana, Namibia, Lesotho and Swaziland.³

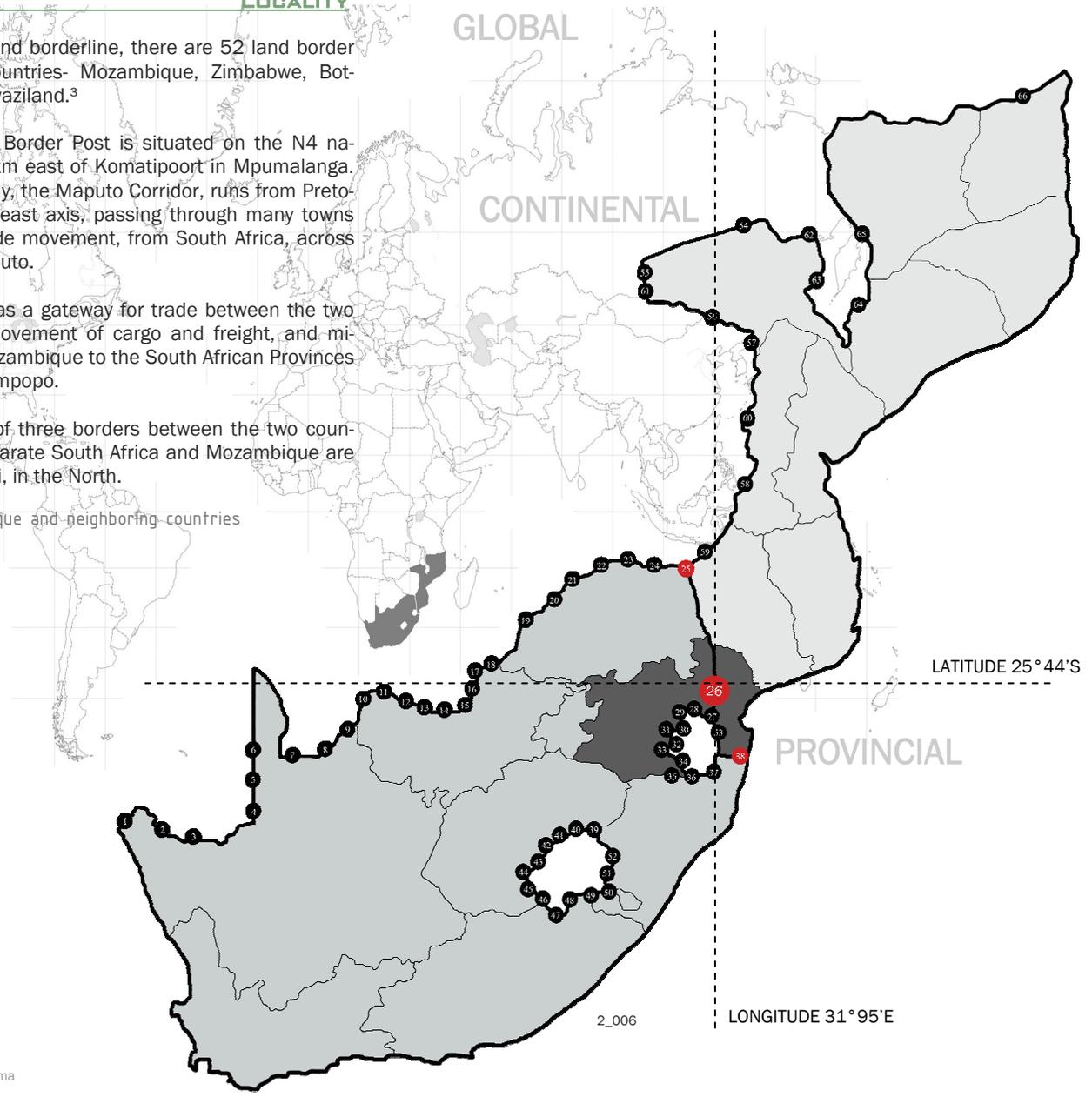
The Lebombo/ Ressano Garcia Border Post is situated on the N4 national toll road approximately 3km east of Komatipoort in Mpumalanga. The N4, or in context of this study, the Maputo Corridor, runs from Pretoria in Gauteng along a west to east axis, passing through many towns and cities that contribute to trade movement, from South Africa, across the border to the harbour at Maputo.

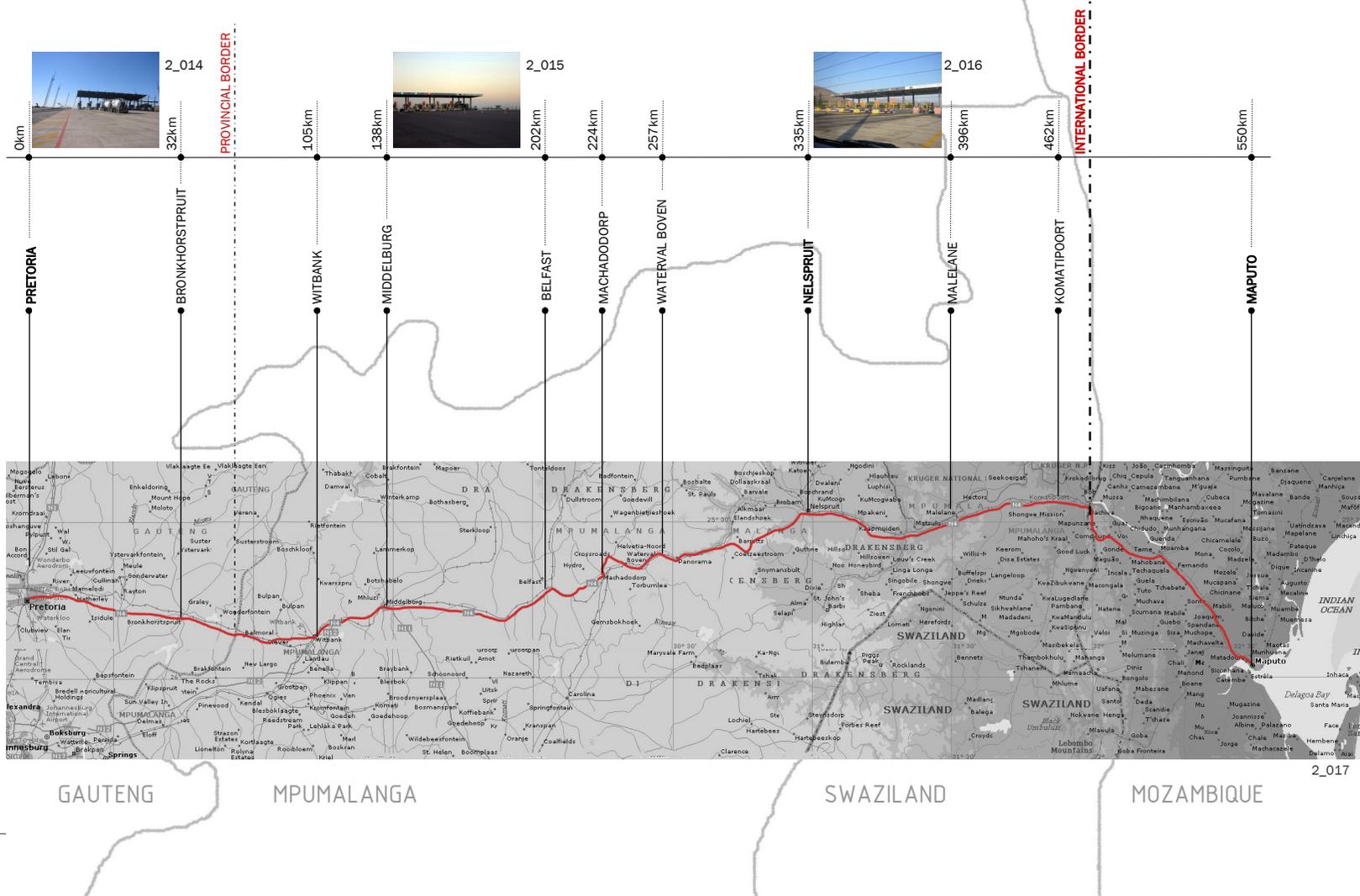
The border is positioned to act as a gateway for trade between the two countries, specifically for the movement of cargo and freight, and migrant labour movement from Mozambique to the South African Provinces of Mpumalanga, Gauteng and Limpopo.

This Border post is the largest of three borders between the two countries. The other borders that separate South Africa and Mozambique are Kozi Bay, in the south, and Pafuri, in the North.

Land Ports South Africa, Mozambique and neighboring countries

- | | |
|-----------------------|----------------------|
| 1 Alexander Bay | 34 Bothashoop |
| 2 Vioolsdrift | 35 Mahamba |
| 3 Onseepkans | 36 Onverwach |
| 4 Nakop | 37 Golela |
| 5 Noenieput | 38 Kosi Bay |
| 6 Rietfontein | 39 Montansa Pass |
| 7 Gembok | 40 Caledonspoort |
| 8 Middeldruts | 41 Ficksburg Bridge |
| 9 McCarthys Rest | 42 Peka Bridge |
| 10 Makopong | 43 Maseru Bridge |
| 11 Bray | 44 Van Rooyens Gate |
| 12 Boshhoek | 45 Sephaphos Gate |
| 13 Makgobistad | 46 Makhaleng Bridge |
| 14 Ramatiabama | 47 Tele Bridge |
| 15 Skilpadshek | 48 Ongeluksnek |
| 16 Swartkopfonteinhek | 49 Quachas nek |
| 17 Kopfonteinhek | 50 Ramatseliso Gate |
| 18 Derdepoort | 51 Boesmansneck |
| 19 Stockpoort | 52 Sani Pass |
| 20 Groblers Bridge | 53 Namaacha |
| 21 Zanzibar | 54 Cassacatiza |
| 22 Platjan | 55 Zumbo |
| 23 Pontdrift | 56 Mecumbura |
| 24 Beit Bridge | 57 Nyama panda |
| 25 Pafuri | 58 Espungabera |
| 26 Lebombo | 59 Chicualacuala |
| 27 Mananga | 60 Machipanda |
| 28 Jeppes Reef | 61 Kanyemba |
| 29 Josef dal | 62 Ulongwe |
| 30 Oshoek | 63 Zobue |
| 31 Lunatsi | 64 Milange |
| 32 Nerston | 65 Mandimba |
| 33 Emhalatini | 66 Mocimboa Do Rouma |





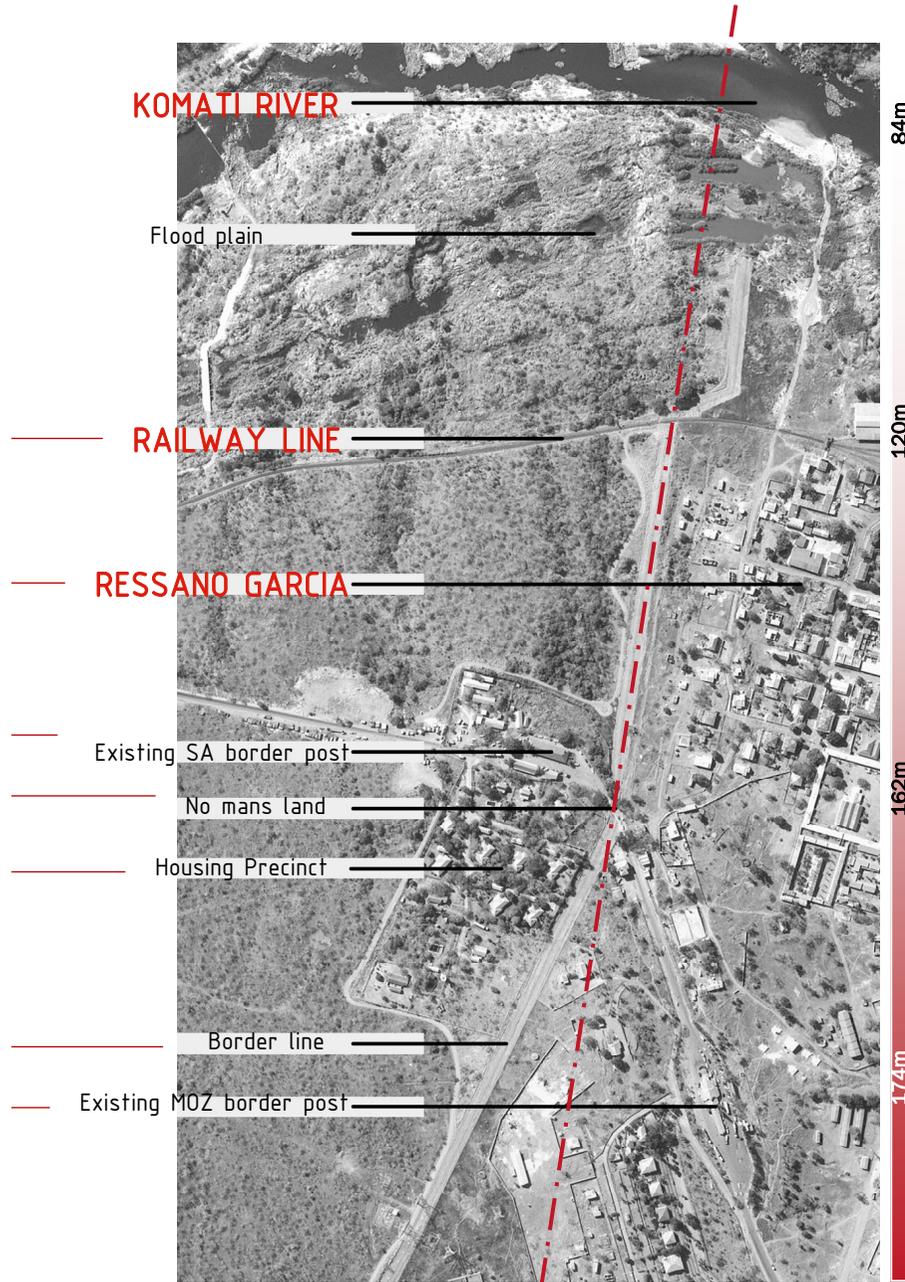
GAUTENG

MPUMALANGA

SWAZILAND

MOZAMBIQUE

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N4 NATIONAL ROAD

The N4 section of the Maputo Corridor extends from the Gauteng border, 27km west of Witbank in Mpumalanga, to Maputo. The length of this section is 504km.

The concessionaire of the N4 is Trans African Concessions (TRAC). The Investment value for the total concession period is estimated at R3.0 billion. The initial construction carried a value of R1.5 billion.⁴

TRAC has identified certain economic aims of the N4, all of which have an indirect affect on the border post:

- _ fostering trade between Maputo and Mozambique
- _ creation of a new export and import thoroughfare between the two countries and with the rest of the world via the Maputo harbour
- _ development of trade and tourism
- _ creation of scope for further development of major exporting industries
- _ reduction in the cost of transport
- _ fostering the development of downstream economic activity, empowerment and development of communities.

RAILWAY LINE

Spoornet has successfully concluded negotiations with Mozambique Railways for the concession to operate the Ressano-Garcia line from Komatipoort to Maputo. The deal will facilitate the realisation of a 'seamless' rail system between Johannesburg and Maputo, freight trains will no longer have to stop at the border gate. This initiative will hopefully increase the competitiveness of rail against road.

At present, freight trains have to be unhitched from locomotives at Komatipoort and pulled through to Maputo by Mozambique railways. This is time consuming process which has led to the increase of trucking operations. If the rail network could take a load of road freight, pressure on the border would be reduced substantially.

Currently 10 trains operate per day by direction, with the possibility of 14 in the future, 40 wagons per train are currently utilised and this could also increase to 50 wagon trains. An investment of R 56mill has been allocated over the next two years for the rehabilitation of the rail infrastructure and maintenance.⁵

North West



2_020

North



2_021

North East



2_022



North East



2_023

North East



2_024

East



2_025

East



2_026

The existing South African Border post is situated on the land marked Portion 9. This ground accommodates the Government Departments and the residential precinct. The Mozambiquan Border post is accommodated directly across the border from this, on land that is owned by the Mozambican Government.

To date, the South African Government has additionally procured the land marked Portion 28 and Portion 29. The Mozambican Government have procured the strip of land indicated in green along the R510 National Road.

The agreement between the two governments allows the design of a 'one-stop' border post to be accommodated anywhere within this combined site. The total area of the site is 34,5 Hectares. (345 163m²)⁶

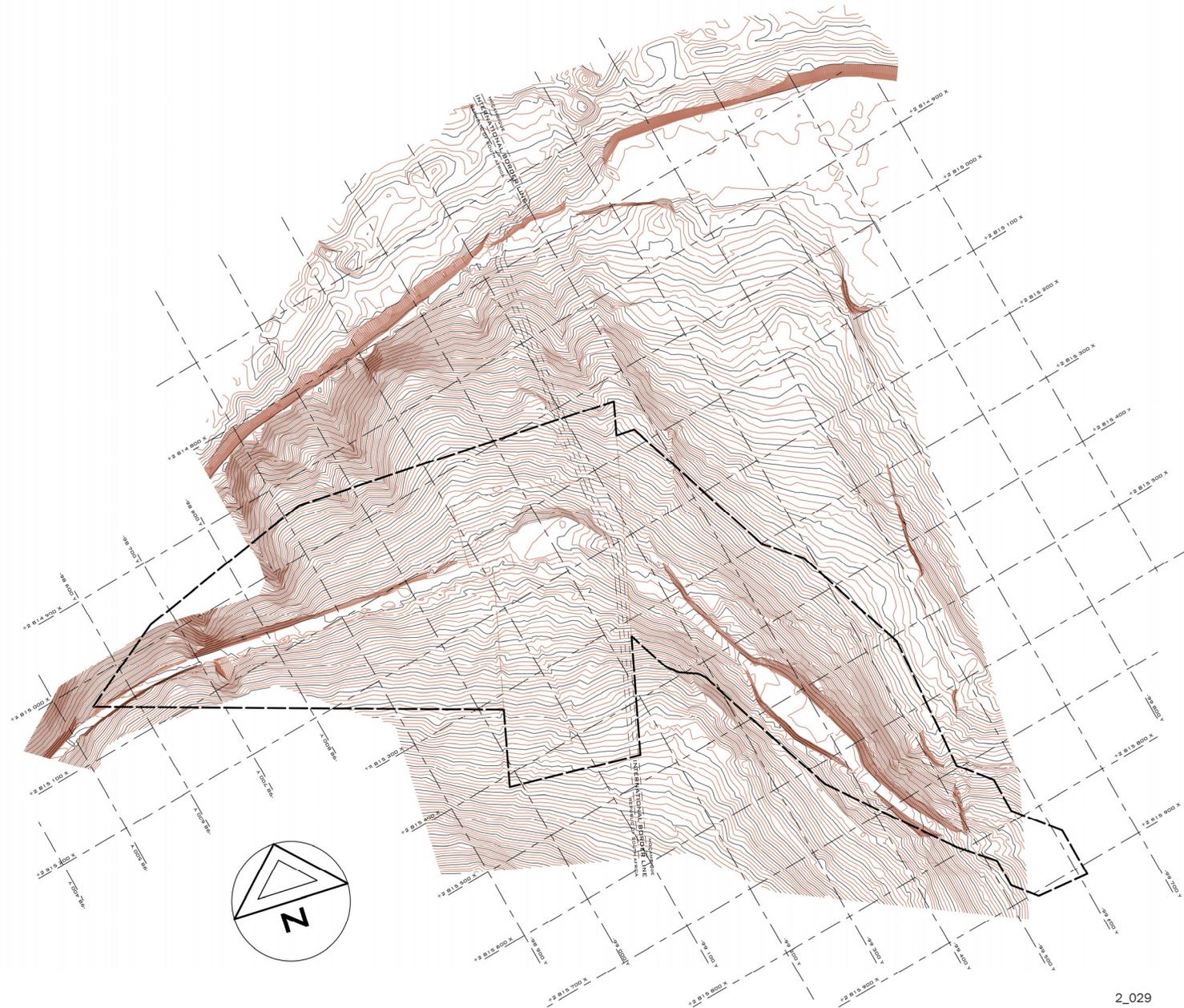
The rail station is currently situated on the periphery of Ressano Garcia. This facility will within time be moved to the land adjacent to the railway reserve, marked x.



The Border Post is situated approximately 170m above sea level in the Lebombo Mountain Range. This north-south trending range, consisting of erosion resistant Stormberg lavas, forms the border between South Africa to the west and Mozambique to the east. The rocky shallow-soiled mountainous terrain is dissected at intervals by rivers providing natural gateways.⁷

The Crocodile River in the north and the Komati River in the south, converge in the gorge adjacent to the site. Both of these rivers arise in the Upper Escarpment and drain eastward to their confluence at Komati-poort. From the confluence, the Rio Incomati drains north-eastward through Mozambique to the Indian Ocean.

The topography therefore provides certain physical constraints due to the gradient of the site, but conversely to this, allows for a 180 degree view window across the river gorge. The design proposal is one that portrays a merge between building and landscape. The lie of land allows for a building with entrances and exits on different levels. Excavation, and cut and fill, will allow for a building that works with the contours of the land, and enhances the understanding of the site.



2.3.4

CLIMATE

Average Daily Maximum Temperature (C) Data for station [0520691 2] - KOMATIDRAAI Measured at 08:00

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1993			30.2	31.3	28.4	25.8	25.7	26.2	30.5	29.1	29.4=	33.4
1994	30.9	31.1	32.2	29.1	27.4	26.5	25	26.2	28.2	30.9	38.3	37.5
1995	38.8	34	32.3	31	27.8	26.9	27.7	28.6	31.8	33	30.8	31.5
1996	32.5	32.5	30.9	29	27.6	27	25	26.4	30.6	31.5		32.3
1997	31.8	31.6	30.2	28	25.6	27.8=	25	28.1	28.4	28	30.1	30
1998	28	21	32.0=	30.6	28.5	27.2	26.4	28.4	30	28.1	29.6	
1999			29.4=	29	27.6	26.9	26.5	28.5	28			
2000	29.7			27.9	26.4	26.2	25.4	26.8=	28.5		30.2=	33
2001	32	31.4	31.1	29.5	27.9	27.3	26	28.4	29.3	30	29.5	29.7=
2002	32.8	31.4			28.9	25.5	26.6	27.7	29.1	30.5	29.8	31.2
2003	33.6	33.5	31.8	30.2	27.3	23.8	25.1	27.6	29	29.6=	31.7	34.6
2004	32.6	31.9	29.6	28.3	26.8	25.2	24.5	28.2	28.3	30.3	33.1	33.6
2005	33.2	33.5	31.3	29.3								

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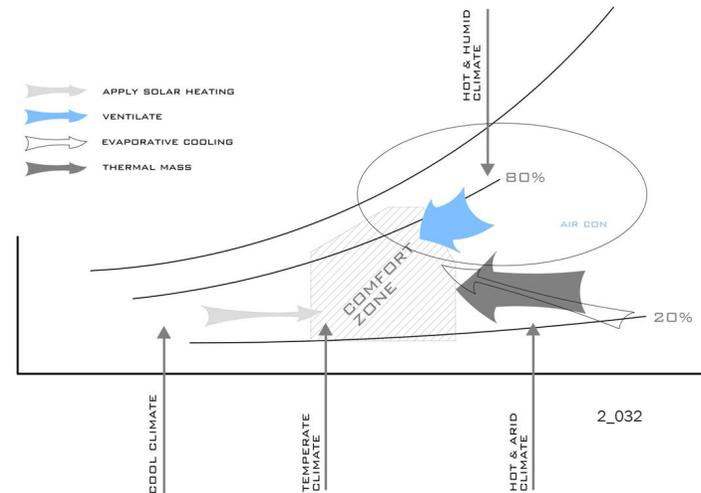
Average Daily Minimum Temperature (C) Data for station [0520691 2] - KOMATIDRAAI Measured at 08:00

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1993			19.8	18.4	14.7	9.2	10.9	11.1	14.7	17.8	17.7	20.2
1994	19.9	19.6	19.4	16.6	11.9	8.2	6.3	9.6	12.9	18.7	24.2	24.6
1995	26.5	22.1	20.5	17.8	14.4	10.5	10.9	13.3	16	19.6	20.2	20.3
1996	22.1	22.1	19.6	16.9	14.8	9.9	9.9	12.1	16.4	18		20.7
1997	21.4	21.1	20.1	15.2	12	7.4=	10.4	12.7	16.6	16.2	18.2	19.5
1998	18.4	11	20.0=	17.6	12.2	9.5	10.8	12.7	15.8	17.4	19.8	
1999			19.8=	17.6	14	9.2	10.5	12.3	14.9			
2000	21			17.3	12.7	12.4	10.1	12.0=	15.8		19.8=	21.1
2001	20.9	21.7	21.2	19.2	14	10.7	10.7	14.3	15.4	18.8	20.7	21.3=
2002	21.5	20.8			12.8	10.3	9.2	15	15.2	17.3	17.3	21
2003	21.5	22.3	20.4	18.2	14.3	12.2	9.6	11.2	13.5=	17.8=	19.9	21.1
2004	21.8	21.8	20.6	18.2	13.4	9.4	9.2	13.6	14.2	17.5	20.4	21.6
2005	22.7	22	20	18.4								

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The Border is situated in a subtropical climate zone and has a summer rainfall. Summer in the area is generally very hot and humid. The temperatures range from as high as 40° C during the day, to 10° C in the evening. The region experiences very mild winters. Temperatures in winter vary between 20° C during the day and 10° C at night. While humid conditions prevail during the summer months, the winter months of June, July, and August are usually dry.⁸

Winds blow mainly from the east, they are generally light, with occasional gales before and during thunderstorms.



2_032

September

DECEMBER

32,68°C/ 21,14°C

JUNE

26,3°C/ 9,9°C

March

2.3.5

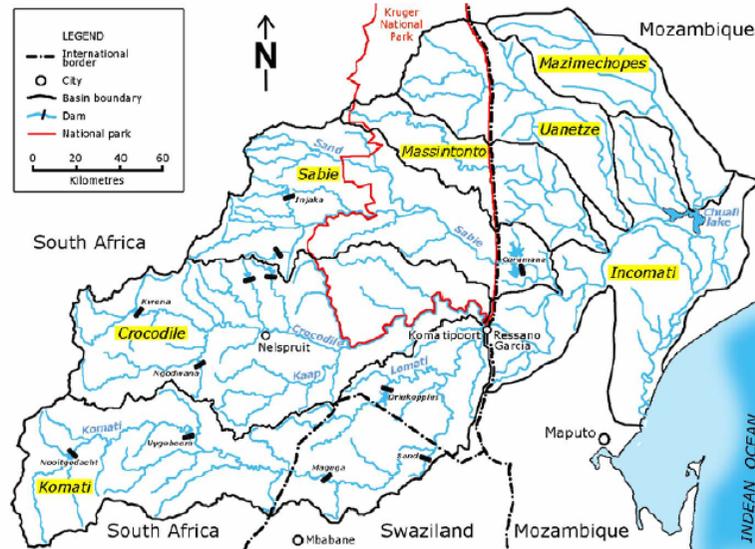
HYDROLOGY

The average annual rainfall of the site is 538mm. It is lower than surrounding areas because of the fact that it lies in a rain shadow in the lee of the Lebombo Mountains. Moist air masses from the Indian Ocean move in over the Region, and high summer temperatures usually cause atmospheric instability. This results in the rainfall being in the form of thunderstorms. Mean annual rainfall of the entire region ranges from 500 to 750 mm.⁹

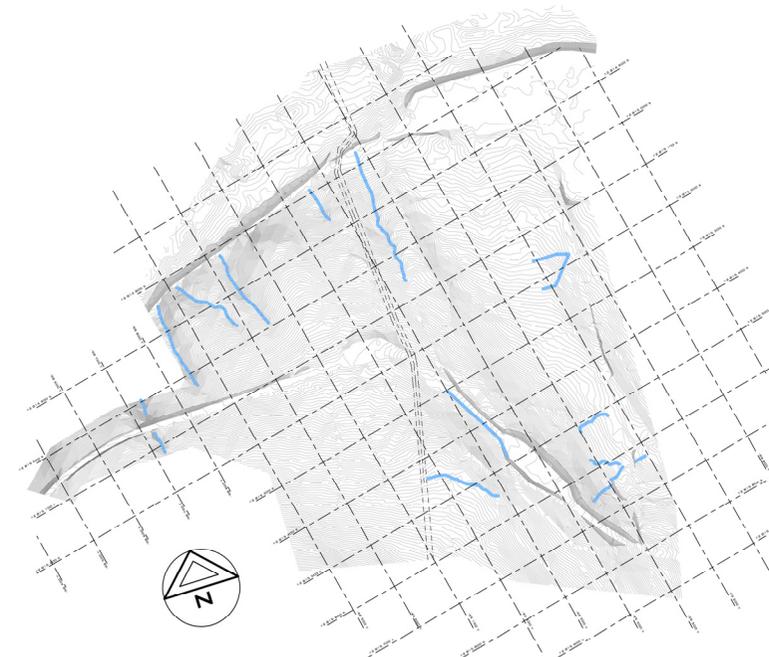
The border is situated in the Incomati River catchment basin. This basin is shared between South Africa, Swaziland, and Mozambique, and discharges in Maputo Bay in the Indian Ocean.¹⁰ Run-off on the site needs to be taken into account in the planning phase of the new built structure. Nature effectively operates in spite of what man proposes, and although water can be controlled, the path and direction of flow should be planned appropriately. Water run-off on the site flows down the slope to the Komati river. Rainwater harvesting should be considered, or alternatively provision made for the flow of surface water.

0557806B3 KOMATIPOORT Lat:25.4330 Lon:31.9500 Height:140 m 1995-2004													
MON	AVE	ST DEV	N DAY RAIN	NUM MON	1 5	5.1 10	10.1 20	20.1 50	50.1 100	100 900	MAX R DAY	MAX RAIN DATE	
JAN	70.6	59.6	5.4	9	1.9	1.4	1.1	0.8	0.1	0	70	1998/01/06	
FEB	110.6	140.5	5.7	9	1.7	1.2	1.2	0.8	0.4	0.1	150	2000/02/06	
MAR	62.2	67.2	3.9	9	1	1	0.7	1.1	0.1	0	53	2001/03/18	
APR	34	22.7	3.1	9	1	0.7	0.8	0.4	0	0	45	2001/04/12	
MAY	10.6	14.5	1.6	8	0.9	0.4	0.4	0	0	0	32	2003/05/05	
JUN	0.5	1.3	0.3	9	0.1	0	0	0	0	0	4	2000/06/06	
JUL	8	6.8	1.1	9	0.3	0.2	0.3	0	0	0	16.5	2001/07/30	
AUG	5.4	9.4	1.1	9	0.4	0.6	0	0	0	0	14	1996/08/20	
SEP	21.4	21.9	2.3	10	0.8	0.3	0.8	0.2	0	0	30	2000/09/20	
OCT	40	36.3	3.5	10	1.3	0.5	0.8	0.7	0	0	44.5	1995/10/27	
NOV	85.9	94.8	5	10	1.7	0.7	1.1	1.2	0.3	0	89	2001/11/15	
DEC	88.6	77.5	4.3	9	1	0.8	0.8	1.4	0.2	0	80	1998/12/02	
YR	537.8		37.4		12.1	7.8	8	6.7	1.2	0.1			

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2.3.6

FAUNA & FLORA

The Incomati River provides habitats for a rich variety of species. The basin provides refuge to at least forty threatened bird species, eleven threatened terrestrial mammal species, twelve threatened fish species, and eight threatened reptile and amphibian species, which are all dependent on water and/or riverine vegetation. In addition to these, about 104 threatened plant species are found in the basin.

Cycads (*Encephalartos* spp.) are vulnerable to disturbance, and of the twenty-eight *Encephalartos* species listed as either endangered, rare, or vulnerable, six species occur in the Incomati river basin, of which five species are endemic.

There is an abundance of bird life in the area, well over 500 bird species have been recorded in the Incomati river basin, of which seventy-three species are listed as threatened in South Africa. Among the endangered bird species occurring in the basin are the Wattled Crane, the Black-rumped Buttonquail, the Blue Swallow, the Egyptian Vulture, and the Yellowbilled Oxpecker.

Endangered terrestrial mammals occurring in the region include the *Hippotragus equines* (roan antelope) and the *Lycaon pictus* (wild dog). Numerous rare reptiles, amphibians, and butterflies also occur.

The Kruger National Park, part of the recently proclaimed Great Limpopo Transfrontier Park, borders onto the Inkomati river directly north of the site.

The site falls in the Lowveld region of vegetation. This vegetation type stretches over the lower margin of the Lower Escarpment Region, the Plains and the Lebombo Mountains. It is a mixed veld, dry, with a smaller proportion of macrophyllous trees than in the Lowveld Sour Bushveld region, and a bigger proportion of microphyllous trees (small-leafed, defended physically by thorns, such as *Acacia* and *Dichrostachys*). Where conditions permit, areas of this veld type have been transformed by intensively farmed sugar cane and orchards. A lot of bush clearing is currently being undertaken near Komatipoort. Almost 25% of this veld type is protected in government controlled reserves, which makes it one of the best protected veld types in South Africa. It is the vegetation of southern Kruger National Park, the majority of the protected area is included within the KNP.¹¹

2.3.7

GEOLOGY

The geology of the area is characterized by sedimentary, volcanic, granitic, and dolomitic rocks, and quaternary and recent deposits. The Lebombo Mountains comprise Karoo sediments with *Ecca* sandstones, shale's and coal, topped by Stormberg lavas. The soils are shallow to skeletal with mesotrophic to eutrophic properties.

The Bushveld Igneous Complex forms an extremely important feature of the region, and contributes a very large proportion of the region's mineral wealth. The geological features of this area consist mostly of basic mafic and ultramafic intrusive rocks, accompanied by extensive areas of acidic and intermediate intrusive rocks. At the southern periphery of this area, large dolomite and limestone formations occur, accompanied by extensive mineralisation along their contact zones. Large areas of the central portion of the Limpopo basin consist of various deposits of consolidated and unconsolidated sedimentary rocks, with important belts of intrusive Greenstone rocks that are heavily mineralised. The north-south trending rhyolites and lavas of the Lebombo Mountains mark the eastern border between South Africa and Mozambique. Elsewhere, harder, silicified sandstones and cherts, as well as syenitic and granitic outcrops, form erosional remnants that protrude above the generally undulating terrain.¹²



2_036

2.4 POLITICAL HISTORICAL CONTEXT

' In 1725 Jan van de Capelle, head of the Dutch fort Lydzaamheid in Delagoa Bay, acting on instructions from the authorities in the Cape, sent an expedition to explore an inland route to Monomatapa. This military expedition of 31 men was commanded by the secunde Frans de Kuiper, on July 5th his sergeant Johannes Monna and 6 men inspected the road through this poort to the Komati River. They were the first Europeans to enter the present day Eastern Transvaal' ¹³

2.4.1 PRIOR TO 1948: THE COLONIAL EXPERIENCE

Delagoa bay deeply influenced early developments in southeastern Africa as people settled round its shores and along its rivers. Inhabitants engaged in activities such as fishing, hunting whales, trading ivory, and maintaining an economy of cattle keeping and agriculture. Through trade operations, especially the trade of copper, the influence of the bay stretched across the Lebombo mountains to the interior.¹⁴

In 1721, a Dutch expedition built a fort in what was to become the city of Lourenço Marques, now the city of Maputo. The Portuguese established their first permanent trading station in 1781. Towards the end of the eighteenth century the bay was a hive of activity, with the British having established a post at the southern shores of the Bay. The city of Lourenço Marques was, however, only founded in 1790. In the nineteenth century, it became the major trading port for the Swazi and Zulus, for the Tsonga chieftainships to the north and, after the Great Trek, for the Transvaal Boers who first settled in the former Transvaal (now Mpumalanga) in the late 1830s.

Both Britain and the Transvaal Boers claimed Delagoa Bay (in 1861 and 1868, respectively). Portugal protested, and in 1869 the Boers and the Portuguese signed a treaty that recognized Portugal's possession of the Bay.

The discovery of important minerals in the Transvaal area during the second half of the nineteenth century reinforced the emerging regional economy. A link was established from the eastern frontier of Transvaal, and along the ridge of the Lebombo Mountains, linking the highveld and the port.

The enormous mine developments required an intensive support network in terms of transport, communication, agriculture, trade, and labor. Lourenço Marques with its harbor was strategically positioned.

The construction of a railway connecting the city to Johannesburg, and passing through Ressano Garcia where the Komati and Crocodile rivers join to form the Incomati, was completed in 1895.¹⁵

Labor movement intensified after 1850, when migrant workers from southern Mozambique traveled via Johannesburg to Durban to work in the sugar industry. The discovery of diamonds in Kimberley in 1869 and gold in the Rand area (Gauteng) and near Barberton in 1886 further intensified this traffic of human labor. From the middle of the nineteenth century the economy of southern Mozambique was thus dominated by its link with South Africa. This link was formalised by the signing of three treaties between Portugal and South Africa, including one on free trade (1875), one on traffic with the Transvaal (1895), and legislation concerning the recruitment of mine workers from Mozambique in 1896. In 1901, just after the South African War, the British High Commissioner renegotiated an agreement with the Portuguese to allow recruitment of mineworkers in exchange for direct payment in gold and preference for Delagoa Bay as a port. During 1903–7 southern Mozambique supplied some 50,000 laborers annually, or 60 percent of the total black labor force on the mines. By 1909, Lourenço Marques dominated 65 percent of all trade with the Transvaal.

2.4.2 THE PERIOD 1948–74: ECONOMIC DEVELOPMENT

By 1952, some 250,000 Mozambican workers were staying in South Africa, of whom only 100,000 were there legally. The swift decolonisation of the continent in the 1960s drove Portugal and South Africa closer together. This is most clearly demonstrated by the construction of the massive Cahora Bassa dam on the Zambezi. This project was a joint venture in which the Anglo American Corporation, as well as Portuguese capital, had a strong interest. Dam construction started towards the end of the 1960s, and coincided with increased guerrilla activities by Frelimo, the liberation movement that came into power at Mozambique's independence in 1975. During this period agricultural development in the Incomati basin increased significantly. This led to the opening up of the area for commercial farming, and the forced removal of black farmers from areas designated for white farmers.

A paper mill was constructed in 1966 in the upper parts of the Crocodile river (Ngodwana). In 1960 Swaziland started to establish sugar plantations along the Umbeluzi river, adjacent to the Komati, with support from the Commonwealth.¹⁶

2.4.3 THE PERIOD 1975-94: TURMOIL AND PEACE

Mozambique attained independence in 1975, and at the same time the African National Congress (ANC) within South Africa increased its domination dramatically. South Africa started to destabilize Mozambique by supporting Renamo, the resistance movement that competed for power with Frelimo. South Africa also unilaterally decreased the number of Mozambican mineworkers allowed into South Africa, from 127,000 in 1975 to 38,000 in 1978.

During the 1980s, South Africa increased its destabilising activities in neighboring countries, and its support to Renamo in Mozambique. The result was that by 1983 the countryside in southern Mozambique had become unsafe. At the end of 1983, South Africa signed a secret non-aggression pact with Swaziland. In the midst of the insurgent activities, negotiations started between Mozambique and South Africa, which culminated in the signing of the Komati Agreement in March 1984.

South Africa experienced severe economic problems after the gold price declined sharply in 1983; production from its manufacturing industry stagnated, and unemployment increased. This fuelled political turmoil. South Africa's interest in entering into a new agreement may therefore be seen as a desperate effort to position itself as the key to regional peace, and in so doing regain some confidence of foreign investors. Mozambique was faced by an even more dramatic collapse of its economy. It wanted to increase the volume of goods ferried through Maputo, to regularise the export of electricity from Cahora Bassa, and to increase the number of mineworkers allowed into South Africa.

The Komati agreement did not however have the intended effect. Rather than decreasing, Renamo's destabilising activities increased and developed into a fully-fledged civil war. The death of Samora Machel in an unexplained plane crash in December 1986 shocked the world. It was only after Nelson Mandela was released from prison in February 1990 that the political atmosphere improved. In the same year the Mozambican government introduced a new constitution that provided for multi-party democracy, and started negotiations with Renamo. This resulted in the Peace Accord signed in October 1992. A UN peacekeeping force arrived in the country, and after some delays multi-party elections were held in November 1994.

They were followed by successive good harvests and a steady growth in the economy. Foreign investors are now showing serious interest in a number of large projects, particularly in the energy and minerals sector but also involving transport and tourism.

2.5

ECONOMIC CONTEXT

Economic linkages between South Africa and Mozambique have been shaped by four major dynamic factors; the regional strength of the South African economy, the weaknesses and public policy options of the Mozambiquan economy; the international weakness of the South African economy; and the dominant role of the minerals- energy complex around which most of the political, social, and economic dynamics of capital accumulation in South Africa is structured.

Maputo became an important commercial center towards the end of the nineteenth century. Economic development in the upper parts of the Incomati basin started to become significant around the same time, when the first towns such as Barberton and Nelspruit were established in South Africa. Today Mozambique is one of Africa's success stories, considering that at the end of the civil war in 1992 they were ranked one of the poorest countries in the world. They do however still rely heavily on foreign assistance. Their economy was reformed by the elimination of subsidies and restrictions on imports and reduction on import tariffs. Mozambique has the natural resources to sustain the development of the agriculture, forestry, fishing, energy and tourism industries. Placed in an ideal trading location, increased exports in these areas will increase the amount of foreign exchange brought into the country. Mozambique has an agriculturally based economy. Contributing to 23.3 % of the countries GDP. Industrial development has been slow as a result of the civil war that destroyed most of their infrastructure.

In South Africa mineral deposits form the basis of the countries wealth, agriculture too plays an important role in economical prosperity. Existing mining activities in the region are limited to coal mining in the upper reaches of the Komati river catchment, and along the Lebombo Mountain range south of Komatipoort. Two crops dominate the area: rain-fed commercial tree plantations (some 340,000 ha), and irrigated sugarcane cultivation (42,800 ha) . It is estimated that in the South African part of the Incomati basin some 83,000 ha is irrigated, of which nearly 30,000 ha (36 percent) is given over to sugarcane. This is crushed and converted to sugar in two sugar mills, both owned by TSB (Transvaal Suiker Beperk). Sugar production at the two mills contributes about 17 percent of total sugar production in South Africa.

Both countries belong to the SADC (Southern African Development Community). This trade protocol will create a free trade zone over time among the more than 200 million consumers in the SADC region. The 10 year implementation process of the SADC trade protocol began in 2002 with the immediate elimination of duties on a large list of 'zero' rated goods.⁴⁷

2.5.1 THE ECONOMIC IMPACT OF THE CORRIDOR ON
TRADE & INDUSTRY

The Maputo Development Corridor comprises of three major primary infrastructures namely: the Maputo Transport Corridor (N4), Maputo-Ressano Garcia Rail Line and Maputo-Goba Rail Line. The development projects implemented in the perimeter of the corridor are estimated at USD 10 billion.¹⁸

Ressano Garcia Rail Line

Is an 88km rail link between the Maputo Port and Mpumalanga areas in South Africa. It has a capacity to move 5 million tons per year in one direction.

Goba Rail Line

With the capacity to carry 4,8 million tons/year in both directions, it links Maputo with the Kingdom of Swaziland

Maputo-Witbank Transport Corridor

The corridor is operated under a concession contract, with 5 toll gates along the 420 km of highway, between Maputo and Wit bank. This project has absorbed \$ 320 worth of investment. The first ever toll road to operate in Mozambique demonstrates the role that private sector can play in the development of public infrastructures.

MOZAL Aluminium Smelter

With a total capacity of 500.000 tons of aluminium, it started production in 2001, and was invested in it so far \$2,329 billion.

SASOL Gas Pipeline

A 866 km pipeline from the Temane gas field in Mozambique, cost \$1.3 billion.

In South Africa the corridor provides closest access to sea; improved profitability and efficiency in transports; enhanced viability of mining projects; increased movement of goods and people; increased viability of the Maputo Port, and the increased tourism attraction of Mpumalanga

The prospects for Mozambique include improved road quality & safety, shorter distances to sources of supply (SA); increase of Mozambique's GDP by 7% (2003); increase of Mozambique's exports; the increase in job opportunities, and Maputo is seen as a major tourism destination by South Africans, and global tourists.



2.6 SOCIO- CULTURAL CONTEXT

2.6.1 PEOPLE, CRIME AND POVERTY



Half of Mozambique's 18 million people live below the world banks poverty threshold of \$1 a day, this contributes largely to the problems the country faces.¹⁹ Migrant workers from Mozambique are therefore a common phenomena in South Africa, and commute on a monthly, weekly and daily basis. The State is entitled to regulate the entry, length of stay, and economic activities of these workers. The 1999 White Paper on International Migration proposes that migrants must offer 'desirable' skills and qualifications to be legally allowed to work in South Africa.²⁰ Throughout legislation the term 'illegal alien' is used to describe foreigners who are in the country unlawfully, basically those without legal documentation. The perception that there are many 'illegal aliens' from Mozambique currently in South Africa is generated through a number of different social mechanisms, including media articles, political speeches and popular beliefs, and is also reflected in border arrest figures and repatriation numbers.



Motivation for the tightening of border controls is led by the fact that there has been considerable growth in cross border crime, and the globalisation of the activities of organised crime syndicates. Criminal gangs in Mozambique and South Africa smuggle girls across the border using bush paths near Ressano Garcia. Many girls are kidnapped or lured by cash and then sold in South Africa, or shipped to Europe.²¹ Although Ressano Garcia is well policed, poor civil service pay in Mozambique means it is easy to bribe officials. Trafficking in humans, human organs and drugs are great concerns. It is also recognised that firearms smuggled across the borders are playing a role in violent crimes in both the countries. The current problems in South Africa with the illegal movement of goods, and people, demonstrate that without proper border control, crime will continue to increase. As the SADC moves towards a free trade area this presents the region with a number of challenges.

2_037

A 1997 estimate of Ressano Garcia's population puts it at 8,782.²² An estimated 150 formal settlements comprise staff houses for customs officials and railway staff. A larger proportion of people live in informal settlements consisting primarily of mud huts and shacks. Formal settlement dwellings are mainly two- to three-room brick houses, and residents organise themselves in the extended family system. These units share common facilities, including a bathroom and water. The only recreational facilities in the area are bars and soccer fields.

Ressano Garcia is very poor. It has attracted limited business investment and remains impoverished. The only well-built structure in the town is the Bank International de Mozambique. The rest of the town still bears scars of the devastating civil war. The majority of its people are either unemployed or engaged in informal trade. An estimated 500 people are economically active in Ressano Garcia, approximately 3,000 cross the border regularly to find jobs in South African mines. The major sources of local employment are provided by freight, retail, construction, customs, and the police, which together provide employment for about 500 people. Informal sector activities, primarily vending, provides employment for approximately 400 people. Most locals travel daily to and from South Africa to buy goods for resale in Ressano Garcia and the rest of Mozambique. A lot of the women also engage in illegal foreign currency dealings at the border gate.

The largest sources of formal income in Komatipoort are wholesale, freight clearance, police, customs, immigration, the municipality, the postal service and banks. Supermarkets, lodges, and bottle stores also play a significant role. The freight clearing agents in this area are mostly mobile caravans at the border gate, which are then also sources of commercial sex work by night. Most women in Komatipoort engage in street vending or work in shops and as maids. Compared to other border towns, Komatipoort is not a very busy border. It is, however, adjacent to a very poor part of Mozambique, which makes its commercial sector busy. South Africa is still relied upon heavily by the upper class citizens of Mozambique for their supplies. Most Mozambiquans who reside in Maputo, still make monthly or even weekly trips to Nelspruit to do their shopping. Sometimes even travelling as far as Johannesburg to make their purchases.

2.6.2

HIV AND AIDS

Approximately 70% of the worlds people living with HIV/ Aids are in Sub-Saharan Africa, with the southern region most seriously affected.²⁴ Prevalence is especially high in cross border areas with high mobility among truck drivers, migrant workers and commercial sex workers. After the war- induced isolation ended, and the subsequent increase in movement and trade to and from Mozambique, the epidemic has surged drastically. Researchers estimate that Ressenno Garcia has approximately 30 permanent sex workers, ranging in age from 19 to 30.²⁵ They seek clients primarily at bars and bottle stores, and rely on truckers who cross the border and stay overnight.

Target groups for educational programmes now include sex workers, truck drivers, miners, uniformed officials and informal traders. Limited AIDS educational activities take place in Ressenno Garcia, although the local health center does have a few posters about HIV/AIDS and STI's on its walls advising clients to use condoms. A new visitors centre for both Mozambique and South Africa, at the border, will provide educational material on Aids and HIV, and other social issues.

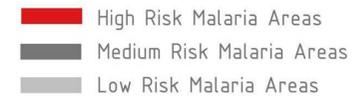
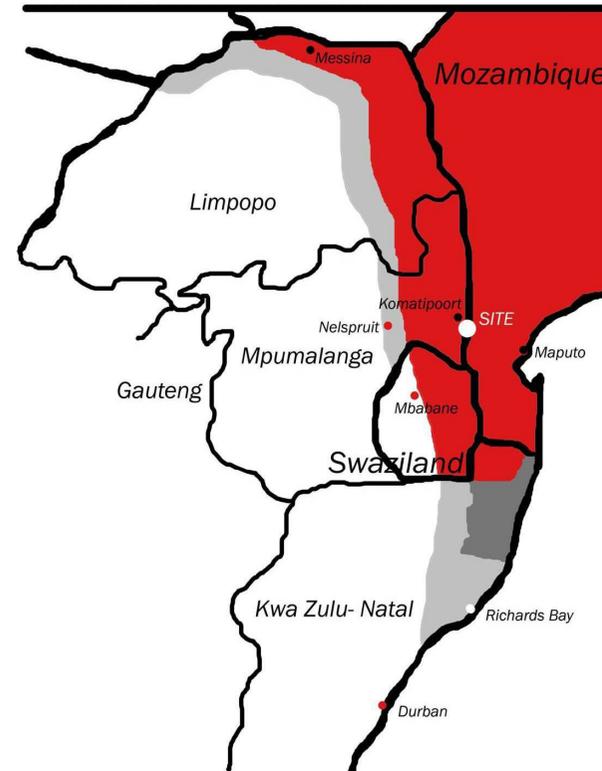
2.6.3

MALARIA

According to the World Health Organisation, WHO, malaria kills a million people a year, of which 90% are in Africa.²⁶ Malaria is a life-threatening disease that is a major health risk for travelers to malaria endemic areas. The Anopheles mosquito, which is responsible for transmitting malaria, is no respecter of borders. So the battle against malaria needs to be waged across borders. Appropriate advice and use of drugs, and most importantly, non-drug measures, can prevent most travelers from contracting the disease.

The Border Post site falls in a high risk malaria area. Malaria occurs in limited areas in South Africa, mainly in the low altitude (below 1000m) areas of Limpopo, Mpumalanga and North Eastern KwaZulu- Natal (See map of malaria risk areas in South Africa.) The disease is distinctly seasonal, with the highest risk being during the wet summer months of October through to May.

It is intended that the visitors centre provide the necessary information to tourists so as to be able to take the necessary precautions against contracting the disease.



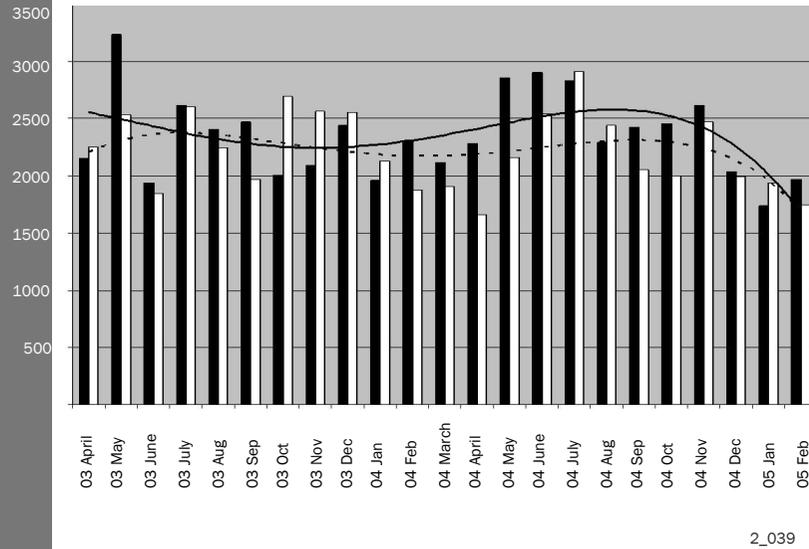
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2.7

BORDER STATISTICS

2.7.1

TRUCK STATISTICS

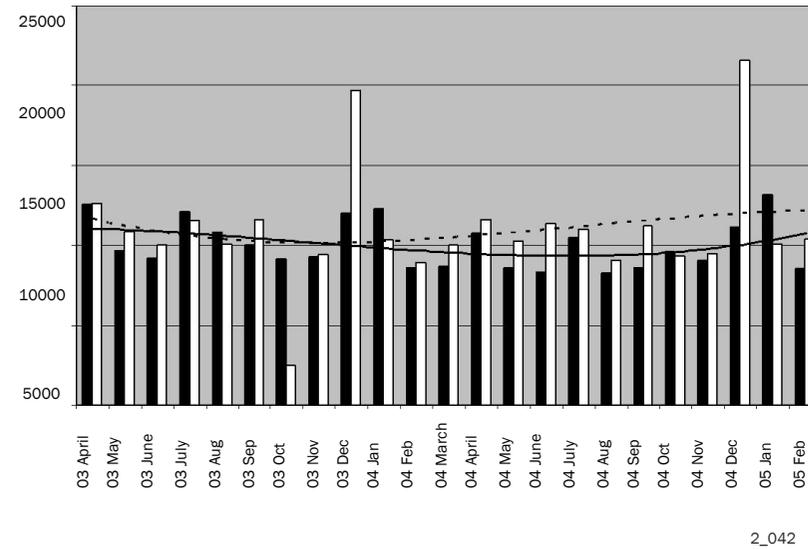


2_039

departures
 entries
 graphical polyline
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2.7.2

CAR STATISTICS



2_042

departures
 entries
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2_041



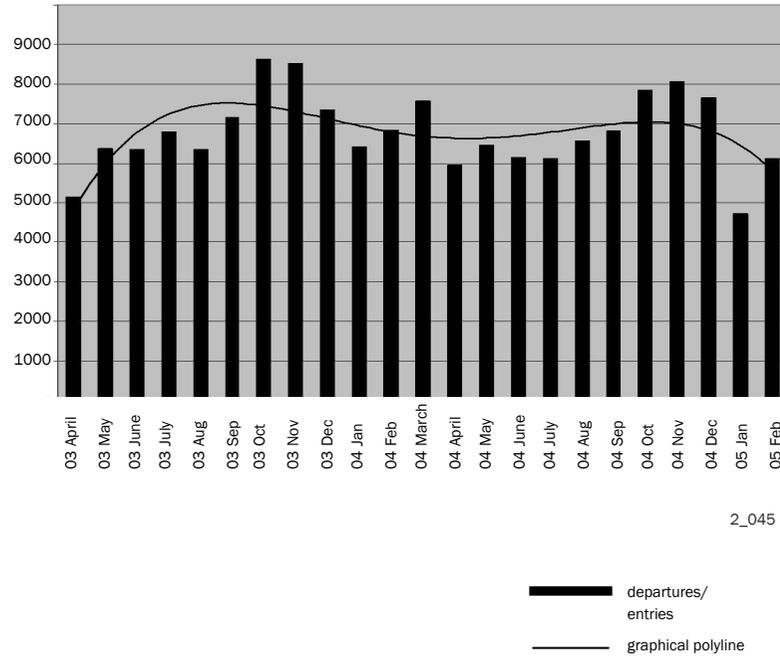
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2_044

2.7.3

PEDESTRIAN STATISTICS



ANALYSIS - DECEMBER

ENTRIES (SA)

± 19 000 · CARS

± 7 400 · PEDESTRIANS

± 2 500 · TRUCKS

DEPARTURES (SA)

± 14 000 · CARS

± 7 400 · PEDESTRIANS

± 2 400 · TRUCKS

= ± 620 CARS/DAY

= ± 240 PEDESTRIANS/DAY

= ± 80 TRUCKS/DAY



2_046



2_047

2.8 FUNCTIONS OF THE DEPARTMENTS

2.8.1 SOUTH AFRICAN REVENUE SERVICES

The South African Revenue Services (SARS) comprises the former departments of Inland Revenue and Customs and Excise. Customs and Excise is responsible for the control of duties and taxes at ports of entries. The Department enforces Customs as well as related trade laws, and ensures the social welfare of the citizens of the Republic, by controlling the import and export of prohibited and restricted goods.²⁸ They need to ensure the timeous clearance of goods, and facilitate the speedy movement of travelers through South African borders.

All procedures are governed by the Customs & Excise Act No 91 of 1964. Goods arriving in the country may only enter through approved ports of entry. In order for Customs to safeguard any revenue due to the State, and to ensure compliance with national legislation, the importer needs to declare to Customs what he/ she has brought into the country and the mode of transport utilised. National legislation allows an importer 7 days in which to clear goods from the time it has landed in the Republic. Goods not declared or cleared within this time period may be removed and detained in a State Warehouse.²⁹

Importation

An importer is required to complete the bill of entry declaration, and ensure that it is accurately completed. The clearance process includes accepting and checking goods against the documents produced, examination of the goods if necessary, and the assessment and collection of duty and VAT. Customs can detain goods for the Department of Health, Agriculture and other Government Departments. The relevant Government departments ensures compliance with other applicable laws, rules and regulations.

Exportation

Important economic decisions are based on trade statistics and it is therefore imperative that SARS accurately record export procedures. Examination facilities need to be provided at ports of entries. Some goods can sometimes be totally prohibited by other authorities and in other instances special permits or licences may be required. Customs offices scrutinise documents in order to ensure compliance with the various laws, regulations and rules.



2_048

Only 19 of the land ports that South Africa shares with her neighbouring countries are designated for the movement of commercial goods. The land borders are all rated according to the level of service provided at the border post. The rating ranges from A to C. At an A status border post, all three of the main Government Departments involved in the control of the movement of people and goods across the border post are present. These include Customs and Excise (South African Revenue Service), Immigration (Department of Home Affairs) and the South African Police Service (SAPS). At the B border posts, only two of the departments are present, and at the C status border posts, only one department is present.²⁷ The South African border police are present at all land border posts in South Africa.

The Ressano Garcia border post is classified as a Category A border post.

2.8.2

DEPARTMENT OF HOME AFFAIRS

The Department of Home Affairs designates ports of entry and handles the administrative control of the entry and departure of persons in terms of the Aliens Control Act.. Every sovereign state has the right to determine who will be admitted to the country, whether temporarily or permanently, and to set any conditions for such admission. The administrative protection and exercising of this right is known as Immigration Control and is supported by legislation.³⁰

The department is responsible for aliens control and admissions, they also verify and validate all travel documents, such as passports, visas, permits etc.

Home Affairs also has the function of controlling refugee/asylum concerns. Generally, work in both of these areas entails granting legal status to foreigners, processing and renewing permits, and repatriating or deporting 'prohibited persons'. At this point, it is important to differentiate between the terms repatriation and deportation. Repatriation involves returning undocumented foreigners to their home countries. That is, people who are in South Africa illegally, either because they entered the country without documents or because they have overstayed the legal time that was granted to them. Deportation involves returning foreigners convicted of a crime to their home countries.

The DHA decides the status of particular foreigners in the country. Corruption and fraud are common problems as it is often that those who are not legitimately entitled to documentation, are often able to buy legal status from corrupt officials. This may result in the purchase of forged passports and ID books or, more commonly, the purchase of bona fide South African documents that are illegally granted to the buyer.

The work of the department is not restricted to status determination and issuing documents. Officials are also mandated to trace and apprehend undocumented foreigners. In this regard, the department works closely with the police and the defence force to find and detain suspects. Once suspects have been apprehended by the DHA, the police and the department is responsible for processing and repatriating undocumented migrants. By law, the processing period between apprehension and repatriation (i.e. the detention period) cannot exceed 30 days without judicial approval.³¹

2.8.3

SOUTH AFRICAN POLICE SERVICES

The main function of the Border Police is to prevent and detect cross border crime and to stop the illegal movement of people and goods into or out of South Africa. The Border Police also perform functions on an agency basis for the Department of Home Affairs and SARS, as derived from section 205 of the Constitution (Act 108 of 1996) and the Police Act (1995). They also assume the responsibility of enforcement of the law applicable to cross border crime.³² The Division of Protection and Security Services is responsible for the security at ports of entry.

The prevention and investigation of cross border crime is important to ensure public order, and to protect and secure inhabitants of the Republic and their property. Control needs to be assumed over matters including:

- _the import and export of firearms and explosive goods.
- _animal markings
- _illegal importation of foodstuffs, cosmetics and other restricted items.
- _Illegal exportation of precious metals or diamonds
- _counterfeit moneys
- _illegal exporting of stolen property/ vehicles
- _detection of wanted persons exiting South Africa.

Major problem areas experienced by the SAPS in their operation, include the limited resources often available to the police, including both man power and physical possessions, the lack of search and storage facilities, and limited training opportunities are also problematic. There is also a shortage of patrol vehicles. The main intention is ultimately to decrease the vast number of illegal crossings occurring on a daily basis and to prevent, combat, and investigate all criminal activities, and uphold law and order.

The SAPS works together with the National Intelligence Agency, and the Department of Correctional Services to enforce maximum control at border posts, and ultimately provide the necessary safety and protection of those crossing the border legally.

2.8.4

OTHER DEPARTMENTS

DOA DEPARTMENT OF AGRICULTURE

The Department of Agriculture is also involved in the administrative control at ports of entry. The Department of Veterinary Services have the responsibility of ensuring that all animals/plants and animal/plant products entering and leaving the country have an Import/ Export Permit. All plant and plant products and animals and animal products could potentially introduce diseases into the country, and associated economic losses are easily prevented by effective border control. They also provide national veterinary risk management services and set legislation, policy and standards regarding all functions of Veterinary Services.³⁴

DOH DEPARTMENT OF HEALTH

The Department of Health is responsible for the control of foodstuffs entering and leaving the country, disease control, and hygiene requirements, i.e. they control all food, pharmaceutical and disease related matters. They need to ensure that proper measures are implemented to enhance free trade within the SADC, but at the same time to also fulfill its obligation to protect the health of consumers.³⁵

DOT DEPARTMENT OF TRANSPORT

The Cross Border Road Transport Agency (CBRTA), a division of the Department of Transport, is responsible for the regulation and control to the cross-border road transport market, and facilitates the establishment of cooperative relationships between public and private sector institutions who have an interest in cross border road transport. The Department contributes to the creation of a borderless Southern African Development Community and facilitates and regulates cross-border flows of traffic in a manner that optimises mobility and accessibility, thus contributing to the seamless integration of the Southern African Development Community.³⁶

They also ensure the maintenance and servicing of roads. The N4 national Road, from Pretoria to Maputo is operated by TRAC (Trans African Concessions). They are the concessionaire of the R3bn project, and build, finance, operate, maintain and expand the 503km N4 toll road between Witbank, South Africa and Maputo, Mozambique.³⁶

NIA NATIONAL INTELLIGENCE AGENCY

The National Intelligence Agency is responsible for ensuring a secure environment for all South Africans. The NIA has therefore been established as a function of government to serve the purpose of national security. NIA is subservient to the interests of the State and the well-being of all its inhabitants.³⁷

They therefore work jointly with the SAPS at Border Stations and assess the total (economic, social, political and environmental) domestic security situation, in order to identify and report to the executive departments any signs or warning signals of threats or potential threats to the constitutional order and the safety of the people.