



Bachelor-Thesis in Spatial Planning  
University of Applied Science  
Rapperswil

Cities without Slums-  
Slum Upgrading,  
Ilha de Moçambique

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June 2008  
Rev. 2010

Institution: University of Applied Science Rapperswil (HSR)  
Department: Spatial Planning  
Title: Cities without Slums-Slum Upgrading: Planning  
strategy for the sustainable development of the Ilha  
de Moçambique  
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Date: Zollikerberg, June 2008

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## PREFACE

The Ilha de Moçambique is a unique island off the East Coast of Africa. Until 1898 it was the capital of the Portuguese Colony it gave its name to and a fascinating place of cultural and commercial exchange on the trade routes to India and the Far East. Its valuable cultural heritage has been recognized by the inclusion in the UNESCO list of World Heritage Sites in 1991.

Mozambique has emerged from a period of civil war that followed its independence from Portugal in 1975 and ended in 1992. The recovery has been steady, however, despite economic growth Mozambique is still amongst the poorest countries and heavily dependant on foreign aid.

Tourism is recognized to have a large potential in the Southern African region and enjoys strong growth rates. The Island has potential to attract international, national and regional tourists as well as schools, foundations, research facilities etc.

The Norwegian, Danish and Swiss development agencies have focused on different aspects of development, including heritage protection and advancement of civil society in the Ilha de Moçambique municipal area.

Building on the extensive documentation of these experiences and his personal background in Mozambique the author of this study proposes a strategic shift of focus away from the island itself. Instead, he suggests concentrating on the surrounding coastline and utilizing the silhouette of the island to generate sustainable and financially attractive opportunities for investment in tourism facilities.

With this study the author attempts to show how the backdrop of the historic island can serve as a catalyst for development favorable to the socio-economic advancement of the local population. Tourism sites in the municipal area can be developed with respect for local traditions and the natural environment, yet with the ability to generate the revenue necessary to maintain and protect the cultural and structural heritage their success is ultimately based on.

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## ACKNOWLEDGMENTS

Foremost I would like to thank Professor Thomas Matta, head of the Department of Spatial Planning at the University of Applied Science in Rapperswil, and the Department Board for providing such a unique opportunity to make a development proposal in a context that it is not common for the department. The assessments of both Professor Thomas Matta and Kurt Gilgen has been very valuable for the elaboration of the bachelor work.

Andrew Leyel is an architect ETH and my husband; he did a Master of Advanced Studies in building in developing countries on the subject of the Ilha de Moçambique. He is currently also doing a MBA with a business study related to the Island. Without his professional assistance and his help with the family during the last three years it wouldn't have been possible to reach this point and produce this document. With all my heart I thank him.

Architect Arlindo Dgedge, National Director of the Directorate of Territorial Planning in Mozambique, has contributed significantly to my understanding of the potential and problems of planning in Developing Countries through the discussion of the problem and the presentation of his own experiences in Mozambique. His review of my work and guidance has been most helpful.

The last three years were a great experience for me and I was also able to advance because of the support and understanding of my colleagues of the class R05. I thank all of you for the friendship and collaboration, especially with Viktoria Slukan.

Last but certainly not least I would like to thank my parents In law, Peter Leyel and Janet Leyel for all their private support and making sure my kids still recognised me when I came home after study.

The special thanks go to my boys John and Alan Leyel, they were my greatest inspiration, without then my work would not have made sense. You are the future and the proof of the exchange of cultures.

Yolanda Leyel

Diplom, Spatial Planning in Mozambique

## LIST OF ACRONYMS

AUSAID	Australian Development Agency
Bairro	Portuguese term for borough or neighbourhood.
CDS	Coastal Development Strategy
DANIDA	Danish International Development Agency
DNPC	Direcção Nacional de Património Cultural
FRELIMO	Mozambican Liberation Front; formed by Eduardo Mondlane as the unified front for the various political and military independence movements opposing the Portuguese colonial rule. Since 1975: political party in power, democratically elected in 1994, 1999 and 2004.
ICOMOS	International Council of Monuments and Sites
IFC	International Finance Co-operation, Private Sector Unit of the World Bank.
IMF	International Monetary Fund
LAM	Lineas Aerias de Moçambique, the national airline.
Macuti	The Bantu term for a palm-leaf roof.
MICOA	Ministry for the Co-ordination of Environmental Affairs
MOZAL	Mozambican Aluminium Smelter: US\$1.4 billion venture operating in the City of Matola, Maputo Province.
MZM	Metical, Mozambican currency (June 2008: approx. 24 MZM = 1 US\$)
NORAD	Norwegian Development Co-operation Agency
PADEM	SDC assistance program for decentralization and municipalization.
RENAMO	National Resistance Movement; initiated by the Rhodesian secret service and supported during the civil war by the South African apartheid regime and, by extension, the CIA and NATO. Since the 1992 Peace Accord: main opposition party.
SADC	South African Development Community
SDC	Swiss Agency for Development and Co-operation
SDI	Spatial Development Initiative, South African territorial planning unit.
UNOMOS	United Nations peacekeeping forces deployed to demobilise the civil war fractions and supervise the first national elections.
WTO	World Trade Organisation
ZAR	South African Rand
ZZM-GT	Zambia-Malawi-Mozambique Growth Triangle; Trade and development pact

UNESCO	United Nations Educational, Cientific and Cultural organization.
MDG	Millenium Development Goals
USAID	United States Agency for International Development
UNDP	United nations Development Programm
PARPA	Action Planfor the Redution of Absolute Poverty







# Introduction



# 1 Introduction

## 1.1 Background of the Bachelor Thesis

The Ilha de Moçambique was declared a World Heritage Site in 1991 as “a former Portuguese trading-post on the route to India. Its remarkable architectural unity is due to the consistent use, since the 16th century, of the same building techniques, building materials (stone and macuti) and decorative principles”.

With the transfer of the capital to Maputo (former Lorenzo Marques), the lack of a deep-sea port and the demographic shift after independence, the Ilha de Moçambique lost its economic basis. During the civil war much of the surrounding population sought refuge from the turmoil on the mainland on the island. As a result the indigenous areas on the island are severely overcrowded while the Stone Town is largely deserted and in decline. If the cultural and physical heritage is to be preserved, a new socio-economic focus must be found.

The author is convinced, essential components for a successful development are given by the international interest invested in the site. What is however missing is an appraisal of the existent development proposals, relevant for the development of a unified vision and strategy that coordinates further progress. For the following reasons she is convinced she can make a significant contribution to this process:

- Mozambique is a priority country for the Swiss Development Cooperation. The annual budget is approx. CHF 30 million. The emphasis is on civil society, water and health. These problem complexes are given on the island in an exemplary manner.
- The skills of spatial planning learnt at the Swiss Technical University of Rapperswil (HSR), are a valuable complementation and extension of the experiences gained at the National Institute of Spatial Planning and in private praxis in Mozambique.
- The project can build on significant prior work. This work is related on the one hand to the personal background of the candidate; on the other hand to current questions raised in national and international planning efforts regarding informal settlements in developing countries.

## 1.2 Problem

Many projects of development collaboration are concerned with the development of the Ilha de Moçambique. Nevertheless the living conditions have only marginally improved. In addition the few successes, for example the restoration of significant buildings, are dependent on continued subsidies.

A major reason for this situation seems to lie in the lack of coordination of the individual development projects. Particular aspects such as the preservation of historical monuments, the health sector or the sewage situation are addressed partially



and according to the relevant budget constraints. What is largely missing is the coordination of the individual projects towards a unified and above all sustainable goal.

On the national level targets have been defined, within the context of the fulfilment of the „Millenium Development Goals“, for the improvement of informal settlements (slum upgrading). According to the statements of the national director of spatial planning, Arlindo Dgedge, these are at the moment still general strategies and will in the following stages be adapted to specific sites. For the Ilha no plan has yet been developed.

The Swiss Development Cooperation (SDC) is aware of this situation and has as a first step assembled an inventory of the current projects. It is however beyond their scope of operation to assume the lead function for the coordination of development.

There is consent regarding the lack of infrastructure particularly in the southern part of the city where the large majority of the population lives. Here approximately 12'000 people dwell in 0.5km<sup>2</sup>, this corresponds to approx. 41m<sup>2</sup> per person. The inadequacy of the situation is visible in the lack of hygiene, light, fresh air and basic infrastructures such as clean water and proper sanitation; generally there is no proper distinction between the private and the public areas. These people largely live in straw houses and earn their livelihood within the same structures.

A further consequence of this situation is that the main potential of the island, i.e. its cultural heritage and the attraction for tourism this could mean, is largely undermined.

### 1.3 Objectives

The aim of the bachelor thesis is a contribution to the development of a planning strategy for the sustainable spatial development of the Ilha de Moçambique and the protection of the cultural heritage for future generations.

- As a first step the current development context needs to be understood.
- Then the major drivers sustaining today's situation must be located and discussed.
- Finally a proposal for a new approach is to be elaborated and documented on the Island level and in a focused intervention project.

## 1.4 Results

The planning efforts for the revival of the Ilha begin with the “Blue Book” and the inclusion of the Island in the UNESCO list of World Heritage. Despite a long legacy of interventions and development projects the situation on the Island has not substantially improved and sustainability is not in sight

This report locates the main problem as the Macuti Town situation. The impoverished population lives in conditions that are overcrowded and unhygienic. This is a strong impediment for development proposals following the main asset the Island possesses – namely its heritage potential for tourism.

The author proposes a change of paradigm regarding the perception of the Macuti Town. By focusing on the positive aspects of a young, vibrant community a strategy is proposed for activating the population and changing the perception from the outside.

Key to this strategy is a focused intervention strategy based on the definition of a few elements that could instil a new self-confidence in the Macuti population and resolve some of the most pressing issues of sanitation and public spaces.

These elements are:

- An entrance park with public games and sufficient shade,
- A marina for small boats that link to the mainland and provide water-sports and recreational fishing opportunities,
- A communal centre with sports and market facilities.

These interventions are placed within a more general context that is outlined in land-use plans for the mainland and island areas.

## 1.5 Methodology

### 1.5.1 Analysis

#### Available data

Much data is available on the Internet. This includes national statistics and donor documentations. In addition the author had access to the books referred to in the appendix and plans received during the site visit in March 2008. The sources are indicated in the report.

#### Summary of the existing studies and actions

It is not possible to seriously address the situation of the Ilha de Moçambique without an in depth reading and assessment of the existing studies and proposals. So as to make some of this background accessible to the reader five relevant studies have been selected and are discussed in the chapter 5. The idea is to provide the back-



ground and scope of these studies, briefly summarise their most important statements and the methodical approach they use and give a critical assessment using the benefit of current hind-sight.

#### Interviews / Site visit

The site was visited for the last time for ten days in March 2008. A representative of the DANIDA 7-Cities Program, Johann Boerekamp, was on site and available for extensive discussion. In addition the author was able to contact the local municipal authorities, particularly for the Macuti Town area, and representatives of the local population.

Structured interviews with 30 representative members of the Macuti Town population were conducted.

In the capital Maputo she was able to discuss the Island and ongoing projects with the project responsible for the Swiss Embassy, Nobre Canhanga, and extensively with the national director for territorial planning, Architect Arlindo Dgedge.

#### 1.5.2 Goal Definition

Following the vision of a change of paradigm the following main goals were defined:

- Urban upgrading of the physical space
- Upgrading of the socio-economic situation
- Upgrading of the basic infrastructure

#### 1.5.3 Strategic Concept

Based on the financing the Island currently receives, a set of priorities was defined and the possible implications for the development were outlined.

Within this framework the key aspects of the Macuti Town development are studied in more detail and an intervention project is elaborated.

#### 1.5.4 Framework for Implementation

A principal step necessary for the continued development of the island is the alignment of the stakeholders. The development strategies on the national, regional and local level need to be coordinated and focused on a single vision.

A steering committee for the implementation was defined. Participation of the local population in the decision making process is maintained.





# Context



## 2 General Context

### 2.1 Geography



Figuer 1: Location Map, Source of Image: USAid

Mozambique is located on the southeast coast of Africa. It is bound by Swaziland to the south, South Africa to the southwest, Zimbabwe to the west, Zambia and Malawi to the northwest, Tanzania to the north and the Indian Ocean to the east. The country is divided into two topographical regions by the Zambezi River. (1.) North of the Zambezi river, the narrow coastline moves inland to hills and low plateaux, and further west to rugged highlands, which include the Livingstone-Nyasa Highlands, Namuli or Shire Highlands, Angonia Highlands, Tete Highlands and the Maconde Plateau. (2.) South of the Zambezi River, the lowlands are broader with the Mashonaland Plateau and Lebomo Mountains located in the Deep South. The country is drained by five principal rivers and several smaller ones with the largest and most important the Zambezi. The country has three lakes, Lake Nyasa or Malawi, Lake Chiuta and Lake Shirwa, all in the north.

The current national population estimate is 20.5 million inhabitants. Major Cities (pop. est. 2007), Maputo city 1.099. Million, Beira 436,240, Nampula 477,900. The density is approx. 26 persons per sq. km (2007 Census). Population growth is 1.48 % per annum (adjusted for HIV/AIDS). Compared with the census of 1997 the population grew in 28 % according to census of 2007. Land Use; forested 18%, pastures 56%, agricultural-cultivated 4%, other 22% (1993).

Mozambique has a tropical climate with two seasons; a wet season from October to March and a dry season from April to September. Climatic conditions, however, vary depending on altitude. Rainfall is heavy along the coast and decreases in the north and south. Annual precipitation varies from 500 to 900 mm depending on the region. Cyclones are also common during the wet season.





## 2.2 History

Due to climatic change and overpopulation Bantu tribes begin moving south from the Sahara regions during the 3rd century A.D. They settle in what is today Mozambique bringing with them the Iron Age and introducing agriculture. From approx. 1000 A.D. trade of gold, ivory, shells and skins begins with Arab, Persian and Asian seafarers. From the 12th to the 14th century the Shona Empire, based on what is now known as Great Zimbabwe, dominates the region between the Zambezi and Limpopo rivers. This empire is succeeded by the Monomotapa Empire which develops rich gold mines. All along the coastline of East Africa Arab traders settle bringing with them the Islamic culture. The hybrid culture that evolves is known as Swahili.

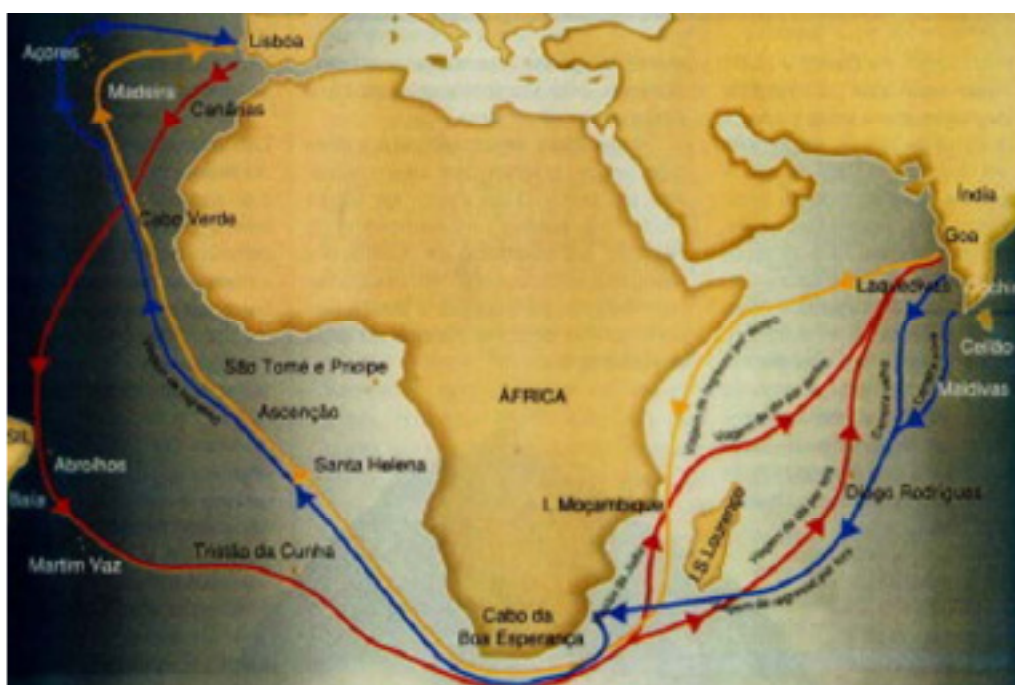


Figure 2: Map of the Portuguese trade routes.

In 1493 the Portuguese explorer Vasco da Gama reaches the shores of Mozambique with four ships searching for a sea route to India. They are well received in Maputo and then sail on to the island town of Mozambique where they immediately enter in conflict with the Arab traders and Swahili population. In the year 1500 Vasco da Gama returns and, within a short period of time, establishes fortified trading posts while destroying most of the Islamic-African culture in the process.

Throughout the 16th century settlers from Portugal arrive, while the Portuguese crown secures its trade to India by re-supplying its ships on the Mozambican coast. After a period of relative independence from Portugal and integration with the local population, Mozambique is officially declared a colony in 1752 and the slave

trade begins. By the beginning of the 18th century the slave trade has become an important economic factor. The Portuguese trade flourishes after the British ban it in 1807 and continues, despite official banning in 1869, until around 1900.

In 1878 Portugal can only control the southern part of now-a-days Mozambique; the northern part is leased to trading companies. Pressure from rival European Nations (predominantly the British and Germans) continues to rise as Portugal loses its strength as a colonial power. In 1891 a treaty with the British secure the modern day borders. The Gaza Empire in the south of Mozambique gains considerable power through participation in the slave trade and, despite submission by the Portuguese in 1915, is able to maintain predominance still relevant today.

In 1926 a military coup brings the fascist dictator António O. Salazar to power in Portugal. From 1932 onwards he pursues a policy of exportation of rural population from Portugal to the colonies combined with a separation of the people along racial lines. The Catholic Church introduces the concept of "assimilados" for Africans who forfeit their local tradition and adopt the Christian faith. In return they are (at least in theory) granted access to basic education.

At the beginning of the 1960s attempts at self-rule are put down in the massacre of Mueda in the northern province of Capo Delgado, killing approximately 500 peaceful demonstrators. However, other colonies in Africa and across the world are gaining independence and the independence party FRELIMO gains popular support, despite Portuguese suppression. In 1964 an armed struggle for independence begins under the leadership of Eduardo Mondlane and directed from Dar es Salaam in the newly independent State of Tanzania.

### Recent History

In April 1974 the fascist regime in Lisbon is exhausted from fighting colonial wars in Mozambique, Angola and Guinea Bissau. Salazar is removed in a military coup and new freedoms are bestowed on the African colonies.

On June 25, 1975 Mozambique becomes independent and Samora Machel becomes the first president in a FRELIMO single-party system. In a chaotic transition many of the white Portuguese leave the country, destroying much of what they leave behind and taking with them the know-how needed to run a modern state.

FRELIMO attempts to form a new society based on nationalisation and collective farms and industries. Education is given high priority and the health system is opened for all. Mozambique receives economic support from the Soviet Union and its allies and from the Nordic Countries of Europe. However, in the context of the cold war, the neighbouring countries of Rhodesia and South Africa consider Mozambique a threat and begin a destabilisation campaign backed by the CIA and NATO.



After FRELIMO gives support to the ANC in South Africa and the ZANU resistance party in Rhodesia, the Rhodesian intelligence service forms the opposition movement RENAMO to fight back within Mozambique. This movement becomes a rallying point for whites who lost possessions or fear the spread of the Mozambican example, for former FRELIMO leaders who oppose the leftist approach or ingrate themselves with the current leadership and for traditional leaders who believe in the indigenous structures and religious healings and are not integrated into the new socialist society.

During the 1980's Mozambique sinks deeper and deeper into the depths of civil war. RENAMO pursues a tactic of economic destabilisation and terror. FRELIMO responds in kind and finds its own soldiers engaged in rape, plundering, killing and press-ganging of young men into its army. Besides recurrent periods of famine one of the results is the internal displacement of a large proportion of the population, this includes the flight to the islands off the coast.

In 1986 the President Samora Machel is killed in a plane crash and the more moderate Joaquim Chissano is elected as the new president of FRELIMO. In 1989 the Marxist-Leninist doctrine of FRELIMO is officially omitted from the party programme. As RENAMO still does not have a concept of government, other than the destruction of the FRELIMO party, the civil war has lost all justification. The end of the cold war opens an opportunity for peace. From 1990 the Protestant and Catholic Church are able to initiate negotiations that finally lead to a cease-fire in 1992 and the holding of free elections in 1994, held under the observation of the UN and prepared for by the UNOMOS peace force.

FRELIMO wins the elections by a 44% to 38% margin over RENAMO. However, they must concede that a large percentage of the population does not identify with their programme. In 1999 FRELIMO again wins the elections in a very close contest. RENAMO is reluctant to accept the results and some tragic incidences<sup>1</sup> in the centre and north of the country show how fragile the peace is, despite a tangible desire for peace throughout the population. Among the political elite, a predominant stabilizing factor is the dependence of both parties on international assistance for continuation of programmes for modernisation and development, and therefore also for maintaining their power base. For obvious reasons these considerations are most apparent to the ruling FRELIMO party. It has established long-term relationships with the donor community and operates from a privileged position that it finds very hard to share.

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1 Riots in Montepuez, Cabo Delgado Province; 84 dead from suffocation after imprisonment.

## The Municipal Election

In the 1992 General Peace Accord reform of local government was agreed upon and the modification of districts into municipalities with a degree of autonomy was intended<sup>2</sup>. This would have put an end to the often conflicting double tutelage, inherited from the Portuguese separation of rural and urban government, with overlapping responsibilities and sovereignty.

However, in 1997 the FRELIMO central government succeeded in weakening the proposed laws. Nevertheless, in 1998 the creation of 33 municipalities (out of a total of 128 districts) with limited fiscal, administrative and patrimonial autonomy was enacted, thereby strengthening local government through a process of decentralization. Their mayors and members of the municipal assembly were elected directly by citizens in local elections held in 1998 and 2003.

The latest elections resulted in five provinces having RENAMO governments; these include the Ilha de Moçambique municipality.

## 2.3 Economic Situation

### 2.3.1 Key Economic Data

With 70 percent of its population classified as poor and a third of those living at or below the subsistence level, Mozambique is among the poorest countries of the world.<sup>3</sup> Of the total population of 20.5 million 80% live in rural areas.

Mozambique is, however, one of the world's fastest-growing economies as well as one of its most heavily indebted and most impoverished. Over the last three years the Mozambican economy has grown at a rate of 9%. Through the Heavily Indebted Poor Country (HIPC) initiative the external debt has reduced from US\$ 6 billion to US\$ 1.7 billion. Due to the floods of 2000 and 2001 and the elections of 2000 the inflation rate jumped to 12.7 and 21 percent. However, prior to these events, inflation had been reduced to 3 percent per annum.

The current rate for consumer goods inflation is approx. 14%. This is to some extent due to the increase in the ZAR (South African Rand). The exchange rate against the US\$ has been steady since 2002 (MZM 24 to US\$ 1). A Value Added Tax of 17% was introduced in 1999 and has had a positive effect on fiscal revenue.

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2 See "Democratic decentralization in Mozambique?", Einar Braathen, Norwegian Institute for Urban and Regional Research, Newitt, Malyn and Patrick Chabal & Norrie Macqueen, 2003, Community & the State in Lusophone Africa, London: King's College.

3 The poverty reduction strategy paper (PRSP) defines "poor" as consumption expenditure of less than US\$0.50 per day and "abject poverty" as consumption expenditures of US\$0.30 or less per day.



Economy	2000	2005	2006
GNI, Atlas method (current US\$)	4.2 billion	6.0 billion	6.5 billion
GNI PPP (\$ millions), 2006	7.7 billion	12.9 billion	13.9 billion
GNI per capita, Atlas method (current US\$)	230.0	290.0	310.0
GNI per capita PPP (\$), 2006	420.0	630.0	660.0
GDP (current US\$)	4.2 billion	6.6 billion	6.8 billion
GDP growth (annual %)	1.1	8.4	8.0
Inflation, GDP deflator (annual %)	12.0	8.8	6.0
Agriculture, value added (% of GDP)	22.9	26.9	28.3
Industry, value added (% of GDP)	23.4	25.3	25.9
Services, etc., value added (% of GDP)	53.7	47.8	45.8
Exports of goods and services (% of GDP)	17.5	32.9	41.4
Imports of goods and services (% of GDP)	37.0	42.3	47.5
Gross capital formation (% of GDP)	31.0	18.7	19.3

Mozambique at a glance (source: World Bank group)

The south of the country, through its proximity to South Africa, has attracted most of the economic development. In 2001 foreign direct investment in Maputo province accounted for 93% of the national figure.

### 2.3.2 World Bank Assessment

In 1984 Mozambique became a member of the World Bank, the International Monetary Fund (IMF) and the Lomé Convention.

Since 1992, the government has earned a reputation for prudent macroeconomic management. Growth has averaged close to 10% per year. Inflation is estimated to be approximately 5 to 7 percent annually through 2010.

Current “mega projects” such as the Mozal aluminium smelter (US\$1.34 billion) and the Corridor Sands Titanium project (US\$1.2 billion) have led to large investments in the country. By the end of this year they should account for 84% of the total export and reverse the balance of trade deficit.

Mozambique’s resources and geography imply an export significantly beyond the current level. Mozambique has abundant farmland and is rich in natural resources, including oil, gas, and minerals. The country’s location makes it ideally suited to be a transportation hub. Mozambique shares borders with several other countries, and has a long coastline dotted with deep ports. Pressure on natural resources along the coast, in urban areas, and along the major transport corridors is increasing.

At present less than 15% of productive land is under cultivation. The low utilization rate, combined with the ability to produce a variety of crops, suggest vast potential for the expansion of agriculture.

Over the last decade Africa has experienced an average annual growth of 6.6 percent in international tourist arrivals. Arrivals to southern Africa alone grew by 18.2 percent per year during this period. The growth of tourism in poor countries has a positive impact on these country's economies. Natural and cultural heritage projects, when properly planned and managed, can generate economic gains that often directly benefit the poor.

### 2.3.3 International Partnerships

Mozambique's foreign policy has become pragmatic. The two main pillars of Mozambique's foreign policy are maintenance of good relations with its neighbors and maintenance and expansion of ties to development partners.

During the 1970s and early 1980s, Mozambique's foreign policy was inextricably linked to the struggles for majority rule in Rhodesia and South Africa, as well as superpower competition and the Cold War. Mozambique's decision to enforce UN sanctions against Rhodesia and deny that country access to the sea led Ian Smith's regime to undertake overt and covert actions to destabilize the country, including sponsoring the rebel group RENAMO. After the change of government in Zimbabwe in 1980, the apartheid regime in South Africa continued to finance the destabilization of Mozambique.

The 1984 Nkomati Accord, while failing in its goal of ending South African support to RENAMO, opened initial diplomatic contacts between the Mozambican and South African Governments. This process gained momentum with South Africa's elimination of apartheid, which culminated in the establishment of full diplomatic relations in October 1993. While relations with neighboring Zimbabwe, Malawi, Zambia, and Tanzania show occasional strains, Mozambique's ties to these countries remain strong.

In the years immediately following its independence, Mozambique benefited from considerable assistance from some western countries, notably the Scandinavians. Moscow and its allies, however, became Mozambique's primary economic, military, and political supporters and its foreign policy reflected this linkage. This began to change in 1983; in 1984 Mozambique joined the World Bank and International Monetary Fund. Western aid quickly replaced Soviet support, with the Scandinavians, the United States, the Netherlands, and the European Union becoming increasingly important sources of development assistance. Italy also maintains a profile in Mozambique as a result of its key role during the peace process. Relations with Portugal, the former colonial power, are complex and of some importance as Portuguese investors play a visible role in Mozambique's economy.

Mozambique is a member of the Non-Aligned Movement and ranks among the moderate members of the African Bloc in the United Nations and other international organizations. Mozambique also belongs to the Organization of African Unity/ African Union and the Southern African Development Community. In 1994, the





government became a full member of the Organization of the Islamic Conference, in part to broaden its base of international support but also to please the country's sizeable Muslim population. Similarly, in early 1996 Mozambique joined its Anglo-phone neighbors in the Commonwealth. In the same year, Mozambique became a founding member and the first President of the Community of Portuguese Language Countries (CPLP), and maintains close ties with other Lusophone states.

#### 2.3.4 Regional Partnerships

Mozambique is a member of the 14-country Southern African Development Community (SADC). The SADC Trade Protocol became effective in September, 2001 and foresees the harmonization of customs procedures, the reduction of tariffs and the adjustments of quotas. South Africa is the leading market for SADC progression and accounts for 37% (excluding prawn exports) of export and 40% of imports to and from the Mozambican market. South Africa is likely to become an even more important trade partner in the future.

#### 2.4 Governance and Decentralization

The necessity of donor initiatives directed at improving the competence and quality of service within the government body is widely recognized. Despite reluctance on the part of the centralised national government, decentralization is acknowledged as a necessary process. A large first step has been taken in the relative autonomy granted to 33 municipalities, including the Ilha de Moçambique, in the municipal elections of 1998 and 2003.

The Programa de Apoio a Descentralização e Municipalização (PADEM) of the Swiss Agency for Development and Cooperation (SDC) is focused on five municipalities, one of them is the Ilha de Moçambique.

#### 2.5 Development Framework and Strategies

##### 2.5.1 General Framework

The World Bank, IFC and WTO consider high growth rates over a number of years the most efficient method for poverty alleviation. As the internal market is too small, they see increased exports as the only viable method. This approach is justified by a correlation of empirical poverty alleviation and growth factors drawn from developing countries around the world. It follows that their policies are directed towards the abolishment of trade barriers and the streamlining of production. To be effective for the whole society these measures must however take place within a regulatory framework that provides economic opportunities and income to the poor. One of the most promising concepts is seen to be public-private ventures, as are manifested in the Nacala and Maputo corridor projects. The legal, fiscal and socio-economic framework for large-scale infrastructure projects is set up and

monitored by the state, the private sector is encouraged to manage the project implementation and benefit from the manifold spin-off opportunities.

South African planning has coined the term Spatial Development Initiative (SDI) to refer to projects focused on zones where there is regarded to be economic potential, which can be "unlocked" and leveraged through planning and investment. The results of this approach vary largely and the reasons for these differences are currently being analyzed<sup>4</sup>.

### 2.5.2 Spatial Planning Framework

The National Directorate for Territorial Planning (NDTP) is an institution under the Ministry for Coordination of Environmental Affairs (MICOA). The NDTP is concerned with issues linked with land planning on different levels and according to different aspects.

This institution is responsible for the elaboration and implementation of planning instruments that public and private authorities need to be able to meet their goals on a national level.

#### National law of spatial planning

In May 2007 the first national law of spatial planning was approved. This law makes the position and perception of the importance of spatial planning stronger and is universally valid. The law makes clear definitions of the planning instruments and competences each province, district, city and community has for sustainable land management.

#### Land use law

In 1997 the Land Law was revised. However, the principle of ownership by the state was maintained. The new law foresees commercial land leases, land that is delimited by communities, land where communities live and have rights and reserves and protected areas where people also live. The constitution confirms people's right to land where they live. The individual is strengthened in his personal rights, however also commercially restricted, as his ability to trade land is limited. In addition investment is hindered as the use of land as collateral is difficult.

### 2.5.3 Strategic Tourism Plan

In October 2004 a Strategic Plan for the Development of Tourism was passed by the Mozambican government. The tourism minister Fernando Sumbana declared the vision as follows: "By 2025 Mozambique will be the most vibrant, dynamic and exotic tourist destination in Africa".

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The Australian Development Agency (AUSAID) and the World Bank are providing technical and financial support for the strategy. Sumbana argued that tourism is contributing to the struggle against poverty in Mozambique, through investment that creates jobs, and also stimulates other sectors of the economy, including the construction industry, transport, agriculture and fisheries. Tourist establishments employed 25,000 workers in 2000, and this figure rose to 32,000 in 2003 - an average annual increase in employment of eight per cent.

"We strongly believe that tourism will make a difference in this country", declared Sumbana. "Tourism will bring high returns to investors and will contribute substantially to the state budget".

A detailed budget for the marketing and promotion strategy runs to about two million dollars. The total budget for a five year plan of action (2004-2009) is 57.3 million dollars. The strategic plan claims as among Mozambique's strong points the two marine national parks (the Bazaruto and Quirimbas archipelagos), the lengthy coral reefs along its extensive coastline, the highest sand dunes in the world, and the largest populations of the rare marine mammal, the dugong.

But there are formidable difficulties to be overcome. One is the sheer difficulty in reaching some of the more remote attractions. Another is that Mozambique is not served by many airlines - the only European city with direct flights to Mozambique is Lisbon.

### 3 Ilha de Moçambique

#### 3.1 Geographic and Morphological Situation



Figure 3: Map of the Nampula Province

The Nampula Province is bounded on the north by the river Lurio and in the south by the river Ligona. To the East lies the Indian Ocean and the Mozambique Channel. Its most prominent geological features are the protruding granite rocks that surround the capital and are spread throughout the province. These formations are responsible for the deep-sea harbour of Nacala and produce a coastline that stands out from the sandy river-deltas that dominate much of the Mozambican seashore

The District of the Ilha de Moçambique is situated on the coast of Nampula province. Ilha de Moçambique is divided in two localities: The Ilha de Moçambique locality and Lumbo on the mainl. The Ilha locality which consists of the Mozambique island and other three smaller islands.

The Ilha de Moçambique is an island off the East coast of Africa. It lies on the South 15th Parallel approximately 2'000km north of the capital city Maputo. A bridge of 3.6km length links the island to the mainland. The island is about 3km long and between 200m and 400m wide; the area is approximately 1km<sup>2</sup>. See appendix 1 for a map of the Island location and appendix 2 for an overview map of the Island.

The island is divided into two regions. The northern half of the island consists of the city of stone and chalk, the southern half is the city of "macuti". This Swahili name derives from the palm leaves used for covering the indigenous huts. The di-



vision between the two areas is a straight line following the walls of the municipal hospital.

### 3.2 Brief History

Inhabited by a Bantu tribe, the territory of Mozambique was occupied circa 900 A.D. by Arabs who set up trading posts.

In their search for a maritime route to India to avoid Muslim forces, the Portuguese decided to go around the continent of Africa. John II (1481-1495) sent Bartolomeu Dias to explore the African coast. Sailing beyond the coast of the Congolese kingdom, the great navigator rounded the extreme southern tip of Africa, unaware of the feat he had accomplished. It was not until his return that he discovered the “Cape of Storms”, which John II renamed Cape of Good Hope.



Figure 4: Historic Map of the Ilha de Moçambique

Manuel I (1495-1521) ordered Vasco da Gama to continue the search for a maritime route. Leaving Lisbon in July 1497, he reached the Island of Moçambique on 2 March 1498, where he was well received by the sultan and the people who thought the Portuguese were Muslims. During his second voyage, he occupied the territories of present-day Mozambique and returned to Lisbon in 1503 laden with gold. Some years later, the Island of Mozambique had become one of Portugal's principal ports and trading posts on the sea route to India.

The first fortress St. Gabriel, later known as the old tower, was built in 1507. The much larger fortress of São Sebastian occupies the northern point of the island. Construction was begun in 1588 and completed in 1620, after work was interrupted by unsuccessful Dutch attacks in 1607 and 1608. The fort was heavily guarded and withstood attacks from the Omani Arabs in 1670, the British in the 18th century and the French at the beginning of the 19th century. Its impressive ramparts are still standing today.



Figure 5: Ramparts of the fortress São Sebastian.

The Chapel of Nossa Senhora de Baluarte was built in 1522 and is considered the oldest European building in the southern hemisphere. The Chapel is situated at the northernmost point of the island, where Vasco da Gamma built the first artillery position during his first trip to India to defend the island against the Arabs. It is Manuelino architecture, a building style of the late Portuguese Middle Ages.



Figure 6: Chapel of Nossa Senhora de Baluarte, built in 1522.

The Church of the Misericórdia dates back to 1535 and was established by a Portuguese religious order. This House of Mercy also operated the old hospital of the island. Today it houses a museum which displays religious ornaments, carvings and paintings. One of the most impressive pieces is a statue of the Queen of Portugal created in the 17th century.





The Dominican and the Jesuit Orders founded churches and convents on the island. An imposing red building on the main square was built as a Jesuit convent in 1674 and served as the governor's palace after the expulsion of the Jesuit Order in all Portuguese dominions in 1759 until the transfer of the capital to Lorenço Marques in 1898. Today the building is a museum displaying furniture from Goa and India, exquisite carpets, Chinese porcelain, paintings and other artifacts of the colonial period.



Figure 7: Church of the Misericórdia dating back to 1535

At the end of the 17th century, after enjoying strong economic expansion, the town with its fortifications, along with the much smaller fortified island of St. Laurent, went into a period of decline.

In the second half of the 18th century, the economy was revived by the slave trade. The following prosperity found its expression in plantation houses and town mansions, found throughout the Stone Town, and in public buildings such as the main hospital.

In 1898 the capital of Mozambique (the Portuguese colony) was transferred to Laurenço Marques (Maputo), considerably slowing down the economy of the town on the island of Mozambique. The town had developed unequally over nearly 400 years. Less than half of it was built of stone, a bit more than one-fourth in macuti, with the remainder being the various fortifications.

The incredible architectural unity of the island derives from the uninterrupted use of the same building techniques with the same materials and the same decorative principles. The island's patrimony includes its oldest existent fortress (São Sebastião, 1558-1620), other defensive buildings and numerous religious buildings (including many from the 16th century).

The island has been classed on the national level and for about ten years has benefited from restoration work and studies by international specialists (UNESCO sent

experts there in 1981). However, while the present state of conservation is not fully satisfactory, a restoration and management program is in progress.<sup>5</sup>



Figure 8: Former governor's Palace and Museum.

### 3.3 Urban Development of the Ilha de Moçambique

One of its most unique properties is its urban structure. On the northern half the buildings are built of stone, using traditional methods of construction in chalk and coral stone for walls and roofs. On the southern half the buildings are largely built of sticks and plaster with roofs of palm thatch. The separation is abrupt and is marked by the neoclassical hospital complex.

Both parts, independently of the materials used, are unified by the structural grid that is formed by the addition of basic roughly square modules. The measure of this spatial module is defined by the structural span given by the use of Macusse wood that is resistant to insects and is used for ceilings.

The urban fabric from the first settlements of approximately 1600 to the situation in 1983 is documented in the "blue book". The following figures are taken from this documentation. They show the urban development of the island.

1600 - 1750: The fort San Sebastian is located on the north point of the Island. The city begins to form around the loading points for ships and consists of commercial buildings and warehouses.

1800 - 1900: Exceptional growth fills out the Stone Town areas. Along the coastal shore and main internal road representative buildings are built. The delimitation of Stone Town is drawn at the hospital complex constructed in 1877.

5 Excerpt from World Heritage List entry No. 599



The stone city reached its limits before the transfer of the capital to Maputo in 1897. From then on the town has been in decline. The Macuti areas filled in during the last century.

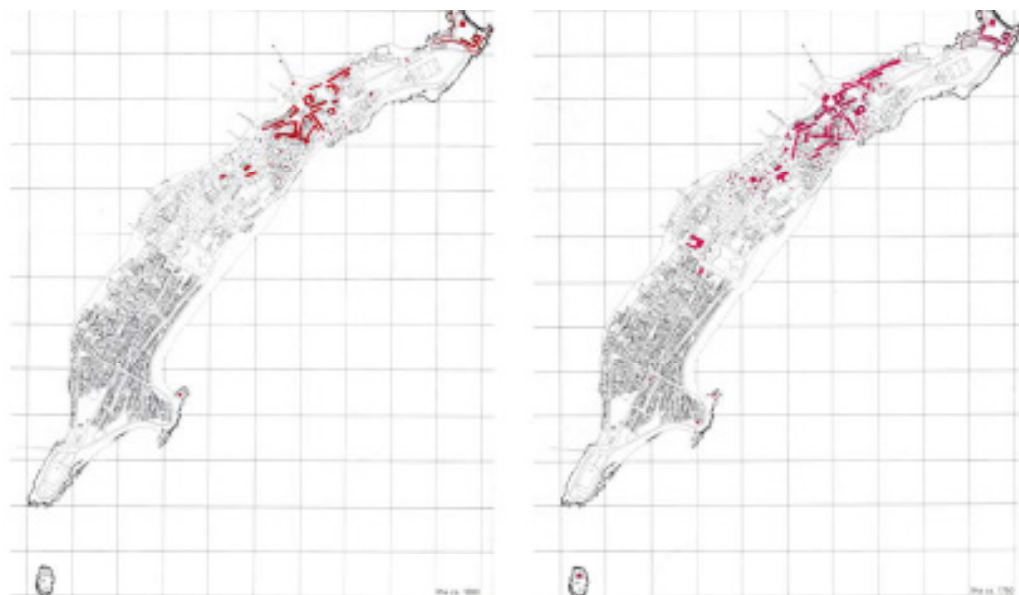


Figure 9: Urban plans of 1600 and 1750

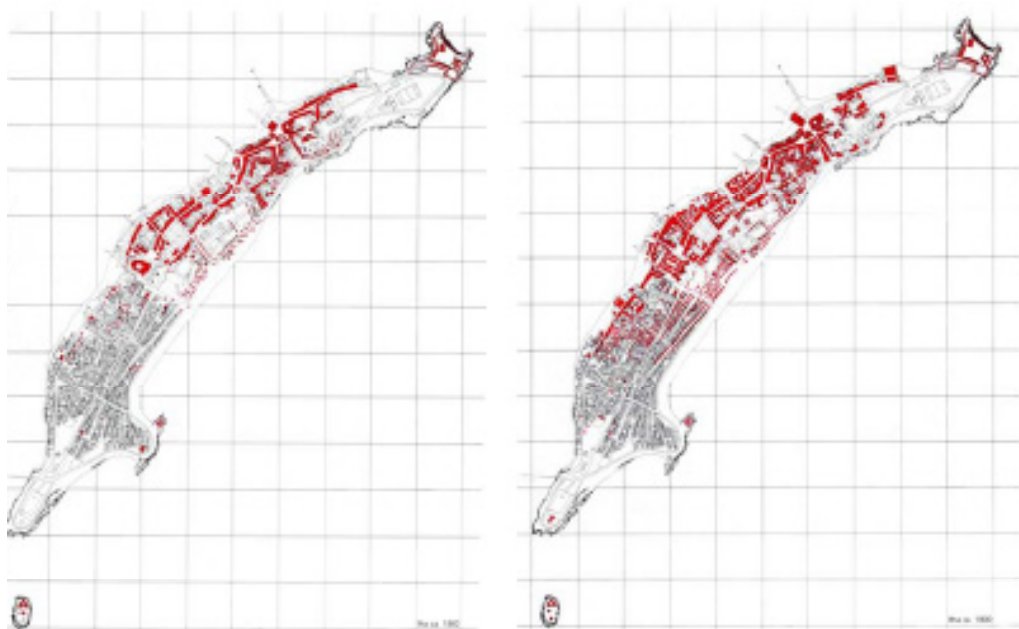


Figure 10: Urban plans of 1800 and 1900

The urban structure of the island is remarkably clear. The stone built town and the Macuti Town are sharply divided by the line across the island. The different urban structures within this stone built town can be clearly seen: To the south the 19th century clear grid layout, in the middle the 18th century carved narrow street system, which also encompasses the 17th century quarters, and which adjoins the open area in front of Fortaleza San Sebastian to the north.

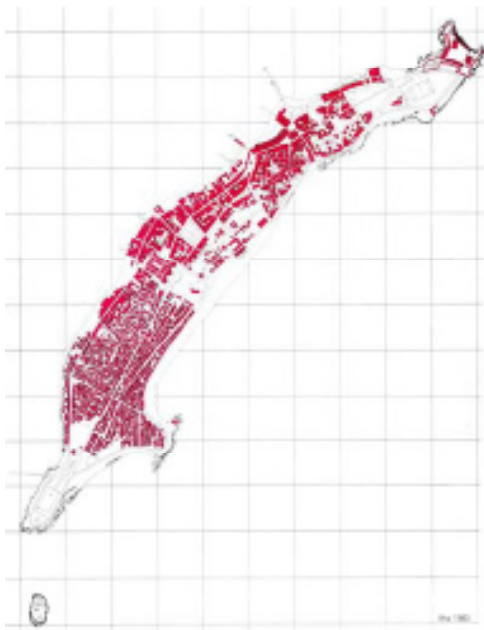


Figure 11: Urban plan of 1983

### 3.4 Socio-Economic Situation

#### 3.4.1 Population and Social Organization

Addressing the population issue is essential in outlining a possible development strategy. However, it is a delicate matter as it is necessary to make assumptions on questions of personal preference for the local population.

Data on the ethnic composition of the island population is sparse; its great diversity is however manifested. In 1822 the existence of 6 white families with a total of 120 members is documented<sup>6</sup>. At that time there were also 650 inhabitants of mixed race, 200 Canrins (Christian Indians from Goa), 180 Baneans, 500 Arabs or Moors, 800 Cafres and 5'000-6'000 slaves. In 1857-58 there were 86 Europeans, about 3'000 slaves and 300 freed slaves. The rest of the population is composed of 56 Baneans, 10 Persians, 38 Gentians, 46 Bathias and 221 Moors. The former

<sup>6</sup> Extracted from "Memória de Frei Bartolomeu dos Mártires", 1822





ethnic diversity has been replaced by a predominance of the people of the Macua tribe.

The population decreased from approximately 12'000 to 8'200 between 1962 and 1968 and, according to the general census of 1980, to 6'837 in 1980. According to the 1991 census 11'988 people lived on the island. This shows a significant increase, constituting almost a doubling of the population in little over a decade. As mentioned in 2.4 (Recent History) a large part of this increase is due to the armed conflict on the mainland. Current estimates for the Island population are between 12'000 and 13'000.

According to the census of August 2007, the population for the Ilha de Moçambique municipal area is 48.839. This includes the mainland areas with the village of Lumbo and the small islands of Goa and Sena. The municipal area is 226 sq. km. This would suggest a density of 188 inhabitants per sq. km. This is however misleading, as the island has approximately 1.5 sq. km and, as we have seen, is home to a significant part of the municipal population. The island population density is thus estimated at 8000 inhabitants/sq. km. This compares with about 3'650 inhabitants/sq. km for the city of Maputo and a national average of approx. 25 inhabitants/sq. km. Obviously the island is severely overpopulated.

Today approximately 14'000 people live on the island. A significant proportion of these are children and youths.

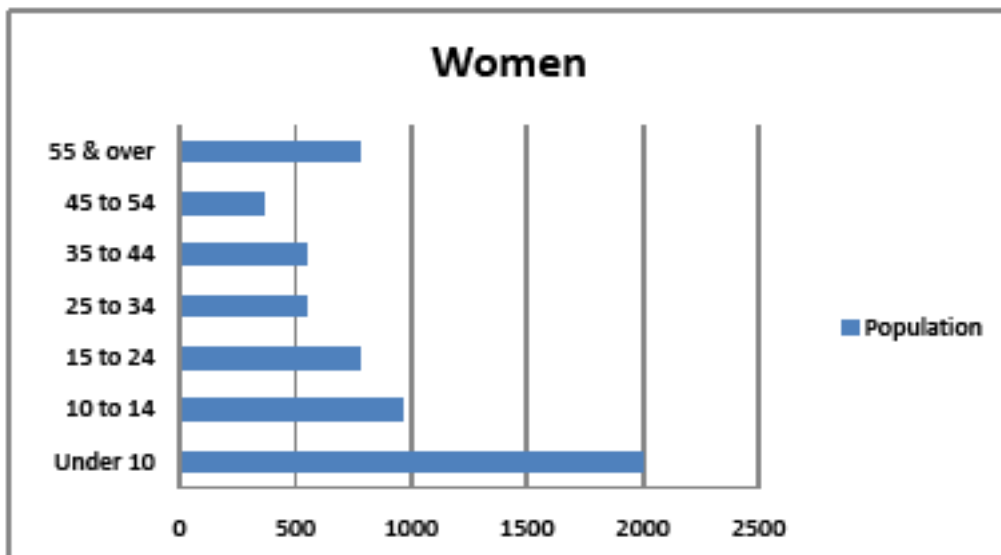
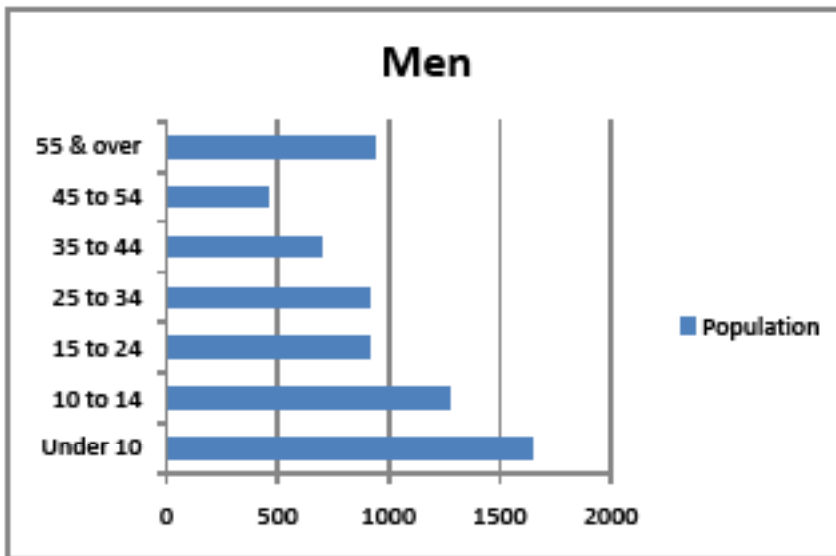
A family household on the island consists of an average of 5.77 members.<sup>7</sup>

Population growth has been estimated at 2.4% per annum on a national average. However, considering the impact of HIV/AIDS, the figure of approx. 1.5% is currently considered more realistic.

Breakdown of population by age, 1997

	Men		Women		Total
	%	Nr	%	Nr	
<b>Under 10</b>	<b>24.2</b>	<b>1650</b>	<b>33.3</b>	<b>2100</b>	<b>3650</b>
<b>10 to 14</b>	<b>18.6</b>	<b>1268</b>	<b>16.5</b>	<b>962</b>	<b>2230</b>
<b>15 to 24</b>	<b>13.3</b>	<b>907</b>	<b>13.0</b>	<b>780</b>	<b>1687</b>
<b>25 to 34</b>	<b>13.3</b>	<b>907</b>	<b>9.0</b>	<b>547</b>	<b>1454</b>
<b>35 to 44</b>	<b>10.2</b>	<b>696</b>	<b>9.0</b>	<b>549</b>	<b>1245</b>
<b>45 to 54</b>	<b>6.7</b>	<b>457</b>	<b>6.0</b>	<b>365</b>	<b>822</b>
<b>55 &amp; over</b>	<b>13.7</b>	<b>935</b>	<b>13.0</b>	<b>777</b>	<b>1712</b>
<b>Total</b>	<b>100.0</b>	<b>6820</b>	<b>100.0</b>	<b>5978</b>	<b>12800</b>

<sup>7</sup> Source: MICOA/IIP, 1999



Age pyramid of the Population of the Ilha de Moçambique (1997)

### Education

The Level and Quality of education it's an important issue in the Ilha where nearly half the population is under 25. Based on the report from the ministry of culture done in 1994, 72 per cent women were illiterate compared to 46 per cent of the men although this number includes the main land. The same report estimated that 89 % of pupils attended school till grad 5, with only 11 per cent of pupils going on to the two secondary schools.



### 3.4.2 Economic Situation

The main economic activity of the island inhabitants is subsistence fishing for the men and seasonal labour in agriculture, combined with collecting mussels and other seafood in the areas surrounding the island, for the women. In 1991 only 32% of the population pursued an economic activity.

Training and employment opportunities are limited on the island. Many families live at subsistence level.

### 3.5 Political Situation

The RENAMO candidate Gulamo Mamudo won the municipal elections of December 2003 by 53.1% of the popular vote over the FRELIMO candidate Mutafite Mutirua with 33.1% and the Independent candidate Jorge Simões with 13.8%.

RENAMO holds 12 seats in the assembly to the 8 seats for FRELIMO and one seat for UPI. As RENAMO boycotted the first municipal elections this is the first time the national opposition party is part of the executive and holds real political power.

Under the PADEM (Programma de Apoio a Decentralização e Municipização) program the SDC (Swiss Agency for Development and Cooperation) assists the municipal authorities of the Ilha de Moçambique to build up its governing capacity. The strategic importance of a successful transition of power to the opposition party and the constitution of a functioning municipal government, perceived as responsive to the needs of its electorate, is hard to over-estimate. The international attention given to this process is tangible<sup>8</sup>.

### 3.6 World Heritage Site

#### Inclusion in List of World Heritage Sites

Mozambique ratified the UNESCO Convention of Protection of Cultural and Natural World Heritage in 1982. The Town of Mozambique Island was adopted by the World Heritage List in 1991, as “a former Portuguese trading-post on the route to India. Its remarkable architectural unity is due to the consistent use, since the 16th century, of the same building techniques, building materials (stone and macuti) and decorative principles”.

#### Sister City Program with Bergen, Norway

The Cooperation between the City of Bergen and the City of Mozambique Island was initiated in Bergen in 1995, when the City of Mozambique Island requested the sup-

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<sup>8</sup> Mid-term review on SDC-Moçambique's PADEM, September 2002, Institute of Political Science, Prof. Dr. W. Linder, Lic. Rer. Soc. G. Lutz.

port of the City of Bergen. In 1999 the City of Bergen made the first official visit to the Ilha de Moçambique, during this meeting a tentative program for cooperation was outlined. Heritage Management was identified as the main concern of the partners.

The City of Bergen, the City Council of Ilha de Moçambique and the Direcção Nacional de Património Cultural (DNPC) have produced a digital map (GIS) for all of island which serves as base for developing projects including this work.

The provision of high quality digital maps will be a fundamental assistance for the development of a master plan. At the same time the existence of these maps highlights the need to integrate with ongoing development efforts.



## 4. Specific Context

### 4.1 Urbanization in the Developing Countries

The world is urbanizing rapidly; in the 1950's one third of the world population lived in cities, now, 50 years later this number increased to half of the population (UNCHS 2003). In the Sub-Saharan region the urbanization process took place at a rapid pace especially in the last decades.

The rapid urbanization, one of the greatest socio-economic changes during the last five decades or so, has caused the burgeoning of new kind of slums, the growth of squatter and informal housing all around the rapidly expanding cities of the developing world<sup>9</sup>.

Cities such as Accra, Lagos, Kinshasa, Nairobi, Lusaka and Dar es Salaam experience growth rates of more than 5% per annum. The urbanization process does not occur without problems (Kyessi 2002). Kyessi mentions that: "Among the most pressing and difficult problems facing cities and towns in the developing world are inadequate and deteriorating technical infrastructure and services. Technical or physical infrastructure refers to roads, drainage facilities, water supply, sanitation (sewage disposal), solid waste collection and disposal, electricity, telecommunication and the houses and buildings for which most of the infrastructure is created (UNCHS 1999). Despite the efforts made by world development agencies, national governments and urban authorities during the past two decades, many millions of people in the developing world still remain unserved with these basic services (...) Across Africa basic urban infrastructure services are inadequate and in a worsening state (Syagga 1992, Hardoy et al. 1999)" (2002; p.3).

Numerous worldwide organizations try to tackle the problem of poverty and the problems related to the urbanization process. The United Nations (UN) puts a lot of effort in solving both urban and rural poverty problems, with the implementation of the Millennium Development Goals. The UN defines urban upgrading (which partly consists of improvement of infrastructure provision) as a dimension of poverty reduction<sup>10</sup>. UN Habitat has launched several programs to guide the rapid urbanization process in the developing world. Recently the World Bank (WB) has become involved in a big urban upgrading project in co-operation with MIT University.

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9 The Challenge of Slums- Global Report on human Settlements 2003

10 The millennium Development Goals that are formulated by the UN have the overall to reduce poverty

## 4.2 Millennium Development Goals

In September 2000 World leaders met at the special Millennium Summit of the United Nations to establish a series of goals for humanity in the 21st century, based on the key policy documents from the series of major United Nations conferences held during the previous decade, including Agenda 21 and The Habitat Agenda. The summit's Millennium Declaration also outlined a wide range of commitments in human rights, good governance and democracy. At the General Assembly session following this Millennium declaration, a Road Map was established with a set of 8 specific global goals (the Millennium Development Goals or MDG) and 18 targets (MDG targets) for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women.

<b>Goal 1</b>	<b>Eradicate extreme poverty and hunger</b>
<b>Goal 2</b>	<b>Achieve universal primary education</b>
<b>Goal 3</b>	<b>Promote gender equality and empower women</b>
<b>Goal 4</b>	<b>Reduce child mortality</b>
<b>Goal 5</b>	<b>Improve maternal health</b>
<b>Goal 6</b>	<b>Combat HIV/AIDS, malaria and other diseases</b>
<b>Goal 7</b>	<b>Ensure environmental sustainability</b>
<b>Goal 8</b>	<b>Develop a global partnership for development</b>

### Millennium Development Goals

The Most important target for this report is the Target 11 of the Goal 7 which says: By 2020, to have achieved a significant improvement in the lives of at least 100 million Slum dwellers, this builds upon the Cities Alliance's Cities without Slums initiative<sup>11</sup>.

#### 4.2.1 Definition / Formation / Characteristics of an Informal Settlement

Slums are the product of failed policies, bad governance, corruption, inappropriate regulation, dysfunctional land markets, unresponsive financial systems, and a fundamental lack of political will. Each of these failures adds to the toll on people already deeply burdened by poverty and constrains the enormous opportunity for human development that urban life offers.

11 Cities Alliance was launched in 1999 by the World Bank and UN-Habitat.



## Definition

The Cities Alliances Action Plan describes Slums as:

Slums are neglected parts of cities where housing and living conditions are appallingly poor. Slums range from high density, squalid central city tenements to spontaneous squatter settlements without legal recognition or rights, sprawling at the edge of cities. Some are more than fifty years old; some are land invasions just underway. Slums have various names, Favelas, Kampung, Bidonvilles, Tugurios, yet share the same miserable living conditions.

The operational definition of a slum that has been recently recommended (by a United Nations Expert Group Meeting held in Nairobi from 28 to 30 October 2002) for future international usage defines a slum as an area that combines, to various extents, the following characteristics (restricted to the physical and legal characteristics of the settlement, and excluding the more difficult social dimensions):

- Inadequate access to safe water;
- Inadequate access to sanitation and other infrastructure;
- Poor structure quality of housing;
- Overcrowding;
- Insecure residential status

## Inequality, poverty and slum formation

Slums do not have:

- basic municipal services - water, sanitation, waste collection, storm drainage, street lighting, paved footpaths, roads for emergency access
- schools and clinics within easy reach, safe areas for children to play
- places for the community to meet and socialize

Slums are worsening:

- while the average age of city populations is increasing, the average age of slum dwellers is decreasing, so youths and children suffer most
- visible disparities between slums and better-off neighbourhoods increase the social tensions in poorer areas
- unplanned growth of settlements makes conventional service provision complicated and costly

Characteristic	Indicator	Definition
Access to water	Inadequate drinking water supply	Less than 50% of households have an improved water supply (rainwater, public pipes, house connection).
Access to sanitation	Inadequate sanitation	Less than 50% of households have improved sanitation (public sewer, septic tank, latrine).
Structural quality of housing	<ul style="list-style-type: none"> <li>• Location</li> <li>• Permanency of structure</li> </ul>	<ul style="list-style-type: none"> <li>• The following location should be considered (houses in geological hazardous areas, under garbage mountains, high industrial pollution area)</li> <li>• The following factors should be considered when placing a housing unit in these categories (quality of construction and compliance with local buildings codes)</li> </ul>
Overcrowding	Overcrowding	Proportion of households with more than two persons per room.
Security of tenure	Security of tenure	Proportion of households with formal title deeds to both land and residency; to either one, with enforceable agreement or any document as proof of a tenure arrangement.

Indicators and thresholds for defining slums

### 4.3 Informal Settlements in Mozambique

When Mozambique became independent in 1975 it had about 12 million inhabitants; of these between a million and a million and a half of the population was urban. The areas with the highest population were and still are the coastal areas, in particular the areas with economic activity. These areas, e.g. Maputo, Nacala, were privileged areas for industrial development and the establishment of farming terrains (machambas) to supply produce to the colonial middle class.

With independence came the nationalization of rented houses and buildings. Many of the families that started to live in the peripheral neighbourhoods in urban areas had arrived from rural areas, attracted by the desire to get good jobs, and improve their living, health and cultural conditions.

Today Mozambique is characterized by urban hubs and peripheral belts of suburban sprawl. In the favourable areas where sufficient land is available, these areas have developed into townships with a high degree of auto-sustainability.





However, where further limiting factors intervene such as liability to flooding or limit of available space the situation has become precarious.

The Ilha is an atypical slum area because of its island characteristics. The density of the population is a combination of the internal displacement of the civil war period and the continued attractiveness of the urban situation with its minimal but existent prospect of economic advantage.

#### 4.4 Proposal of Intervention Strategies

The Government of Mozambique, in order to provide continuity to its strategy of combatting poverty, elaborated an Action Plan for the Reduction of Absolute Poverty (PARPA) 2001-2005

The central objective of the Government is a substantial reduction in the levels of absolute poverty in Mozambique through the adoption of measures to improve the capacities and the opportunities available to all Mozambicans; especially the poor. The specific objective is to reduce the incidence of absolute poverty from 70% in 1997 to less than 60% by 2005 and less than 50% by the end of this decade.

In concrete terms, the poverty reduction strategy in Mozambique is based on six priorities aimed at promoting human development and creating a favourable environment for rapid, inclusive and broad-based growth. The «fundamental areas of action» are: (i) education, (ii) health; (iii) agriculture and rural development; (iv) basic infrastructure; (v) good governance; and (vi) macro-economic and financial management. These areas for action are considered as «fundamental» because they are absolutely essential for reducing poverty and stimulating growth, and also because their impact is both deep and broad. The selection of priorities was based on the diagnosis of the poverty determinants in Mozambique, as well as studies on the issue of poverty reduction (in light of international experience), and consultations with civil society and the private sector.,

The National directorate of Planning and Territorial Development in collaboration with United Nations Human Settlements Program (UN Habitat) elaborated an intervention strategy on fighting against informal settlements. Three main components are to be considered while intervening on slums, these are:

- preventive measures
- the crucial importance of building the capacity of the Municipal structure
- Participatory planning of the main actors

The first and indispensable element in any planning strategy is participation. This includes: The civil society; the local communities; the local administrative authorities; the final beneficiaries and the private sector.





# Analysis



## 5. Analysis based on five studies

### 5.1 Current Development Studies and Actions for the Ilha de Moçambique

Five studies are discussed in chronological order. They are but a small section of the available literature but are considered relevant for the current analysis due to their current recognition and scope.

- Ilha de Moçambique Relatorio – Report”, 1982-1985, “Blue Book”
- State Secretary of the Culture, Mozambique; Aarhus School of Architecture, Denmark
- Sustainable Human Development and Integral Conservation Global Report Nov. 1998, Coordinator/Consultant S. Mutal, STS/UNDP/UNESCO/WHC Project
- Strategic Development Proposal for the Ilha de Moçambique, Nov. 2006, Dipl. Arch. Andrew Leyer, MAS ETH-Z
- Project Heritage 2006 Technoserv Inc. Consultants Joana Freitas and Rory Campbell, Ford Foundation
- Strategic Plan for Heritage Management Sept. 2006, City Council of the Ilha de Moçambique, Twin City Initiative Bergen-Ilha, Ministry of Education and Culture, Mozambique

#### 5.1.1 Review of the “Ilha de Moçambique Relatorio – Report”, 1982-1985, “Blue Book”

##### 5.1.1.1 Origins

The “Blue Book” is the result of the collaboration between the State Secretariat for Culture and the Department of Restoration and Conservation of Buildings and Towns of the Aarhus School of Architecture in Denmark.

Under the auspices of Professor Johannes Exner and architect Per Cruse a comprehensive document was assembled, drawing on the capacities of the Aarhus University and diverse international donors including the UNESCO. To this day this document is treated with great respect and is considered the basis for further studies.

The document is written in Portuguese and English (face to face presentation) and is structured into a historical background component, an analysis part separated into the Stone Town and Macuti Town areas and a proposal section developing concrete suggestions for individual buildings and urban situations.

The main success of the “Blue Book” has been the inclusion of the Island in the UNESCO List of World Heritage Sites in 1991, based on its analysis and descriptions.



#### 5.1.1.2 Methodology and Scope of the Report

As a document assembled by the Architecture Department of the University of Aarhus the primary focus is on individual buildings, urban settings and projects referring to both aspects. The historical and socio-economic background is presented in some depth; the book is however to a large extent project-driven.

A significant mapping and documentation effort was undertaken. This was based on state of the art technology of the period (before computerized data was available). The depth of analysis and documentation is most impressive and extends to the discussion of building materials and technologies.

In effect a cadastre map of the island was assembled, including segmentation according to state of conservation and access to basic infrastructures. Significant detailing and historically meaningful elements were documented with particular dedication.

The document takes care to emphasize the significance of anonymous architecture for the development of a homogeneous urban fabric. It is this aspect that led to the integral protection of the island as a World Heritage Site based on its unique urban fabric more than individual monuments.

#### 5.1.1.3 Some Examples of Project Proposals (see appendix 3):

A warehouse project – The Lion Warehouses<sup>12</sup>- Warehouses form an important part of the island structure and are directly linked to its history as a fortified port and trading post on one of the major Portuguese trade routes.

The Lion warehouses consist of five buildings, a cistern installation and a small landing quay. These buildings were built in the end of the 1800's and have consistently been used as warehouses.

The report proposes four different concepts for re-utilization (student projects): a modernized warehouse, a café, exhibition and meeting space, a cotton production factory and a fishery and shipping museum.

Only two proposals – the cotton factory and the museum - are consistent with the urban restructuring proposed in the master plan of the same report.

The proposals are documented in plans and sections and give a good impression of their possible implementation on the building level.

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12 Ilha de Moçambique Relatorio – Report 1982-85, pages 181-185.

Building no.19.17 – A former commercial property<sup>13</sup> – Two distinct proposals are made for this compact complex: a research station and a production and training establishment.

The research station includes staff housing, some laboratory or sorting areas and some exhibition and presentation facilities. The production and training establishment is reliant on the longitudinal spaces along the side of the complex for well-lit production niches.

Both suggestions are well documented and illustrated with attractive renderings.

Upgrading Project for the Macuti Town<sup>14</sup> - A reduction of the density of the buildings is proposed in order to create small open spaces where the kitchens and small gardens could be located. The report suggests the utilization of the open spaces on the south side of the island for the relocation of displaced persons. In addition open areas in the Stone Town could be used for this purpose.

A further suggestion is the installation of “water kiosks”. These would be linked to the main water distribution and would provide clean drinking water at key points in the area.

Public latrines with direct linkage to the sea are proposed to compensate for the lack of adequate installations within the developed area.

#### Action program for implementation

The Ilha and its mainland counterpart are recognized as a dynamic living organism. As such the path of development is valued higher than an eventual ideal situation that were to be preserved. It is emphasized the island is not to be converted into a museum. The report states: “If the process and not the theoretical end product is considered as the essential element, then it is obvious that each initiative should lead to some immediate improvement, and not just to potential future improvement.”

At the time of the report Mozambique is in the midst of civil war and shortages of supplies and technical competence are prevalent. The level of decay is documented, however there is still the hope that normalization is possible and some of the former splendour of the island could be recovered in a natural transition and recovery process.

Based on these premises the actions proposed are small in scale and transient in character. Elaboration of a development plan that provides the authorities with the tools to engage in a dialectic process based on dialog with the public is seen as

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13 Ilha de Moçambique Relatorio – Report 1982-85, pages 198-207.

14 Ilha de Moçambique Relatorio – Report 1982-85, pages 213-215.



essential. Local skills are to be fostered through the study of the existing and a training effort led by government programs and supported by international funds.

It is considered important control of development be retained on the local level and not outsourced to central government or a foreign entity. As the local capacity is however very limited, a consultant body, under the auspices of the Office for Preservation and Conservation, is to be developed and equipped with the responsibility of monitoring private or state owned development projects.

In response to the obvious rapid decay, stopping the further deterioration of the dilapidated buildings of the island is identified as a first priority. A list of priorities regarding the future utilization of buildings is to be established. It is emphasized that the utilization of traditional methods of construction is crucial for maintaining the uniqueness and cultural value of the island.

#### 5.1.1.4 Conclusions from the “Blue Book”

The blue book is a product of its time. It is refined and prudent in its assumptions. Nevertheless it is embedded in a dialectic mind-set of continuous evolution and progress. From today’s point of view this seems idealistic and in parts overly optimistic.

It is undoubtedly the “blue book” that kicked off the sustained awareness and commitment to the island on the national and international level. It is however also here that the focus on heritage and small scale development was set. The consequent developments have shown the limits of this approach:

- The development is to a large extent dependant on foreign aid. Despite attempts to introduce local industries their success has been limited. In those instances where moderate success is seen this is based on Ex-pat projects.
- The fundamental contradictions pertinent to evolutionary sustained economic development and a valuable heritage basis with a high requirement of financial commitment in order to be maintained is not addressed.
- The population issue is not sufficiently considered. The conflict of an impoverished population living in an overcrowded situation with inadequate sanitation and the environment needed for a tourism revival are neglected.
- It is not clear how the continued use of traditional materials is a viable concept for the future. The high cost of materials and intense maintenance requirements are issues that need to be addressed on the concept level.
- The focus of the “Blue Book” is on the Stone Town portion of the island. This is in contradiction to the actual habitat of the majority of the island population and to the image the island is able to portrait based on its economic and cultural situation.

As a consequence the overall degradation of the island habitat has continued to the point where retention of the WHS status is now under consideration.

## 5.1.2 Review of the Sustainable Human Development and Integral Conservation Global Report

### 5.1.2.1 Origins

The Sustainable Human Development and Integral Conservation Global Report is the result of the coordinated work between the Special Technical Services Projects (STS) / UNDP / UNESCO / WHC. The report follows the systematic monitoring report on the state of conservation of the Ilha de Moçambique and is the initial result of the UNDP funded STS Project entrusted to UNESCO / WHC for implementation.

It builds on the assumptions and descriptions made in the “Blue Book” and makes frequent reference to the text.

### 5.1.2.2 Methodology and Scope of the Report

The document is written in English and summarizes the contents of the Volume I to Volume VI Reports<sup>15</sup> and Architectural Surveys. It is structured into a brief description of the Ilha, the World Heritage situation, the natural resources of the island, the state of conservation, present state of existing services, habitat – housing, environmental concerns, disaster preparedness and tourism potential. The last chapter is a summary of the projects files with brief descriptions and budgets emanating from volumes I to VI.

The document makes clear statements on the course the island should take for its sustainable development such as: From observation and findings so far, it becomes evident that an action based solely on the preservation of the historic built heritage/landmarks would be useless, it would not be sustainable<sup>16</sup>. In this context the island should be seen within an overall sustainable human development program. Tradition is acknowledged as an asset and not a liability.

The document emphasizes the significance of the island being a World Heritage Site based on a unique architectural blend. All World Heritage Sites across the globe belong to the place and the people, and unless the conditions of the place,

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15 Volume I: Rehabilitation of Architectural, Urban and Cultural Heritage by D. Pandakovic

Volume I-A Site Plans by D. Pandakovic

Volume II-A Water / Sanitation / Environment by N. Matshine

Volume II-B Water / Sanitation / Environment by P.H. van Beers and N. Matshine

Volume III Fisheries in the Ilha by R. Falcao

Volume IV Sustainable Tourisms Development by A. Villeminot

Volume V Legislation by G. Carducci

Volume VI Socio-Economic Overview, some consideration ref income generating activities by M. Hadfield

16 Sustainable human development and integral conservation, global report page xi





the environment and the people are improved, it is difficult if not impossible to conserve the physical heritage.

The document describes the state of conservation and the state of the existing services on the island. A detailed analysis of the infrastructure services is described where all relevant aspects from water supplies to the state of the houses are considered.

The land ownership and land use is discussed. It is suggested that the island should have a “Special Status” based on the premises of the World Heritage Site status.

Based on the lack of adequate infrastructure there are concerns about environmental problems and disaster preparedness. Suggestions are made on how to address the problems of the drinking-water-system, sanitation, malaria and natural disaster such as cyclones.

Because of its various outstanding assets, from the rich natural resources such as beautiful beaches and coral reefs to the architectural, cultural and historical legacy, the Ilha de Moçambique is considered to have high potential for tourism development.

Constraints for tourism development on the Ilha are identified as:

- limited access
- poor general infrastructure
- insufficient tourism infrastructure
- lack of a tourism industry and know-how
- incipient marketing and promotion
- lack of human resources in tourism related activities with appropriate skills
- lack of national and/or international investment and access to capital

#### 5.1.2.3 Specific Sector Proposals: Volumes I- VI

Most of the statements that the document summarizes are described in the six volumes that accompanied the report.

Volume I focuses on the rehabilitation of the architectural, urban and cultural heritage. It makes suggestions for the town development plan and technical procedures, defines four levels of intervention for the stone town, and defines the rules for intervention in the Macuti town. Most importantly it defines projects for economic, educational, social, cultural and tourism.

The four levels of intervention proposed for the Stone Town are:

- integral restoration
- typological restoration with the insertion of new elements
- restoration of some old parts, integrated into the new buildings
- new buildings

The integral restoration is proposed for buildings still in a good state of repair but also for partially deteriorated or destroyed buildings. The philological techniques to be used are those currently used in restoration.

Because some buildings are in terrible state of repair the cost of typological rehabilitation is prohibitive. A prioritization according to importance for preservation of the urban tissue is necessary.

Traditional techniques should be used to extend existing buildings. Particular care should be taken with the fronts of the buildings and the outer walls. The integration of stone buildings and Macuti buildings is the visible embodiment of the different peoples inhabiting the island.

New buildings should be put on the totally vacant lots where once old buildings were standing. These buildings should be compatible with the existing street layout and alignment and also allow for building techniques typical of the Macuti town and mainland architecture.

#### Rules for intervention in the Macuti town

The layout and peculiarities of the Macuti town should be preserved so as to prevent the now rampant degradation. The traditional materials are known to be resistant to the saline atmosphere. In addition they have proven to be particularly effective in dealing with dampness and high temperatures.

#### Specific intervention proposals

Besides a listing of 51 building of cultural value a list of projects related to the areas of education, culture and health is assembled. The individual projects are classified according to priority and preliminary costing is proposed for projects judged to be of prime importance or exemplary nature.

The importance of the Ilha as an education centre is emphasized. To hypothesize the modification of the hospital into a school complex and the conversion of the 'casa de fiestas' into a primary school – are described in particular detail.

Volume II focuses on the sewerage and sanitation problem of the Macuti and Stone Town.

The situation of sanitation, sewage and surface drainage is found to be highly unsatisfactory throughout the island. In the Macuti town the high water-table and cost have led to a lack of pit latrines with defecation on the beach being the consequence.

Based on the precarious condition the island presents main issues to be addressed were defined:

- improved accessibility to sanitary facilities either individual or communal
- improved utilization of constructed/rehabilitated communal facilities as a result



of optimization/adaptation of the design of facilities to match as much as possible the habits and culture of the islanders

- improved utilization as a result of a proper location of latrines, regular water supply and availability of council staff to ensure correct usage and cleaning
- improved sanitary conditions of the island as a result of appropriate measures to stop/reduce defecation on the beach
- improve surface runoff water collection both in the Macuti and Stone Town
- rebuild/clean part of the underground system for surface drainage of the Stone Town
- stop the inflow of run-off water of the Stone Town into the Macuti area,
- Rebuild the complete system for surface drainage in the Macuti area including the adaptation/modification of the design
- Select, design and construct a proper (feasible) structure for the discharge of runoff water of the Macuti area into the sea

The upgrading of the sanitation, sewage and drainage in both the Macuti and Stone Town depends on the foreseen development. Two development scenarios were developed.

First scenario (low profile development scenario)

- Re-establishment of the functioning of the infrastructure at a level that conservation (stop degradation) of the patrimony of the island is top priority.

Second scenario (high profile development scenario)

- Investments in the rehabilitation of the infrastructure of the island for tourism purposes. This implies the provision of high quality services.

Due to the urgency of the situation the first scenario providing immediate relief to the population was favoured. Cleaning of the beaches and strengthening of policing measures is a must. Because of the strong traditional/cultural habit that prevails in the island, a starting point should be the definition of tolerance zones (preferable close to the strongest currents in the beach) for open defecation. Gradually, these tolerance zones will be reduced.

Sewerage in the Macuti and Stone Town

In Stone Town existing tanks could be rehabilitated and the service of emptying them should be linked to the provision of water and put on a sustainable basis monitored by the city council.

For the Macuti Town a system of communal septic tanks strategically placed throughout the area is recommended. The effluents are to be evacuated to the sea by a system of gravitational and tidal pull. The solids will have to be deposited in a dedicated place on the mainland.

## Surface Drainage in Macuti and Stone Town

For the Stone city, it is recommended that surface drainage be improved by paving some of the roads and by constructing street channels to conduct the run-off into the underground collectors or into the sea (depending on the topography).

For the Macuti area an open flow channel running through the lower part of the town (Identified as the flooding area) will be constructed. Secondary lines based also on open flow channels will be constructed to collect the runoff water of the higher parts of the town into the main channel.

Projects were defined for both Macuti and Stone town where the urgency of intervention and a strategy for implementation and inputs from local government are also considered.

Volume III addresses the development of the Fisheries. Fishery is a very important activity for the population of the Island. This is on the one hand the main income generator for the local population and on the other the only source of subsistence.

The document makes a proposal for rehabilitation of the fishery system based on the current situation. Even though the traditional way of fishing is considered important, this has to be motorized because of the shortage of fish near the Island. The creation of a motorized fleet and improvement of the non motorized one will bring more productivity; therefore it is essential that the activities are properly monitored.

Volume IV focuses on the Sustainable Tourism Development. The tourism situation of the Ilha was analyzed on the global, regional and local context. To place the Ilha as a tourism destination in all segments the followed suggestion were made:

An airport on the existing site in Lumbo with connections to Johannesburg, Harare or Nairobi.

A seaside hotel on the main land capable of generating sufficient flux to amortize the airport upgrading.

A passenger boat to transport the tourist from the airport or hotel to the island.

A luxurious hotel in the fortress of the Ilha. This would be complemented with other small scale hotels.

Zones and elements of special interest to tourists are identified.

For each of these aspects a brief description is made showing the number of rooms, guest and job opportunities they would bring and the necessary investment.

Volume V is concerned with the legal statute of the Ilha de Moçambique. A "special status" based on the classification as a World Heritage Site is proposed. As this cannot



cover all aspects of the regulation of the Island; where the “special status” is silent, the general legislation of Mozambique will remain applicable.

The principal aspects that are considered are:

- Land-use and housing
- Construction and Reconstruction
- Development and local economic activities
- Tourism
- Investment
- Protection of the cultural property

Volume VI focuses on the socio-economic situation of the Ilha de Moçambique. Based on the existing situation of population, education, health, culture and social organization and economic activity an integrated development program to cover a period of 15 years was proposed.

The objectives are to improve the quality of life of the local population as well as restore the built area in both Macuti and Stone Town and create an ambience attractive to tourism.

The introduction of selective tourism that would provide the island with increased economic activity and justify the restoration of the colonial buildings and monuments is envisioned. Houses should be restored for educational purposes including the housing of teachers and pupils. The participation of the local community in the reconstruction program is considered important.

Conclusions from the “Sustainable human development and integral conservation program”

The UNESCO volumes provide in depth development proposals for the five sectors they address. Nevertheless the current situation manifests the exceedingly slow implementation and the absence of real progress on the socio-economic level. Individual projects have been implemented; however this is more due to the dedication of individual donors and does not serve to validate the proposed strategies.

This raises two questions:

- Is the plan flawed?
- Are there external constraints that were not considered or have come into being since the plan was conceived?

First we look at the components of the plan. They are elaborated to considerable depth and address a wide range of issues related to their implementation. On a technical level there would seem to be little to object to.

Could it be that the sum of the parts does not add up? Here an element of doubt creeps in. The vision evoked by the development proposals is of an ideal world living in its own historically enriched past. The consideration begged for a harmonious past

jars with today's institutional lethargy and the truly violent nature of the Island history. Is the development proposal trying to reconstruct a situation that in fact never existed? If so is this legitimate and does it not underestimate the difficulties?

The current situation would suggest there are real problems in implementing the goals as formulated in the report. Although sustainability is stated as the prime objective there is to date no proof that economic independence can be reached.

Regarding the Macuti Town the steps implemented have accentuated the tension between the rural roots of a subsistence society and the modern technical possibilities. The report favours the continued use of traditional construction methods. This is a serious limitation of the freedom of the concerned population and has to be justified on a wider basis than historical precedence. The report uses technical sustainability (low cost, high ecological and functional value) as justification. However, the population doubts this rational and opts for less "attractive" but more available short term solutions.

Tourism is expected to play a significant role in the development of the Island. The UNESCO report emphasizes the constraints to be laid on such development to minimize its impact on the heritage and natural environment. The questions of viability and economy of scale are hardly touched.

How does the impoverished situation of the Macuti town impact the prospect of tourism development?

The UNESCO report is an impressive source of development ideas and potential strategies. However, it also raises many questions that will form the basis on which this study is built.

### 5.1.3 Strategic Development Proposal for the Ilha de Moçambique

#### 5.1.3.1 Origins

In 2006 Andrew Leyel followed a post-graduate course in building in developing countries at the ETH-Zürich. The course was taught by Professor H.E. Kramel and Dr. Jacques Feiner. Both tutors have extensive experience in construction and planning in the developing world and were able to provide ample background for a study dedicated to a planning framework for sustainable development of the Ilha. The study was written in English and circulated to the relevant stakeholders in Mozambique.

#### 5.1.3.2 Methodology and Scope of the Report

Building on his six years of experience as an independent architect in Mozambique, and the IFC (World Bank) evaluation process for hotel projects he was involved in during this time, he proposes the elaboration of development a master plan for the Ilha district.



The main thesis of the report is the establishment of a bridgehead on the mainland opposite the island with the potential of significant urban development. Based on an estimated turnover, the minimum number of beds is calculated such as to increase the average available income of the local family by USD 100 per month. This would in effect constitute a broad middle-income basis for the local population.

The impact of this Ball Park figure for the targeted scale of tourism development on the infrastructure requirements is then calculated. The outline of the proposed development on the mainland is documented in an urban development and land use map.

### 5.1.3.3 Proposal: Bridgehead Development Plan

The development of the bridgehead is the nucleus of the Strategic Development Proposal. A dense urban setting with facilities for tourism and local commerce is intended. A public promenade offers prime sites for ocean-side facilities such as hotels, restaurants and bars, casino and public buildings.

At the centre of the bridgehead city are the public market, the bus terminal with car-park and the tourist information centre. Between these two poles lies a garden square and adjacent harbour with boat rides to the island.



Bridgehead development plan



#### 5.1.3.4 Conclusions from the Strategic Development Proposal

The Strategic Development Proposal (SDP) raises two additional aspects that to date had not been addressed:

- Scale of development related to its financial viability
- Possible urbanization of the mainland areas

The SDP is based on a relatively thin basis of actual site knowledge and omits vital factors such as current settlement pattern on the mainland and the quality of the shoreline in the prospect areas.

In addition scant reference is made to the impact of the proposed development on the Island itself. The SDP assumes the scale of development on the mainland will encourage the excess population on the Island to relocate to these areas. As employment will be concentrated in the new areas and sufficient land reserves are available this seems reasonable.

On the institutional level there is no indication of a legal framework apart from the suggestion of a heritage tax that would support the envisioned development.

#### 5.1.4 Review of the “Project Heritage - New prosperity from old”

##### 4.1.4.1 Origins

The Project Heritage is the result of the collaboration work between Tecnoserve and the Ford Foundation.

Tecnoserve is a globally operating consultant group with 400 employees, focused on managing sustainable livelihood for areas in the Developing World.

Joana Freitas, a McKinsey consultant, and Rory Campbell, product manager for L’Oreal, produced a tourism development plan for the Island which was part of Tecnoserve’s effort to develop the tourism industry in northern Mozambique.

The project was presented to the local and national government and interested stakeholders in 2006 in English and Portuguese.

##### 5.1.4.2 Methodology and Scope of the Report

The project has as its main goals the elaboration of a vision and strategy for tourism development for the Island, the identification of opportunities and the elaboration of a business plan for potential investors.

Within the development plan the project considers the following aspects:

- Definition of the target market
- Access to the Island
- Vision for accommodation
- Tourist attractions
- Elaboration of an investment plan





- Definition of stakeholder's alignment
- Timeline

#### 5.1.4.3 Some Examples of the Project Proposals

Market definition and plan- starting with the question of who visited the island and what were their key needs and behaviors, it was possible to identify UK, Germany, France and Portugal as the key target markets.

Access- by plane to Lumbo, followed by a luxury private bus service to the Ilha and a boat service to the beaches on the mainland.

Vision for accommodation in the Ilha district- 117 rooms in 11 boutique and luxury hotels are proposed on the island - in existing guesthouses, restored ruins and luxury hotel in the transformed hospital building. Other suggestions are the use of the fortress, court building, harbor mastery, police station and prison for accommodation.

#### 5.1.4.4 Conclusions from the Project Heritage

The Technoserv proposal is driven by a market analysis and segmentation approach. This defines the tourism potential from a supply side comparison with existing offerings in the larger region (Zansibar, Comorres).

Based on this analysis an offering is defined and means of achieving it are suggested. These include the above mentioned project proposals.

This is a case-book study in marketing. Potential investors have been contacted but to date there has been no commitment.

The market approach seems ahead of the facts. The Island environment includes hazards and risks that are beyond the scope of the private investor:

- Poverty
- Endemic malaria, cholera, HIV ...
- Weak institutional framework
- Political instability

The private sector on its own is not able to address these issues and is reluctant to invest outside of an established framework for sustainable development with sufficient financial backing including investment risk guaranties.

The impact of the proposed development on the lifestyle of the local population is not addressed. It is assumed the market forces are sufficient to establish a new balance of social welfare, heritage protection and tourism requirement.

## 5.1.5 Review of the Strategic Plan for Heritage Management of the Ilha de Moçambique (2005 - 2010)

### 5.1.5.1 Origins

The strategic plan for heritage management is the result of the sister network program "city to city" between the Municipality of the Ilha de Moçambique and the city of Bergen in Norway.

The program is a part of four intervention actions between the two cities which are:

- planning of management of the heritage
- rehabilitation of the monument in risk
- institutional capacitating
- network of the heritage cities in East Africa

The document was elaborated by the city of Bergen in collaboration with the city of Ilha de Moçambique and the national directorate for cultural heritage. The document is written in Portuguese.

### 5.1.5.2 Methodology and Scope of the Report

The present strategic plan is a continuation of the strategic plan for 2003-2007. Here a national policy for cultural heritage management was first presented as the result of two workshops realized in 2005 on the Island. This was adopted in 2006

The document refers to the various meetings and workshops between the city of Bergen and the Ilha over the years. The historical background is presented and the recent plan material based on GIS mapping is presented in its various layers of information.

The main goal of the strategic plan is to establish an orientation framework and operational lines for a successful management of the Island as World heritage.

A listing of priority actions is compiled and allocated to the responsive government departments together with an implementation time-line.

### 5.1.5.3 Action Proposal (Example)

The elaboration of an urban development plan for the mainland city of Lumbo opposite the Island is proposed. The responsibility is attributed to the local city council and the district authorities. The plan is to be based on the GIS mapping of the existing structures.



#### 5.1.5.4 Conclusions from the Strategic Plan for Heritage Management

The Strategic Plan for Heritage Management (SPHM) is available in an embryonic form and thus only partially valid. Nevertheless it is the most recent official document.

The actions proposed are of a technical nature and do not address the socio-economic impact they imply. The close collaboration with the city council is apparent in the SPHM. However, this is also reflected in the generic nature of the action proposals and is an indication of the lack of technical capacity at the local level.

### 5.2 Principal Conclusions from the Five Studies

The quantity of studies and development proposals for the Ilha is impressive. The level of detail of some of them is substantial and the scope is significant. The chain of consecutive studies, building on each other, breaks after the UNESCO report – the following studies take a different approach or fall behind the initial studies.

The conclusion is, the initial optimism expressed in the “Blue Book” and enacted in the implementation strategies elaborated in the UNESCO report has failed to deliver. The following studies suggest a new angle but are not able to deliver the substance that would lead to successful implementation.

It seems most promising to return to the UNESCO report and seek the reasons for its lack of success. The Project Heritage and Sustainable Development Proposal can serve to broaden the discussion and indicate aspects that were not considered in the UNESCO report.

All studies and development proposal base their hopes for economic revival on the tourism industry. The importance of this focus grows over time as the hopes for a diversified economic revival fade.

There is however a fundamental flaw in the logic of the tourism based recovery. The current situation in the Macuti Town is a liability for a sustainable tourism industry. Improvements suggested for this part of the island are insufficient to convince potential investors their assets in the immediate vicinity would not be at risk. Contrary to the assumptions of the UNESCO report, tourism would need to be on a significant scale and of a medium to high quality to impact the economic situation of the Island. This is due to the economy of scale required for the provision of necessary infrastructures at affordable prices.

It is not sufficient to improve the monuments without also improving the lot of the local population. This fundamental truth, if sustainability is to be achieved, is recognized in the UNESCO study. However, the next step of concluding that it is not possible to improve the lot of the population without creating a unique sales proposition based on the heritage and social diversity is not stated with sufficient clarity.

The Macuti Town is vibrant and overcrowded, indigenous and impoverished. Without addressing these issues head on there is little chance of an economic revival based on the unique heritage of the Island and its uncontested tourism potential.



## 6. Dimensions of the Problem

Addressing the problems of the Macuti Town has been identified as a key factor for the sustainable development of the entire island situation (including the district areas on the main land). From here on this study is concerned with problems and possible solution for the Macuti Town.

### 6.1 Origins and specifics of the Macuti Town situation

The Macuti town is approximately 50 ha. It stretches from the mainland facing shore-line (north-west) to the ocean facing shore line (south-east).

It begins with the park opposite the cemetery, where the island is linked to the main land by a 3.8 km long bridge, and ends at the division line following the walls of the municipality hospital in the middle of the island.

The Macuti Town is the informal settlement area of the indigenous population from historical times. The name Macuti derives from the Swahili term for the palms leaves use to cover the indigenes huts.

The Macuti Town is divided into seven “bairros” or boroughs (see map in appendix 4). Despite the use of poor materials for construction, the buildings had to obey the principles set out for urban development by the colonial authorities.

The bairro Maragonha and Esteu were the first to be laid out and Quirahi was the last. The bairros along the “contra costa” or ocean-side are Maragonha, areal, Quirahi and Unidade. These bairros occupy the more favourable high grounds and were subjected to more specific planning. The bairros of Litine, Esteu and Macarribe are located around the bay. This bairros are partly built on land that was formally used as quires that were excavated for construction of the Stone town areas. As consequences this areas are partly below sea level.

The land was divided up among different owners and leaseholders. Slaves were only allowed to live on the property of their master and under his control.

<b>Borough</b>	<b>Location</b>	<b>Main properties</b>	<b>No. of houses</b>
<b>Maragonha</b>	Ocean-side, north east	Relatively high degree of structure, ocean and street frontage properties, large proportion of cement block houses with basic amenities.	112
<b>Areal</b>	Ocean-side, middle	Small to medium size properties, relatively high degree of structure. Artisanal fishing	182
<b>Quirahi</b>	Ocean-side, south west	Relatively high degree of structure, small to medium size properties.	129
<b>Unidade</b>	Ocean-side, peninsula	Less structured, small to medium properties.	145
<b>Esteu</b>	Bay-side, north west	Former quarry stakeholders, informal settlement pattern on the interior, low level properties.	144
<b>Litini</b>	Bay-side, middle	Highest density, Former quarry stakeholders, informal settlement pattern on the interior, low level properties.	390
<b>Macaripe</b>	Bay-side, south west	Informal settlement pattern, low level properties, focus around market	202
<b>Total no. of houses in the Macuti town</b>			<b>1,656</b>

Borough in Macuti Town

## 6.1.1 Relevant Dimensions

### 6.1.1.1 Population Density

Currently the large majority of the approximately 14.000 inhabitants of the Island live in Macuti Town. Their number is roughly estimated in to be 12.000 habitants.

Dividing this number with the number of houses in Macuti Town delivers an average of 7.24 inhabitants per habitat.

Before the civil war the population of the Island was around 6.000 people. The large increase of the population is due to refugees from the mainland seeking sanctuary on the island during the period of civil war and, with the passage of time, their numerous offspring. In addition the modest economic activity, due to the interest in conservation of monuments and the general tendency of the population to migrate to the coast, have contributed to the increase of the number of inhabitants.



During the visit to the island in March 2008 and based on the interviews it was possible to conclude that the people living in the same household do not necessarily belong to the same family. In most houses two to three families each occupies a room and share the kitchen.

As we will see on the discussion of public and private spaces the communal living is mostly outdoors, and utilises the roads and paths between the buildings. It's not infrequent for household's members to sleep on the porches of their houses.

Based on the statistics available on the Island half the population is estimated to be less than 16 years old.

#### 6.1.1.2 Housing Density / Urban Fabric

Due to the particular island situation - limited space and high concentration of economic activity (from the historical slave trade, construction and commerce to administration, services and ultimately refuge from the civil war), the density of the urban fabric is unusually high.

Nonetheless the traditional Macuti town is a Swahili inspired architecture and characterized by buildings of straw, wood and dhaga materials. Their construction is traditional and consistently contains front porches and an entrance oriented directed towards the roads and paths. The roofs have a high pitch and are covered with palm leaves.

Regarding the floor plan the houses consist of an addition of modular cells, frequently two deep and three wide. This floor plan module was stipulated by the colonial authorities but also corresponds to the economic usage of locally available materials.

These elements together form a unique entity and have been deemed worthy of conservation by the World Heritage Foundation.

With the introduction of more industrial materials (cement and corrugated iron) this shape and form have been challenged and changed. These recent houses have flat or shallow pitched roof in corrugated metal and a covered stone platform is built along the front as a half enclosed veranda.





Figure 12: Impression of the Macuti habitat

The Avenida 25 de Junho divides the Macuti town in two main parts - roughly speaking into the historical boroughs on the ocean side and the more recent scattered settlement on the bay side.

The ocean side houses are assembled into continuous lines along the roads and paths with second and third rows following the same pattern. In the remaining bay-side areas only the front-line properties are aligned. The infill follows the more haphazard lines of the former quarry or simply makes the best possible usage of the remaining space.

All houses are individual houses and are separated from their neighbours by at least a narrow passageway – often as narrow as one meter. The buildings are also without exception single story

The original indigenous population of the island continues to predominantly live in the ocean-side boroughs. The immigrant population is mainly to be found in the bay-side habitats. This distinction also transfers into the level of conservation of the houses and the level of service provided to the individual house.

#### 6.1.1.3 Private and Public Spaces

Due to the high density of the settlement pattern both private and public spaces are very limited.

The average habitat houses about two persons per room – this corresponds to a private space of approximately 5m<sup>2</sup> per person. The central hallway is semi-private as there are frequently a number of families living under one roof. The kitchen and porch areas must also be considered to be semi-private.

The roads and paths around the habitats serve as an extended living room. Here the children play and adults sit in the shade and play games, discuss with their neighbours or go about their different chores.



In recent years the drainage system suggested in the UNESCO report has been implemented. This consists of an open drainage channel running down the middle of some of the principal internal pathways. Initially this channel was meant to be covered with concrete slabs, but this has proven to be too easily congested and leading to flooding with waste waters. The unfortunate side-effect of the open drainage channels is the consumption of public space where it is most frequently used and the persistent presence of waste, stagnant water and odour in the middle of the boroughs (This is not to say the prior situation without drainage was preferable, but the current solution also has considerable drawbacks).



Figure 13: Public Spaces

There is one formal market and a number of informal market stands. There are also three mosques and two churches in the macuti areas.

The beaches are a further meeting point. Unfortunately the predominant use of the beaches adjacent to the Macuti Town is defecation. This is perceived as a social activity and is a controversial part of the local tradition.

#### 6.1.1.4 Social and Economic Situation

The main sources of income are traditional fishing and small-scale handcraft. Roughly 80% of the adult population has no firm employment. The average income per household is below US\$ 100 per month. Per person it lies below the poverty level of 1 US\$ per day.

The population is predominantly Muslim and organised around madras schools in private homes and mosques. The excesses of the civil war never reached the island and the population can be confidently considered peaceful.

There is one point of contention that is on the rise. The Island community is one of three communities in Mozambique that elected a RENAMO representation in the local elections. This is in contrast to the district government that is appointed by the province and is loyal to the ruling FRELIMO party. The lines of responsibilities

are not sufficiently defined and double tutelage and lack of cohesion is felt down to the local level.

The community is youthful and has a high degree of energy. This is felt in the lively nightlife focused around the TVs and games that are accessible from the road. The oral culture is continued and reflects in the lively debates and discussions.

Within the narrow limits of the realistically possible the population is self-organizing and provides for mutual support and cultural diversity. These activities are supported by organisations committed to the advancement of the island.

Tribal traditions of dance and music and costumes still persist and are presented on festive occasions.



Figure 14: Commercial and social life in Macuti Town

#### 6.1.1.5 Infrastrures

A major problem of the Macuti Town is the insufficient und ineffective supply of basic services.

The principal dimensions to be considered are:

- Water Supply
- Sewage / Sanitation
- Drainage
- Electricity
- Access
- Education
- Communication
- Commercial infrastructure
- Sports and recreation

#### Water Supply

The shortage of water is a problem that the Macuti Town has always had to deal with. Drinking water is collected from rainwater fed into cisterns which are located



inside the residential area. In addition a water feed brings water from the mainland into a series of water tanks at the entrance of the Maculi Town. These cisterns and the distribution aren't always reliable.

Cleaning water is pumped manually from boreholes into additional cistern in the residential area. This is brackish water and is not suitable for drinking.

After the cyclone in March 2008 the Macuti town suffered from lack of water. Water was brought to the boroughs in containers and distributed to the local people.



Figure 15: Water supply in Macuti Town

#### Sewage / Sanitation

The lack of toilets and bathrooms is a problem that has grave consequences for hygiene and unattractive alternatives. Even though the majority of the houses, particularly in the ocean-side boroughs, have toilets that feed into septic tanks and infiltration drains there still aren't enough to cover the necessities of such a dense population. There are a number of communal toilet blocks, but these are not popular and frequently not in operation.

With the program financed by Danida up to 2008 120 private latrines were built for the local population. The micro project was started by a local resident and is financed by Danida. It has as objective the participation of the population in the combat of defecation in open spaces. A resident of the Macuti Town can approach the organisation and request the construction of a latrine and septic pit. If this is reasonable from the perspective of available space and drainage and the requester is willing to contribute his labour the system is constructed.

Given the proximity of the houses the construction of an excess number of external latrines is however also an unhygienic and at best temporary solution.





Figure 16: Public and private sanitation facilities

### Drainage

The system of open drainage channels was discussed under the heading on public / private spaces. An additional aspect is the difficulty of draining into the sea due to the low level of parts of the Macuti Town.

The solution is the construction of tidal based systems. However, maintenance of the valve system has posed a problem.



Figure 17: Open drainagen in Macuti Town



## Electricity

The mainland sub-station is linked to the national distribution net and is sufficiently powerful to provide for a considerable extension of demand. The distribution net on the island is based on wooden electricity pylons and is a threat within the Macuti Town as it poses a risk of sparks in an area dominated by organic roofs.

The principal constraint on the availability of electricity is the cost factor. The price of electricity is beyond the reach of the majority of the Macuti residence.

Public lighting is provided along the three major roads.

## Access

Vehicles can circulate along the three major roads. Inside the Macuti Town the paths are too narrow for motorised access.

Much of the fishing is done from boats and dugouts launched off the beaches. These are capable of reaching the mainland and form an alternative route to crossing the bridge.

Inside the Macuti boroughs the path system is a labyrinth. Access to the borough of Letine is via stone steps off the main road



Figure 18: Paths in Macuti Town

## Education

Within the Macuti Town there are no education facilities. The children can access the schools in the Stone Town. A significant proportion of the children however do not follow any formal education. This is also reflected in the fact that the tribal language Macua is still predominant in the Macuti areas.





Figure 19: School and pre-school facilities

### Communication

The island is covered by the cell-phone network. A surprising percentage of the youths owns a cell-phone and is used to using it.

An additional commodity that has found its way into the community is the television. The local population thrives on Brazilian soap operas.

### Commercial infrastructure

The Macuti Town has a formal market and a series of informal market stands and shops. As there is almost no local production of goods what is available on the market is the last step in the supply chain of local traders.

There is currently no shortage of goods on the island and transport to and from the provincial capital of Nampula is on a daily basis.



Figure 19: Cottage industry



## Sports and recreation

In the Macuti Town there are no such provisions. Within the Stone Town there are limited facilities such as the parks and a football field.

### 6.1.1.6 Voices of the Population

In March 2008 a representative sample of 30 people of the Macuti Town were asked for a structured interview and requested to fill out a questionnaire.

The interviewed were:

- 1 Local political representative
- 6 Elders (2Male, 4Female)
- 3 Kindergarten teachers
- 15 Youths (14-18 years)
- 5 Children <14 years

Some of the most informative questions and answers were:

Do you like living in the Macuti Town?

Yes 30 No 0

Would you consider moving to the mainland if you were given land and a house?

Yes 17 No 13

Would you rebuild your house with traditional materials or with cement blocks and corrugated sheets if the materials were paid for?

Traditional: 19 Blocks and corrugated 11

What is your most pressing concern for the Macuti Town?

- Loss of heritage status 1
- Lack of education possibilities 12
- Hygiene situation 10
- Political situation 7

If there were public showers would you use them if you had to contribute to the maintenance (in labour)?

Yes 23 No 7



Have you ever used the Internet?

Yes 18 No 12

In the interviews particularly the young expressed their opinion that tourism would bring an improvement for the island and they were prepared to contribute if they were given the possibility. They were concerned about the political situation and felt they were being deprived by the government (not the municipality). The youths long for access to education, they complain about lack of computers and books and the possibility of learning English.

### 6.1.2 Definition of the Macuti Town as an Urban Slum area

Using the indicators defined in the global report on Human settlements in 2003 a comparison of the Macuti Town situation with these indicators is made.

As we can see from the table below the characteristic of Macuti Town are those of a slum area.

<b>Characteristic</b>	<b>Indicator</b>	<b>Situation</b>
<b>Access to water</b>	<b>Inadequate drinking water supply</b>	The Macuti Town lacks a functional water distribution system.
<b>Access to sanitation</b>	<b>Inadequate sanitation</b>	There are an insufficient number of individual sanitation facilities; the existing public facilities are poorly maintained and used.  The majority of the population uses the beach for defecation.
<b>Structural quality of housing</b>	<ul style="list-style-type: none"> <li>• Location</li> <li>• Permanency of structure</li> </ul>	Some boroughs are located in areas below sea level and liable to flooding.  Recent constructions diverge from the traditional building methods and are poorly adapted to the Macuti Town situation.
<b>Overcrowding</b>	<b>Overcrowding</b>	The average number of people living in one household is 8.
<b>Security of tenure</b>	<b>Security of tenure</b>	The majority of residents of the Macuti Town have no proof of tenure arrangement or title deed.

Macuti Town situation in relation to the indicators



Not only do these indicators defined Macuti Town as a slum urban area, but also other factors like the social situation of the population and the unemployment rate collaborate the finding.

The deficit of basic infrastructure is one of the main problems of the Macuti Town. Together with the high population density these are classic indicators of a slum situation.

Historically Macuti Town was designed as an area for the indigenous population, minimal basic amenities were considered to be sufficient. With the years this situation didn't improve, but on the contrary deteriorated. During the civil war more people immigrate to Macuti Town; more houses were informally built without consideration for the building codes.

## 6.2 SWOT- Analysis of the Macuti Town

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• The will of the population to survive</li> <li>• The handcraft skills of the population</li> <li>• The young generation is interested in learning the ways of the modern world</li> <li>• Various development agencies and private foundations are interested in solving the problems of the Macuti Town</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• High illiteracy level of the population</li> <li>• The lack of identification of the population with the "foreign" heritage</li> <li>• The lack of coordination from the part of the donors while trying to improve the situation of the population of Macuti Town</li> </ul>
<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Continuous increase of the population</li> <li>• Continuous deterioration of the infrastructure</li> <li>• Use of the beaches for defecation</li> <li>• Continuous deterioration of the houses</li> <li>• Ignorance of the buildings codes</li> <li>• Instable political situation</li> <li>• Loss of World Heritage Site status</li> </ul>	<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Tourism offers the possibility of upgrading the economic and social situation of the population</li> <li>• The Macuti Town represents a clear delimited area of intervention</li> <li>• The mainland includes sufficient areas for alternative housing.</li> <li>• The young generation is the future the Macuti Town.</li> </ul>

## 6.2.1 Conclusions

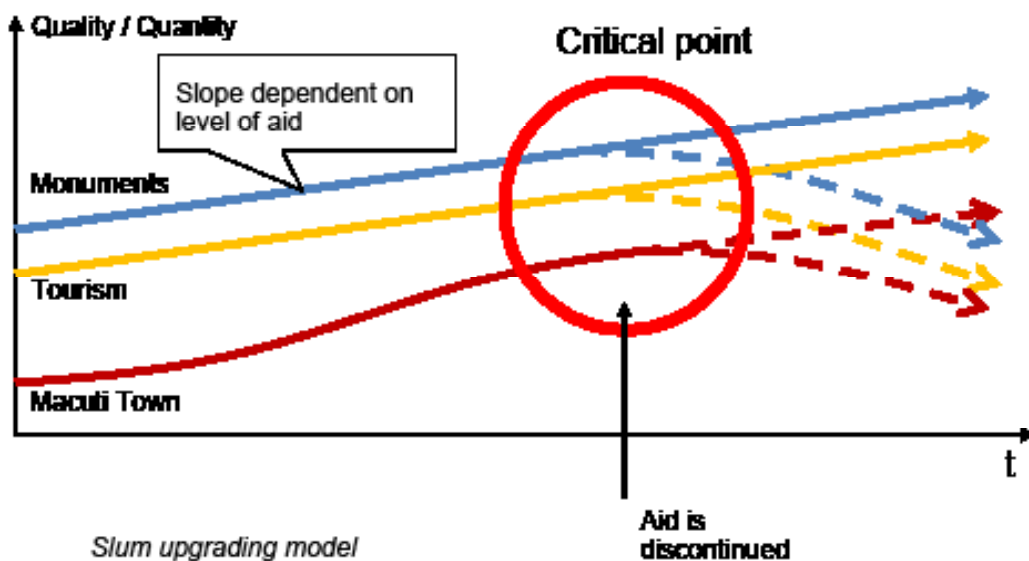
The density of the population and houses in the Macuti Town is a threat to the development of the whole Island. The situation of Macuti Town is also the main cause for the slow development of the tourism potential.

With the deterioration of the buildings and the non acknowledgment of the building codes there is a risk of the Island losing its status as a World Heritage Site.

The lack of coordination of the donors and the strategies applied does not bring the expected results and in the long term doesn't achieve the sustainability needed for the Macuti Town.

The opportunities and strengths that the Macuti Town offers should be considered when trying to solve its problems.

Developing the Macuti Town in the current manner and under the objectives of the slum upgrading goals is not sufficient to enable continuous development. Tourism will not develop to a point where it becomes sustainable. Improvements remain dependant on the influx of external aid. If this is discontinued the situation of the island will revert to its current status of decay.



The Macuti Town situation is to be seen as a priority and the main key to the development of the Island and its surroundings.







# Concept



## 7. Objectives / Vision

### 7.1 Change of Paradigm

The development of the Macuti Town is crucial for the future of the Island. If current development trends are continued, the threshold for investment into the tourism infrastructure of the island will not be taken.

Potential for sustainable tourism

	Today (T)	T+5 current	T+5 change	ideal
<b>Monuments</b>	+	+	+	+
<b>Stone Town</b>	+/-	+	+	+
<b>Macuti Town</b>	---	--	0	+
<b>Beaches</b>	+/-	+/-	+/-	+
<b>ΣΣ</b>	<b>-2</b>	<b>“zero”</b>	<b>+2</b>	<b>+4</b>

It is essential to build an image and scenario for the Macuti Town that is not detrimental, and in an ideal case supportive, to the development of the Island as a whole.

In today's situation (T) the Macuti Town is a slum area with health and hygiene issues. The visitor to the Island enters via the Macuti Town areas. He is confronted with defecation on the beaches and acute poverty in the boroughs. Malaria is an endemic illness and cholera is a threat. In sum the Macuti Town habitat is a risk for its inhabitants, for the Island as a whole and to the image of the Island (---). The other interventions (Monuments, Stone Town, Beaches) are to a large extent cancelled out by the Macuti situation and the sum of the Island situation is negative (-2).

If current trends are continued (T+5) the drainage situation will be improved and small-scale intervention projects will bring some relief for the population from a health and hygiene perspective, including a slight improvement of the poverty situation. Nevertheless the slum situation is likely to persist and endemics will still be a threat (--). While improvements in other areas may continue, the sum of the situation is at best “zero”.

The “change of paradigm” model assumes it possible to neutralize, or in the best case invert the influence of the Macuti Town situation on the Island. The result for the whole Island context is positive (2+, 4+). The tourism potential is able to unfold and bring fresh investment from the private sector into the Island environment. It



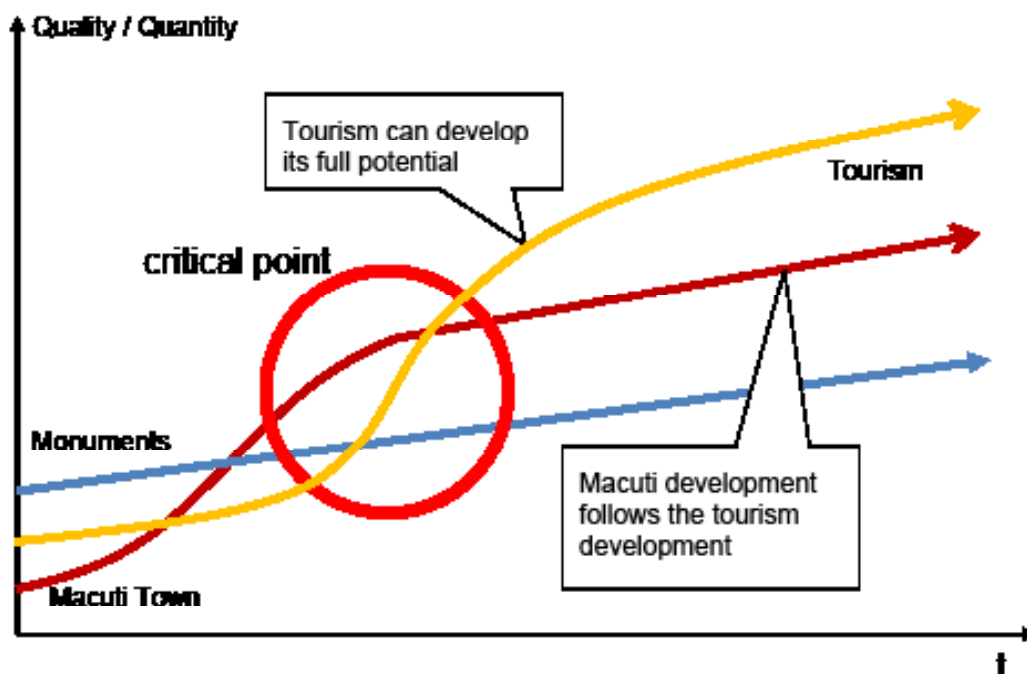
would seem this is the most convincing way to achieve a truly sustainable situation.

This calls for a fresh look at the potential and assets of the Macuti Town:

- Average age of the population is 15 years
- Urban setting on a small island is unique
- Density has led to a vibrant community
- Modern technical commodities are available
- Handcraft skills are popular
- Time is available
- Sea air and island setting is healthy
- Subsistence existence is possible without famine

A further consideration is the sustainability from an ecological perspective. It is not beneficial to change methods of construction because other materials are available that are not suitable but cost less. A method should be found that focuses on the sustainable use of resources by providing incentives for their application. The cost of turning the Ilha into an eco city would be a fraction of the equivalent costs in the developed world and, if turned into a tourism asset, could pay for itself.

Change of paradigm model



The Macuti Town develops from a liability to an asset. As tourism develops traction it pulls the further development of the Macuti Town and the preservation of monuments along.



## 7.2 Development Priorities

For the Macuti town specific development goals were defined considering the change of paradigm proposed above. This considers the current situation of the Macuti town and defines objectives to be achieved to enable this leap of faith.

### 7.2.1 Upgrading the Physical Space

	<b>Current situation</b>	<b>Objective</b>
<b>Trad. houses</b>	Built of sticks and wattle covered with lime plaster. Roofing with palm leaves "Macuti" Built on a square grid with corresponding of additive cells.	Maintain a homogeneous urban fabric with traditional roots.
<b>Recent houses</b>	Built of cement blocks and covered with corrugated metal sheets.	Divergent construction should be combined with enhanced aesthetic requirements.
<b>Meeting points</b>	Front yards, madras schools, market places.	Provide new meeting points combined with essential services.
<b>Public spaces</b>	Roads and paths, beaches.	Offer new spaces for sports and recreation inside the urban fabric.
<b>Attractions</b>	Televisions, board games, juke boxes etc.	Combine recreation with education.
<b>Services</b>	Open sewage drains are "eating" the public spaces.	Provide clean energy, water and sewage.



## 7.2.2 Upgrading the Socio-economic Situation

	<b>Current situation</b>	<b>Objective</b>
<b>Population</b>	High density, ca. 12.000 people on 0.5 km <sup>2</sup> .	Reduce the number of people living in such a congestive situation.
<b>Education</b>	Limited access to all education levels. High level of illiteracy, mainly for adults.	Access to basic education levels has to be guaranteed for all. Incentives for other educational programs should be created.
<b>Health</b>	Poor conditions favouring epidemics and the spreading of other illnesses including HIV /AIDS	Provide clean living conditions that reduce the occurrence of epidemics. Provide health education and prevention programs.
<b>Economic base</b>	The majority of the population is unemployed and living below the poverty line.	Develop incentives such as micro-credit schemes and broad based manual employment that surge economic activities.
<b>Recreation</b>	Recreation is limited to the activities that can done on the streets.	Provide new spaces for recreation. Open possibilities for recreation combined with education.

### 7.2.3 Upgrading the Basic Infrastructure

	<b>Current situation</b>	<b>Objective</b>
<b>Sewerage / sanitation</b>	<p>Insufficient facilities available, majority of the population uses the beaches for defecation.</p> <p>Infrastructure for final disposal of sewage none existing.</p>	<p>Provide a functional system which covers the basic needs and improves accessibility to sanitation facilities.</p> <p>Provide incentive for proper usage by combining with social activity.</p>
<b>Drainage</b>	<p>Open sewage drains take up space.</p> <p>Children play in these areas.</p>	<p>Provide a system that is ecological, sustainable and clean.</p>
<b>Water supply</b>	<p>Insufficient and inefficient water supply from the mainland.</p> <p>Defunct rain-water collection system.</p>	<p>Provide adequate water from the mainland and ensure proper distribution.</p> <p>Check desalination option.</p>
<b>Environment</b>	<p>Open drains, defecation on the beaches, showers in the streets...</p>	<p>Besides improving the facilities engage population in awareness programs.</p>
<b>Energy</b>	<p>Insufficient distribution on the island.</p> <p>Mainland power sufficient.</p>	<p>Improve island distribution system.</p> <p>Use alternative sources for such as wind, tidal and solar.</p>



## 8. Strategic Concept

### 8.1 Introduction

The Ilha de Moçambique receives approximately USD 8.0 million annually from national and international organizations. This sum is directed to finance various projects from infrastructure, education to tourism (see list of projects in the annex). Most of the funds are directed at projects located in Stone Town.

### 8.2 Assumption / Development Strategies

As Macuti Town is the major constraint for the development of sustainable tourism half of this sum, i.e. USD 4.0 million annually should be delegated to the resolving of the Macuti situation.

This sum is a rough estimate but allows for a plausible definition of scale for possible development proposals.

The four strategies considered are:

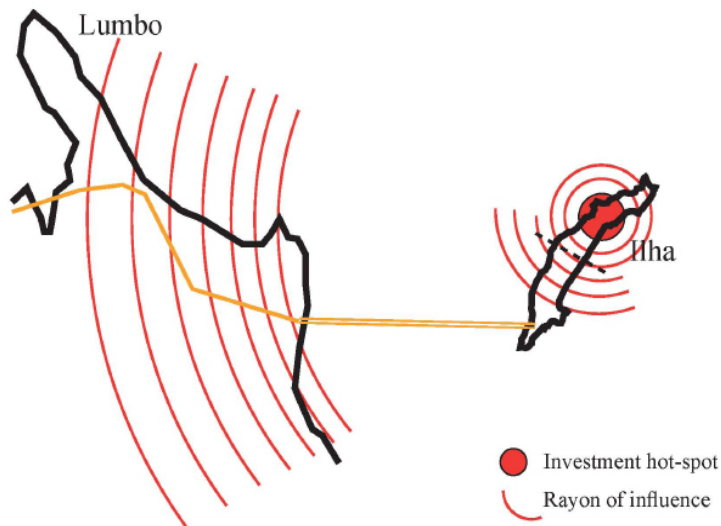
- Monument preservation
- Mainland development
- Broad Macuti Town intervention
- Focused Macuti Town intervention

#### 8.2.1 Monument Preservation

Historic monuments are one of the key reasons for the high tourism potential of the island. They are at risk and their preservation is essential. This effort has to date consumed a considerable part of the resources dedicated to the site.

Especially if the restoration work is extended to include roads, drainage etc. these efforts offer significant opportunities of employment for the population of Macuti Town. It is possible to imagine a scenario under which such activities are increased to the point of offering a livelihood for the entire population of the Macuti Town. If 3'000 people (i.e. one in four) were employed at USD 100 per month this would cost an annual USD 3.6 million. Naturally the restoration does not only consist of manual labour. Materials, training and overheads would lead to a significantly higher figure. Nevertheless, if this were the solution the appropriate figure would have to be considered seriously. If the current investment were used in such a way that it reached the population basis this would be a desirable strategy.

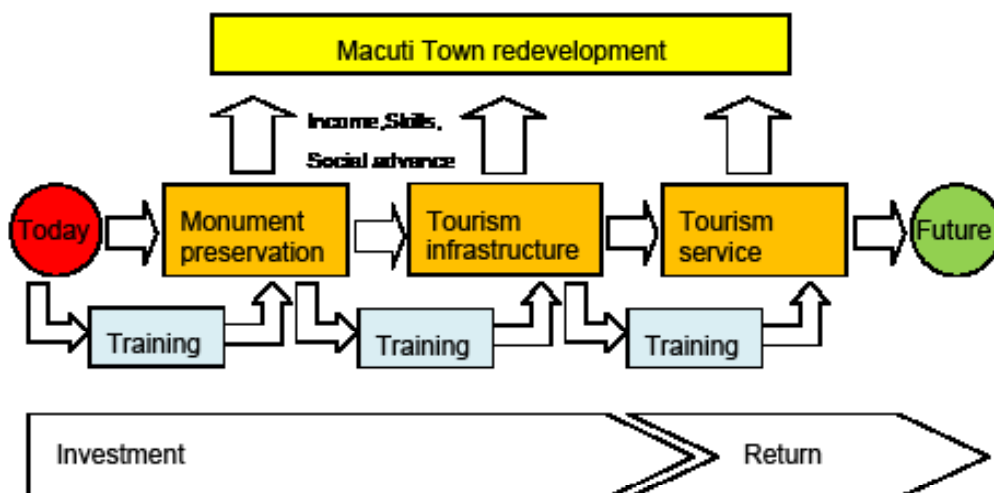
The model shows how the redevelopment of Macuti Town and adjacent mainland areas would be influenced by the monument preservation effort. This development strategy would give the residents of Macuti Town the opportunity of an employment income and training. In an initial phase this would be related directly to the preserva-



Spatial implication of the Monuments Preservation strategy:

tion efforts. At a later stage the tourism ventures attracted by the heritage environment would provide employment opportunities in the service areas.

The following development model is proposed:





There would however be no direct investment into Macuti Town and the extent to which the population would use the income for improvements of their habitat is debatable. The alternative of mainland relocation is to be considered; however this would require the provisions of attractive living conditions, i.e. access to roads, water and electricity and decent lot sizes. In addition properties and house construction would have to be affordable, that is loans guaranteed by employment or part of the employment package would have to be available. The current experience suggests improvements on the mainland tend to attract more population from the interior, instead of leading to a decrease of population on the island. This problem would have to be addressed in a legal and financing framework.

The main problem at the outset is the disparity of the level of skills available in the Macuti population and the requirements for the precision work of restoration. The population is to a large extent illiterate and skilled labours that could convey their techniques are hard to find. The training effort would thus have to be a substantial undertaking on a long-term time basis.

### 8.2.2 Mainland Development

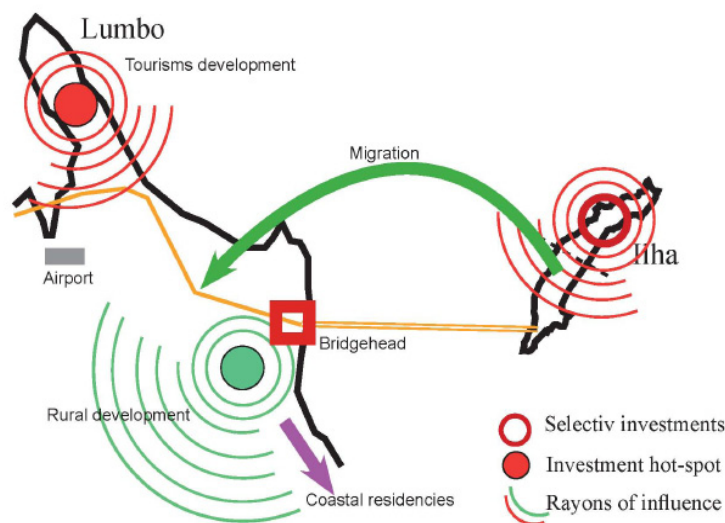
A possible strategy for development of the island, including the Macuti Town areas, is the substantial development of the mainland opposite the island. The Strategic Development Proposal (SDP) links the mainland with the island, based on the fact that on the mainland enough space is available for creating new residential areas and tourism facilities which are complementary to those already existing on the island. The island is not large enough to accommodate the infrastructures necessary for a broad based tourism. Only by developing a bridgehead on the mainland and linking this to new hotel complexes of a substantial size (100 to 200 beds) can an economy of scale be reached that can be directed to the international market.

The idea behind the model is that a heritage tax or specific site contribution will provide the means necessary to maintain the historical monuments. Rates for services will allow for the construction and maintenance of adequate infrastructures.

The immediate problem, besides the significant investment needs in infrastructure, is the non compatibility of the Macuti Town with high-mid-class tourism. To address this problem, besides some direct investment into the Macuti Town, a significant portion of the population would have to relocate to the mainland. In theory the development of the mainland in itself would provide incentive to leave, as jobs are created there and services are provided.

The Villa de Millenium project is one such government backed venture encouraging the population to develop its rural base in the Lumbo area. There is however a contradiction in providing the most attractive sites for the resettlement.

The town of Lumbo was the historical mainland hub. The railway line ended here and goods were ferried to the island by boat leaving from the piers built out into the sea. Nowadays the town is in decay; however it still includes the most attractive sites for tourism development on the mainland.



#### Spatial implication od the Mainland development

More favourable to the development of the area as a whole is the opening of the areas south of the main road for the local population. This effort has already begun and a road grid has been constructed.

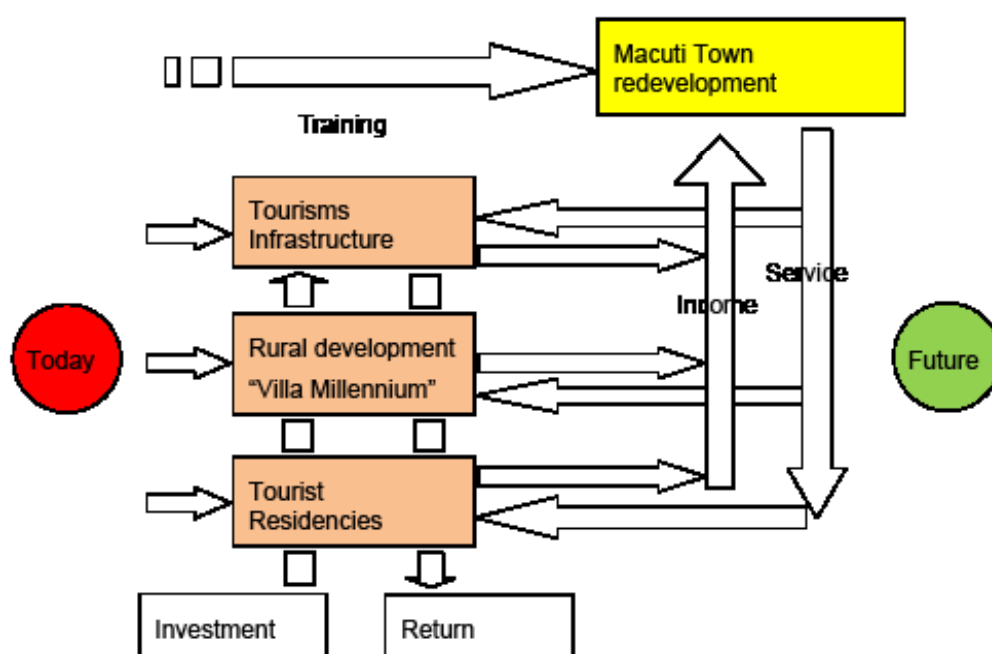
A third component is the reservation of front-line properties for tourism and ocean-side residences. There is already an access road running along the coast. This road could be extended to include the nearby bays.

The essential key is trust in the provision of infrastructures and sufficient commitment by the government, in collaboration with donors and foundations, to address the socio-economic problems of the population. The private investor is not interested in investing in projects that will need a generation to become reality. To date there is no development plan that would include the mainland areas and show how all components should interact to create a sustainable situation based on tourism.



The investments into infrastructure would include the reopening of the Lumbo airport at least for lightweight aircraft, the reestablishment of the rail link by rebuilding the 43km stretch linking Lumbo to the Nacala corridor and the building of roads, distribution nets for water and electricity and the provision of sewage treatment.

These are significant investments that require a framework established at the national level and coordinated all the way down the supply chain to the private stakeholder and investor.

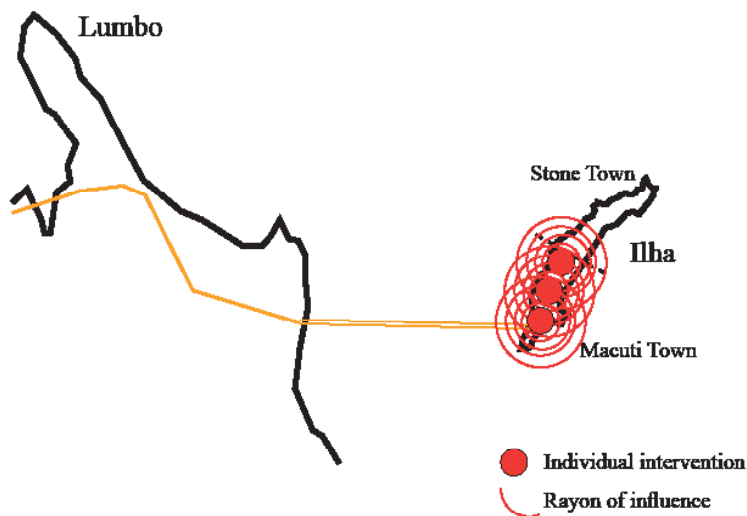


### 8.2.3 Broad Area / Narrow Based Macuti Town Interventions

This strategy envisions the redevelopment of the Macuti Town based on private initiatives within an institutional framework. Possible elements are a Microcredit banking scheme and lead projects in arts & crafts and similar areas of cultural interest backed by donors but awarded to local groups or individuals on competitive terms of reference.

One current such intervention on the infrastructure level is the backing of private initiatives for the construction of latrines. This example however also shows the limits of this approach as the broad application of this principle is not possible, or at least highly limiting to the development of the Macuti Town as a whole.





#### Spatial implication of the Broad area/ narrow based Macuti Town Intervention

Of more value to the “change of paradigm” approach would be the backing of initiatives on the cultural and/or economic level. For example “curiosa” shops and kiosks, handcraft home industries or fishing and seafood ventures.

In respect to the Macuti habitats initiatives for home upgrading could be fostered and supported. Room should be given to improvements based on the historic model, true to the proper application of traditional materials, and to modern day ideas using today’s materials in innovative and appropriate ways.

The main advantage of the broad based approach is that there is no lower threshold. A wide range of initiatives are possible and partially they are already in place. The approach relies on private initiative from the population and diverse ventures from donors and development banks. The argument for USD 4 million annually for the Macuti Town would leave ample space for a wide range of initiatives.

If as a though experiment only the housing situation is considered the following scenario could be proposed:

In the island context USD 1.000 is considered sufficient to construct a traditional house. If a significantly improved model is considered USD 5.000 would be an appropriate figure. This would mean 800 habitats per year could be rebuilt. In two years the whole Macuti Town environment would be replaced.

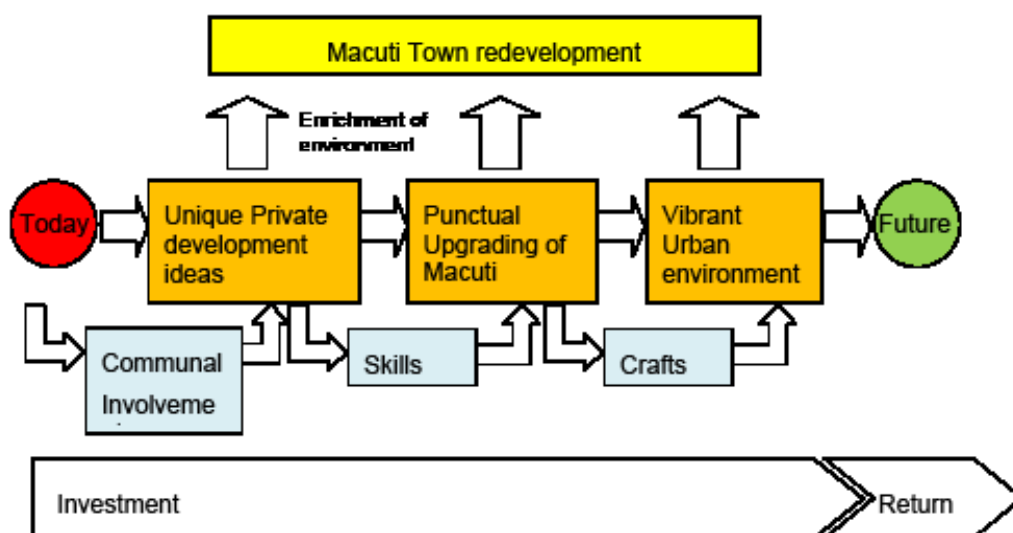
The high level of salt in the air and the impossibility of applying cement based plaster to chalk walls suggest, the construction throughout the Macuti Town should be based on walls of chalk, wattle and daub and the traditional Macuti roofing. This however implies high maintenance as the roofs need to be replaced every few years. In addition the initial materials are difficult to acquire in appropriate quality



and are costly. Constructions based on cement of ceramic blocks and cement plaster are also possible. The usual construction of corner pillars, lintels and ring beams in reinforced concrete is to be avoided as the proper coverage of the iron re-bars is in practice never achieved and the sand used in the concrete is saline to start with. Instead brick-force nets in carbon fibres are readily available on the South-African market.

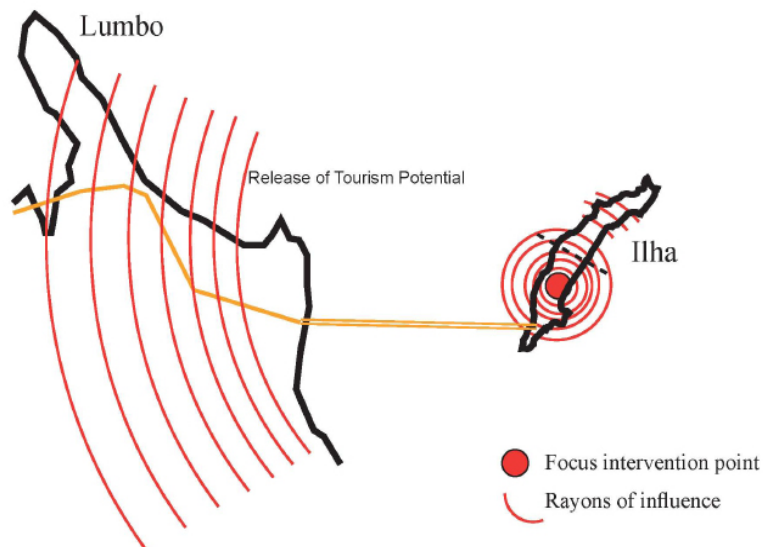
The roofing could be in thatch or cement based tiles. The wide use of thatch seems an attractive alternative to the Macuti roofing. The material would have to be imported; however there is no shortage in the region and the lifespan is considerably longer than the Macuti roof.

This does not address the underlying problems of density and infrastructure. It does however show the proportions of the problem and which components should actually be considered “solvable”.



The market is relied on to regulate access and project overheads can be kept to a minimum. The population is encouraged to take its own initiative and not to rely on general planning and development programs. In this sense the approach activates the population and contributes to a vibrant environment. The return to the community is the gradual improvement of the habitat based on ventures within the existing market.

The disadvantage of the broad and individualistic approach is the possible lack of consistency. This however is dependent on the framework. If goals and objectives on the meta-level are clearly set, the model is an efficient means of reaching them. If on the other hand the initiative is left to uncoordinated interventions the result will be the resolution of individual problems at the cost of a coherent whole.



Spatial implication of the Focused Macuti Town intervention

#### 8.2.4 Focused Macuti Town Intervention

The idea behind this strategy is the radiance of focused significant interventions on the Macuti Town and by implication on the island and mainland areas as a whole.

By focusing on the most pressing needs and addressing them in an exemplary fashion the imagination of the population is captured. Ideally this will lead to a change in self-perception and ultimately also to the redefinition of the Macuti Town as perceived in the island context.

As we have seen in the objectives the most pressing needs are:

- Density reduction
- Infrastructure
- Housing
- Public Space

It is not possible to address the housing problem with an individual intervention. The other objectives can however be addressed:

Reducing the density of the Macuti Town can mean two things:

- Reducing the number of inhabitants per house
- Reducing the number of houses

In both cases alternative housing must be provided. This is to be resolved in the context of the mainland and is not addressed here. Reducing the inhabitants per



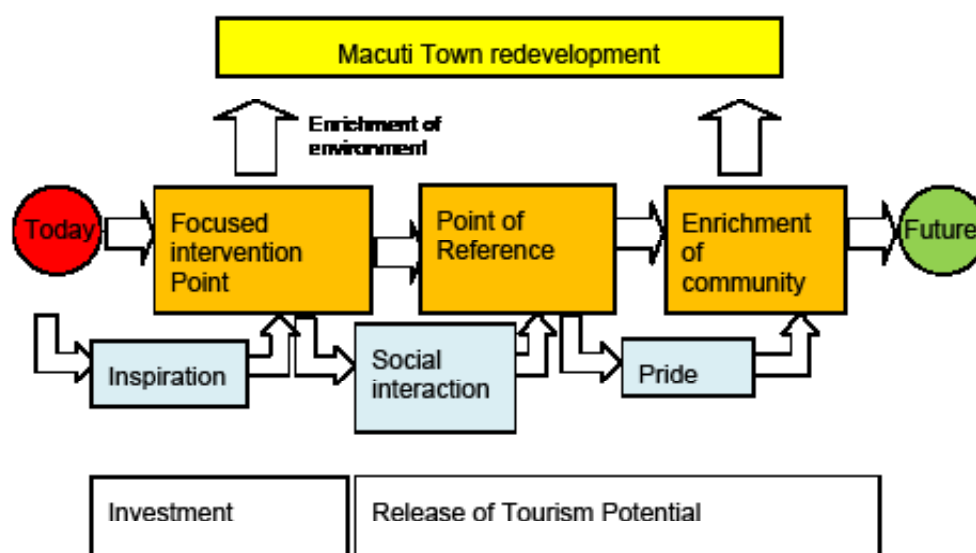
house must be on a voluntary basis and is also dependant on alternatives. Reducing the number of houses could be achieved by decree if sufficient arguments are put forth.

- Part of the Macuti Town is in areas liable to flooding,
- These areas are the most recently and most densely populated with the poorest conditions,
- Providing infrastructures to these sites is particularly difficult,
- The necessities of the larger Macuti Town population in terms of public space and infrastructure could justify prioritising over existing habitats,
- There is no shortage of space for alternative housing on the mainland .

A focused intervention could be a structure, or number of structures, located in, and replacing, the most inadequate housing areas and providing infrastructure and public space to the larger population of Macuti Town.

- These infrastructures could include:
- Hygiene facilities such as public baths, toilets and showers
- Sewage treatment
- Sports and recreation facilities
- Meeting areas
- Incentives for education / access to the internet

If the usage of one year's investment, or USD 4 million, is considered for the provision of a focused intervention this would correspond to approx. 4000 m<sup>2</sup> of built



area at USD 1.000 per m<sup>2</sup> (a figure sufficient for international grade construction). Alternatively one could consider 2000 m<sup>2</sup> of built area and USD 2 million for infrastructure for sewage treatment.

strategy	positive	negative	conclusion
Monument preservation	<ul style="list-style-type: none"> <li>▪ Local income</li> <li>▪ Training</li> <li>▪ Heritage</li> </ul>	<ul style="list-style-type: none"> <li>▪ Donor reliance</li> <li>▪ No direct intervention in Macuti Town</li> </ul>	<ul style="list-style-type: none"> <li>▪ Necessary to maintain heritage</li> <li>▪ Not sustainable</li> </ul>
Mainland development	<ul style="list-style-type: none"> <li>▪ Mainland income generating</li> <li>▪ Training</li> <li>▪ Migration/ commuting</li> </ul>	<ul style="list-style-type: none"> <li>▪ No direct intervention in Macuti Town</li> <li>▪ Significant investment requirement</li> </ul>	<ul style="list-style-type: none"> <li>▪ "Leap of faith" gap.</li> <li>▪ Framework not established</li> </ul>
Broad area / narrow based intervention	<ul style="list-style-type: none"> <li>▪ Involvement of the community</li> <li>▪ Self-regulating</li> <li>▪ Scalability</li> </ul>	<ul style="list-style-type: none"> <li>▪ Lack of coordination</li> <li>▪ Conflict of interests</li> </ul>	<ul style="list-style-type: none"> <li>▪ Component requirement</li> <li>▪ Low intensity</li> </ul>
Focused intervention	<ul style="list-style-type: none"> <li>▪ Point of reference for the population</li> <li>▪ Decisive</li> <li>▪ Inspirational</li> </ul>	<ul style="list-style-type: none"> <li>▪ Investment and stakeholder alignment requirement</li> </ul>	<ul style="list-style-type: none"> <li>▪ Change agent</li> </ul>

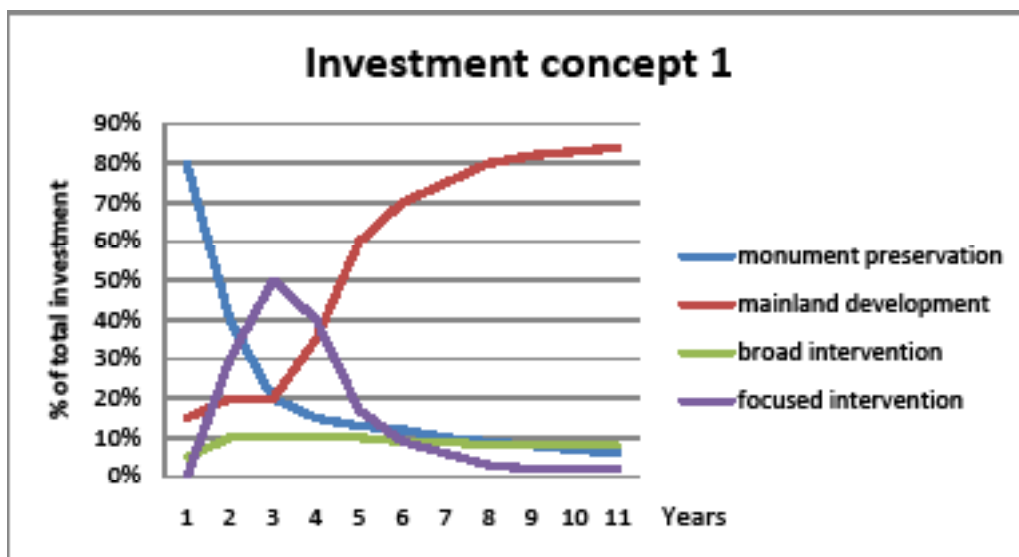
### 8.3 Discussion of the Strategies

As we have seen no single strategy is able to address all the problems concerning the island development and in particular resolve the Macuti Town situation. By combining the strategies and placing them on a time-line, a development plan is defined that maximises the chances of success.

#### 8.3.1 Investment Concept

Based on the assumption of a continuous net flow of financing the projection of the contributions to the four strategies is as follows:

% of investment:												
monument preservation	80%	40%	20%	15%	13%	12%	10%	9%	8%	7%	6%	
mainland development	15%	20%	20%	35%	60%	70%	75%	80%	82%	83%	84%	
broad intervention	5%	10%	10%	10%	10%	9%	9%	8%	8%	8%	8%	
focused intervention	0%	30%	50%	40%	17%	9%	6%	3%	2%	2%	2%	
%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Years	0	1	2	3	4	5	6	7	8	9	10	



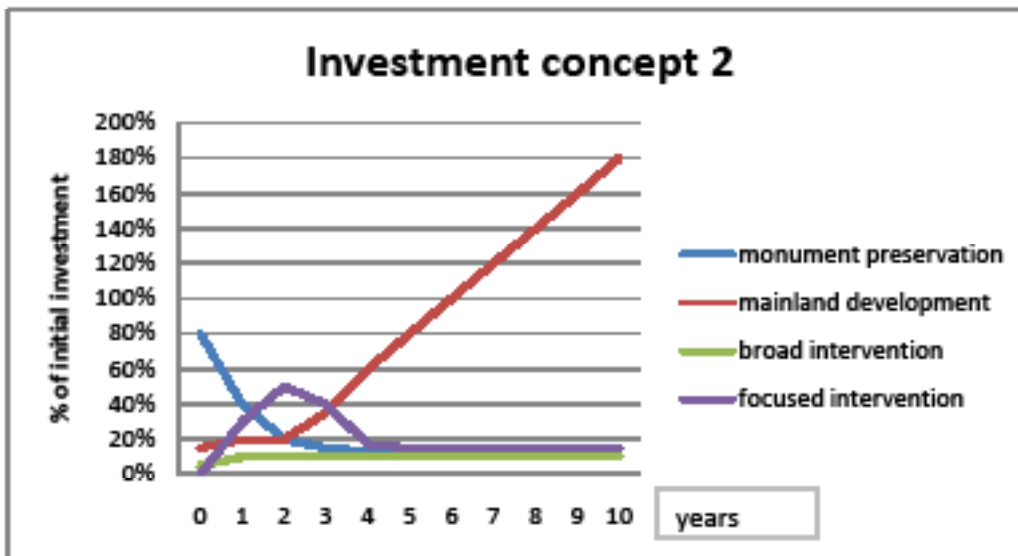
The investment into monument preservation is rapidly faded out. A significant focused intervention fills the gap and produces a “change of paradigm” with signal character. This boosts the investment into mainland tourism infrastructure and provides incentive for a continued broad area / narrow based intervention in the Macuti Town areas. The assumption is the mainland tourism base is sufficient to sustain the island development.

This is questionable if the financial commitment is maintained constant. As it was assumed the mainland development is public and private based, it seems permissible to increase the net funding correspondingly.

Based on the assumption the private investment assumes a more dominant role, complementing and ultimately substituting the public / donor funding the projection is as follows:

% of investment											
monument preservation	80%	40%	20%	15%	13%	12%	10%	10%	10%	10%	10%
mainland development	15%	20%	20%	35%	60%	80%	100%	120%	140%	160%	180%
broad intervention	5%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
focused intervention	0%	30%	50%	40%	17%	15%	15%	15%	15%	15%	15%
%	100%	100%	100%	100%	100%	117%	135%	155%	175%	195%	215%
Years	0	1	2	3	4	5	6	7	8	9	10

Over a time period of ten years the investment volume is assumed to roughly double. This permits the investment into monument preservation, broad area / narrow based and maintaining the focused intervention point to be kept constant, after a transition period of four years.



This concept would provide an ideal development scenario from the (limited) financial perspective. The mainland development assumes a lead role and provides the framework for a sustainable development. Crucial to this model is the success of the focused intervention in aligning the stakeholders behind a tourism based investment program based on private-public interventions.

This discussion underlines the importance of the focused intervention and its ability to enable a change of paradigm.

#### 8.4 Strategic Structure Plan

The discussion of the strategies shows the interrelation between the four strategies and the necessity to prioritise the interventions that address the problem as a whole.

The proposed structure plan demonstrates a possible spatial implication of the strategies without going into the details of the implementation framework. It respects both the current conditions and the opportunities that exist in each area.

The structure plan defines the optimal land use for the Stone Town, Macuti Town and the Mainland, considered from the perspective of the development of the Macuti Town.

##### 8.4.1 Residential areas

For the development of Macuti Town the definition of the residential areas within the Island district is important. Because of the scarcity of land on the island, the mainland is the area most favourable for the satisfaction of the residential requirements.



## Macuti Town

The Macuti Town is the principal habitat of the Island. The main use of this area is residential and this should be maintained.

In order to be functional these areas need to be restructured. The existing urban grid should be respected and applied to the planning process. The housing density needs to be reduced to the initial plan.

New open spaces within the settlement fabric need to be created. Communal infrastructures such as wash-houses and meeting areas for the young should be provided.

An integral and reliable solution to the hygiene situation must be found. This above all means the sewage situation must be solved.

The redevelopment of this area needs to consider the particular requirements of an indigenous community in transition:

- Identity
- Opportunity
- Familiarity

The needs of the new generation of the island should be considered without losing the identity of the Macuti Town. The contribution the population can make to the improvement of its own environment is central.

## Stone Town

The existing residential buildings should be preserved and reconstructed. A new structure plan is not necessary because the existing grid is still functional and gives the Stone Town its unique character.

Where a reconstruction is no longer possible, new residences should be erected that follow the building codes particular to the island.

A residential use of former warehouses should be considered.

## Mainland

A bridgehead development is to be established that includes public housing and forms a small but urban environment.

A new residential area is planned south and west of this bridge head. This area should serve as an expansion area for the urban centre. Sufficient land is reserved for a semi-urban environment with a degree of self-sufficiency of the individual homesteads. The transition to the rural areas further inland is gradual.

To encourage the population to settle in these areas basic infrastructures such a road access, water and electricity should be provided.



Construction methods can vary from the traditional methods inland to more modern structures closer to the bridgehead.

#### 8.4.2 Commercial Activity Area

Commercial activities are within the bridgehead development, along the shore-facing coast of the island, following the main access road within the Stone Town and adjacent to the air- and rail-port facilities foreseen on the mainland.

##### Macuti Town

Within the Macuti Town commerce can take place at the cottage industry level and at the local market. In addition, a new centre for exchange of handcraft and souvenirs is intended in the focused intervention area and the local harbor should provide opportunity for water-sports and fishing activities.

The area beside the bay is appropriate for a fish market, "Quiosques" selling traditional food prepared by the locals and market stand for selling artisanal products.

##### Stone Town

The commercial area in Stone Town is centrally located. This permits the creation of a shopping mile that extends from the main market to the former Governor's palace.

This area is suitable for shops, bars and restaurant which serve the locals but mainly also the tourists.

This activity is a continuation of an existing trend, thus only needing to be encourages my favorable legislation and commercial opportunity.

##### Mainland

Commercial activities on the mainland include the tourism services around the bridgehead and in Lumbo, and the areas around the air- and rail-port.

In addition the land cultivation in the inland areas is expected to intensify as the demand for fresh products increases. This development should be encouraged by the provision of road access and irrigation projects.

#### 8.4.3 Area for Public Institution and Services

The municipal hospital, the schools and administrative buildings are located in compact areas forming the division line between the Stone Town and the Macuti Town, and along the bay seafront of the Stone Town.



Some central functions such as customs and additional schooling facilities will also be located at the mainland urban areas of Lumbo and the bridgehead development.

#### 8.4.4 Area for Tourisms and Recreation

The northern point of the island, beyond the Governor's palace includes public parks and gardens, landmark buildings, hotels and the fortress. This is the prime area for tourism development. It is a green area and has beaches with public access.

#### 8.4.5 Protected Areas

The public beaches of the Macuti Town are in a poor state as they are used for sewage outlet and defecation. These areas must be restored and protected. They not only form an integral part of the island environment but are also a marine habitat of some importance.

The ocean floor around the island is covered with shipwrecks from centuries of trade and strife. This is a valuable asset for diving and must be protected.

#### 8.4.6 Bridge head

A new urban centre should be created around the bridgehead. Today there is an informal market and a collection of makeshift shacks on this site. Access to the island should be controlled from here. There is no point in admitting private transport to the island. Public parking facilities and major tourism facilities such a sea-front hotel and tourism information centre could be locate here.

#### 8.4.7 Lumbo

Lumbo is the site of the former mainland hub serving the island. Some of the shorefront properties can still be restored. The interior of the peninsula is in ruins, however this are the best areas for tourism development as they are raised properties with a sea view and lavish green surrounding.

## 9 Project Outline / Focused Intervention

### 9.1 Points of Focused Intervention

The significance of a focused intervention to alter the perception of the island and the perspective the local population has of their own future was discussed in chapter 8 (Strategic Concept).

The following points of focused intervention are proposed:

- Entrance Park
- Bay-front marina with fishing and water-sports facilities
- Shaded alleyway leading across the Macuti Town
- Central Sports and Recreation centre built in the low areas of the Litine borough



### 9.2 Sports and Recreation Centre

The Sports and Recreation Centre (SRC) is located on the main avenue (Av. 25 de Junho) and lies central to the Macuti Town areas. This is the location of one of the historic quarries and is an area that is below sea-level. The current use is housing in the Macuti tradition but without many of the ordering principles applied in the



earlier settlement areas. Removing these habitats seems justified as they are in the areas most affected by flooding and also at a collection point for sewage and run-off waters.

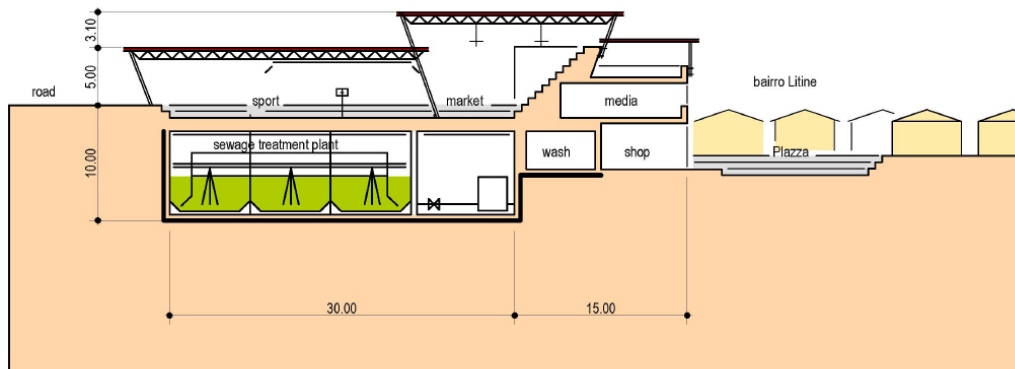


The principal functional idea behind the SRC is the location of a sewage treatment facility on the basement level and a sports ground and market on the upper level.

Instead of the current system with septic tanks, a new Macuti Town sewage system can be defined that directs the waste water to the lowest point within the island. Here the water is treated and the effluents are pumped out to sea in a single line extended well beyond the island. The solid waste can be evacuated periodically to the mainland along the main road.

This system has a number of advantages:

- An inexpensive gravitation system can be built for the rest of the Macuti Town, sufficient capacity is envisioned to also serve the Stone Town.
- There is no need for individual septic tanks that need periodic excavation.
- The centralized system is controlled at a single point.
- The treatment plan forms a base that can be used for the Sports and Recreation Centre.



Section of Sports and Recreation Centre

The SRC can also be built to offer further advantages to the community:

- Covered sports and market facilities
- Changing rooms with shower and sanitation facilities
- Shopping front onto an open Plaza
- Media floor with internet café and meeting rooms

From a purely functional perspective the building could use the extensive roof surface for rain-water collection and for the generation of solar energy. The combination with a salt-water desalination plant still needs to be studied. If this is not possible sufficient fresh water needs to be pumped from the mainland.

In conjunction with the “change of paradigm” concept the building sets a decisive sign for the importance of the Macuti Town development.

A sustainable solution for the sewage problem is envisioned and at the same time valuable services are provided to the community. The washroom facilities are central and can easily be maintained. They are provided in combination with sports facilities and public meeting areas. This is intended to send a clear signal as to the importance of the proper use of sanitation facilities and provide the necessary incentive to invert the acceptance of using the beaches for defecation.

### 9.3 Outline Costing

The dimensions of the Sports and Recreation Centre are 45m x 100m = 4'500m<sup>2</sup>.

If as a rough approximation the building is considered to be single story and the rate of USD 1'000 / m<sup>2</sup> is applied, the pure construction cost can be estimated at USD 9 million. Considering that the cement works of Nacala are only 80km away and the cost of manual labour is low, USD 10 million, including overhead, is a safe estimate.



A small sewage treatment plan with a capacity of 8'500 m<sup>3</sup> per day is estimated at a turn-key cost of USD 2.2 million.<sup>17</sup>

The total project cost is thus estimated at USD 12 million.

If the inclusion of additional technical facilities and the construction of the sewage network throughout the Macuti Town are considered, we are looking at a figure of approximately USD 15 million.

Spread over a period of five years this would be an annual investment of USD 3 million. This is within the framework outlined in the discussion of investment (8.2). In addition a significant proportion of the investment would be into local labour and would thus benefit the community in a direct way.

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17 Rostov Scientific Research Institute of the Academy of Public Services after K.D: Pamfilov







# Implementation





## 10 Implementation Framework

### 10.1 General Considerations

The proposed intervention and the implied strategy require a leap of faith. Mozambique receives approximately USD 5 billion in aid annually. If a small proportion of these funds were directed to the Island situation, the island would prosper in a short period of time.

There are however reasons why the Island is not considered:

- The economic benefit to the whole nation is not evident.
- The balance of trade and industrial basis is hardly impacted.
- The number of people benefited is limited.
- Tourism is an unstable industry and sensitive to environmental change.

If the island is not necessarily a public priority, the interest from the private sector is real. However, the private sector is not willing to address structural problems that require a significant investment within an unsettled framework.

The way forward would seem to be a public-private partnership. There are other projects in Mozambique that have successfully followed this path:

- The Trans-frontier Park Initiative
- The Maputo-Witbank development corridor
- The Crown Agents customs alliance

As the Island is under World Heritage Site protection and is well aligned with other national programs such as the Millennium Goals and Poverty Alleviation Programs (PARPA) it would seem the public component is posed for action, if the private sector can be enticed to commit.

As we have seen addressing the Macuti Town situation is the key to overcoming this reluctance. The author is convinced a strong steering-committee with parity between private and public components is crucial.

The difficulty is in providing an institutional framework with a generation pay-back period to enable the private sector to expect a business cycle with a payback period of five to seven years. A mediating role might be expected from foundations such as the Aga Kahn Foundation that is already present throughout the region and particularly in the tourism area.

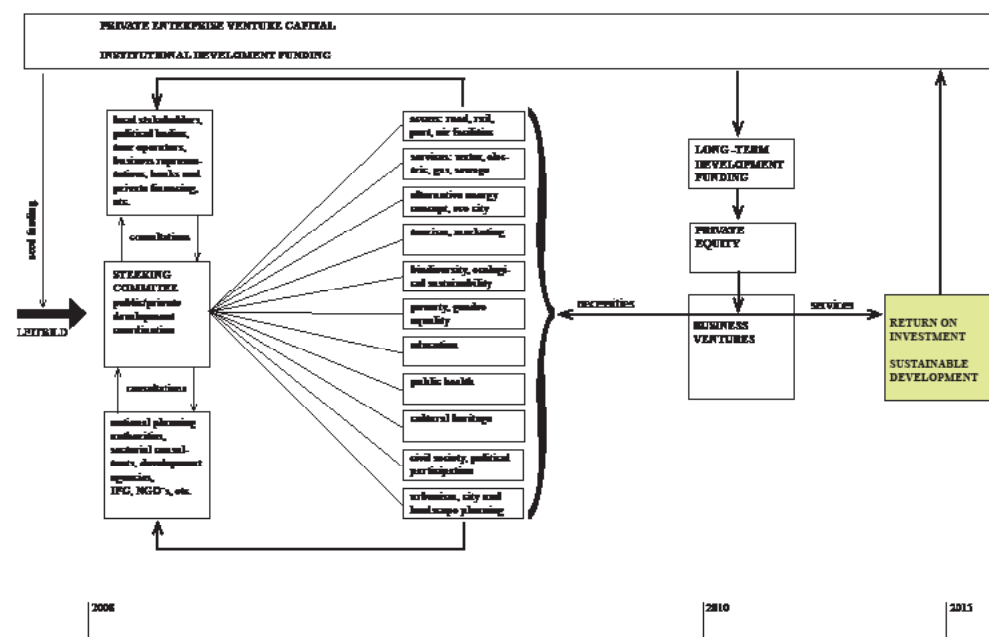
The lead for such a process would have to come from the national government, but a high degree of autonomy would then have to be granted to the steering committee.



**ILHA DE MOÇAMBIQUE DEVELOPMENT PLAN**  
Implementation Structure

target

April 2007



10.2 Planning Framework

The municipality needs “structure plans”, “municipal development plans” and “partial plans or detailed plans”. The first and indispensable element on the elaboration of this planning strategies is the participation. The participation is a form of indispensable work, not only in the search for solutions for the urban problems but also as an essential element to the formation and training of the operative municipality bodies (administrative and technicians).

A variety of “stakeholders” must be involved , the government, the local communities, the private sector and the civil society and all of them, together, can make decisions to satisfy the citizens needs.

Because a certain lack of technical staff on the local level a certain educational programmes should be developed to sensitize the population to participated on the planning process.

10.3 Priorities

10.3.1 Site Office

The Palacio Girasol has just been renovated under the Twin City program with Bergen in Norway. The building offers good office and conference facilities. This could

be the central facility of the steering committee. Funding of such a feature is at risk as the Bergen program has now ended.

### 10.3.2 Maps

One of the major legacies of the Twin City component has been the elaboration of GIS maps of the Island. These maps have been used as the basis for this report. On the island the capacity to work with the maps is however very limited.

Based on the maps it should be possible to establish a cadastre service that would provide the planning and title deed security necessary for investment.

A further objective is the mapping of the mainland areas. To date the best information on the mainland environment is taken from Google Earth. The 7-Cities program is considering addressing this problem, to date there has however been no decision to implement.

### 10.2.3 Millennium Goals

The Architect Arlinde Dgedge, national director of territorial planning under the Ministry of Environmental Affairs (MICOA) is interested in collaboration with the HSR to address the planning of the island and in particular confront the aspects of poverty reduction.

He has given written indication of his commitment and is willing to align his institution with a research project defined by a Swiss institution.







# Conclusions



## 11 Discussion of the Results / Conclusions

We have followed an extended path through the history of the Island into projections of a possible future and the concrete proposal of an intervention project. Based on existing studies a basis for discussion of the options was created.

It became apparent that the Macuti Town situation is a major impediment to the realisation of the island potential in the tourism realm. It thus becomes an imperative to address this situation if change is to be realized.

This is no easy task as the problems are engrained in the livelihood of the population and the society they live in. The population is in fact basically content with the situation it is in. This is because they compare with the option of living off the land further inland. From their perspective the island is an urban situation, the sea provides the essentials and the existing interest in the heritage and monuments is enough to provide occasional perks and income opportunities.

At the same time modern media have also reached the Island and the predominantly young population is aware of other options – even if they appear as beyond their wildest dreams.

The focused intervention the author proposes intends to solve some of the most pressing hazards the Macuti Town faces – namely the absence of decent sanitation facilities and the lack of public spaces – and at the same time provide the local population with a new image for the situation they live in. In the process significant construction work needs to be undertaken. As this includes the sewage system throughout the Macuti Town a large portion of the local population can be involved over an extended period of time.

In the ideal situation the prospect of a sustained income and a sustainable solution to the sewage situation is sufficient to encourage private sector investors to commit to the Island future.

The “change of paradigm” approach needs to be extended beyond the context of the Island perception to a generation approach. The heritage that may be protected is significant, at stake is however the transition of the local population from a tribal structure to a modern society able to act within a global context. The heritage may serve as a catalyser for this transition.









Appendix



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