

MASTERPLAN BEIRA MOZAMBIQUE

November 2013

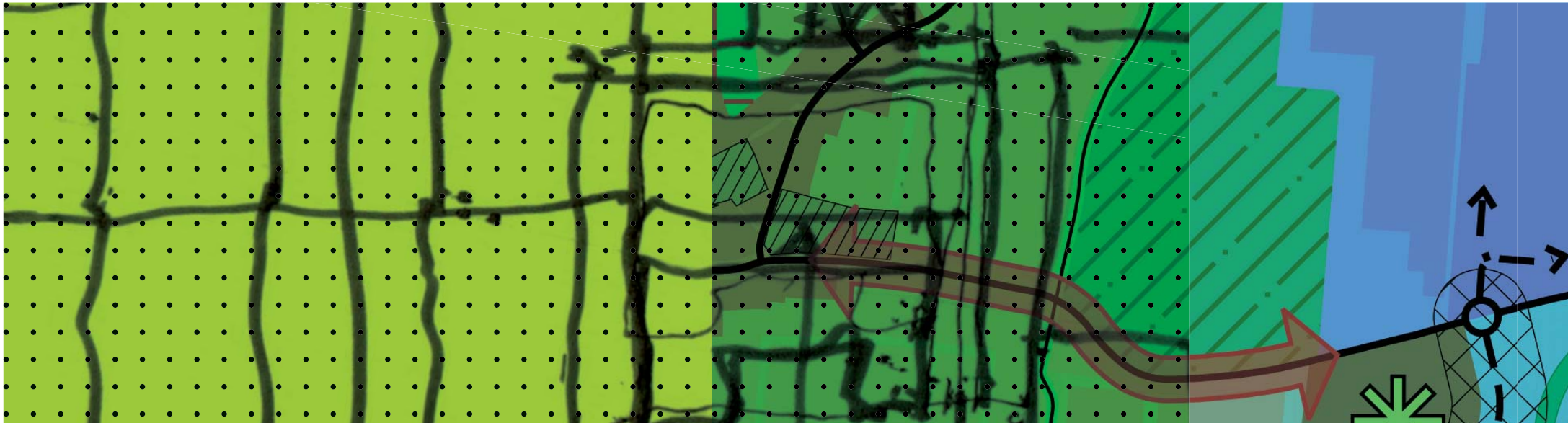


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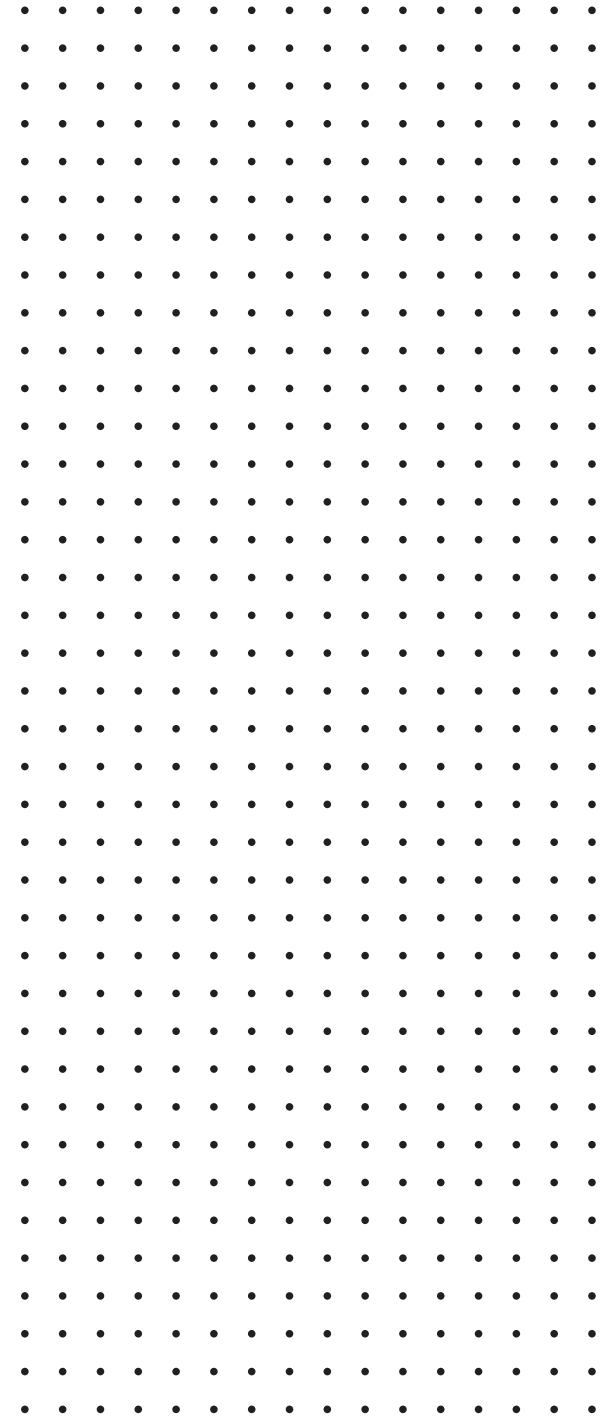
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Masterplan

MASTERPLAN BEIRA
MOZAMBIQUE
November 2013

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0 Summary

Introduction

The consortium Deltares, Witteveen+Bos, Wissing, NIRAS Mozambique and Van-denBroek Consulting developed the Masterplan Beira 2035 in cooperation with the municipality of Beira (CMB) and local stakeholders. The Masterplan project essentially consists of two parts: Masterplan development and the development of a long list and shortlist of projects. For these projects, also financing options are researched and sought.

Essential challenges for Beira

The overall goal of the Masterplan is to make a significant contribution to a safe, prosperous and beautiful Beira. To realize this overall goal, Beira essentially faces three challenges:

- To utilize the great economic potential of the city and its hinterland, mainly due to its strategic location at the Indian Ocean and at the end of an important transport corridor and the presence of a sea port;
- To improve the currently poor living conditions of a large part of its inhabitants, mainly due to poor basic infrastructure and service coverage;
- To adapt to climate change and sustainably coexist with its natural environment. Beira is located in a delta and large parts of the built up areas are prone to flooding.

To meet these challenges, an integrated and planned approach to these challenges plus a clear implementation and financing strategy are necessary. An integrated approach (thereby linking the challenges) also creates better opportunities for financing of follow-up projects.

Core strategic interventions

In the tables 0.1 and 0.2, we have summarized the core strategic interventions for each challenge. The foremost intervention is capacity building of CMB and institutional strengthening, which is a precondition for the successful implementation of the Masterplan and the follow-up projects.

Table 0.1 Essential challenges for Beira

1	Utilize the economic potential of Beira
	Improve the investment climate in Beira
	Rehabilitation and expansion of rail and road connections to the hinterland
	Rehabilitation and expansion of current primary access roads in Beira
	Improvement and expansion of the urban public transport system
	Expansion of the port and industrial areas, including transport infrastructure and dredging operations
	Professional and effective management and maintenance of transport infrastructure
2	Improve the living conditions and quality of life of the citizens of Beira
	Improved service levels of services with regard to health, safety, recreation, education, etc.
	Provide basic quality and affordable (social) housing
	Rehabilitation and expansion of sewer and drinking water distribution network
	Rehabilitation and expansion of drinking water treatment plant
	Improved solid waste management
	Professional and effective management and maintenance of basic infrastructure and services

3	Realize flood proof residential and industrial areas
	Integrated planning with a special focus on urban planning, watermanagement and vital infrastructure and services
	Urban development in areas with a relative high ground level (i.e. east of Manga)
	Rehabilitation and expansion of drainage infrastructure
	Rehabilitation and strengthening of coastal protection

Table 0.2 Essential preconditions

1	Capacity building and institutional strengthening
	Sustainable public - public and public - private cooperation
	Integrated urban planning with a special focus on watermanagement
	Training and education of CMB employees (preferably on the job)
	Technical instruments and datamanagement
	Financing capacity of CMB and financial engineering of projects
	Implementation of a Land Development Company (LDC)
	Enforcement of plans and regulations

Integrated and planned spatial development

The core strategic parameters above have been integrated into one strategy for spatial development and urban expansion of Beira. Starting points for this strategy are:

- The spatial layer model. This model emphasizes the importance of the so-called base layer, which influences the network layer (i.e. infrastructure) and occupation layer (i.e. residential and industrial areas). Particular relevant parameters in the base layer for Beira are the ground levels and climate conditions (e.g. heavy rains and droughts) which imply the necessity of designated areas for water retention and drainage;
- The concentric expansion model. The essential elements of the concentric development concept are: a centre, arterial roads and ring roads. The main advantages of this model are: shorter travel distances, alleviation of the urban pressure on the current city centre and a high degree of flexibility.

The integrated spatial development strategy is presented on map 1 in the Appendices.

Implementation and follow-up projects

Part of the Masterplan project is also the development of a long list of follow-up projects which contribute to the implementation of the Masterplan. The long list of projects is presented table 0.3.

Table 0.3 Long list of follow-up projects

no	project title
1	capacity building and institutional strengthening
2	optimization study into dredging of port access channel
3a	urban transport plan
3b	rehabilitation and paving of primary access roads
3c	rehabilitation and improvement of hinterland transport infrastructure
3d	feasibility study into the improvement and expansion of the urban public transport system
3e	design and realization of a new port access road
3f	design and realization of the extension of the railway to the port
3g	reconstruction of the EN6 main access road to Beira
4	rehabilitation and expansion of drinking water treatment plant
5	rehabilitation and expansion of drinking water distribution network
6	rehabilitation and expansion of sewer network
7	coastal protection
8	drainage
9	social housing
10	development of structure plans and zoning plans
11	land development company
12	solid waste management

Part of the Masterplan project is to select projects which should be implemented on the short term. The selection of projects has been made in cooperation with local stakeholders. First, stakeholders agree all projects are important. Second, the following projects stand out: capacity building and institutional strengthening (project 1), coastal protection (7) and the land development company (11). We conclude projects (1) and (11) should be implemented first, to provide the basis for successful implementation of the Masterplan and follow-up projects.

Immediate actions

Successful implementation of the Masterplan and the sustainable development of Beira depend on immediate and decisive short term actions:

1. Stop the current uncontrolled issuing of land use concessions and land use concession speculation. Especially in areas which should be designated for water retention;
2. Revoke the current land use concessions and building rights which lead to future land use conflicts;
3. Plan, designate and enforce reserved spaces for important future infrastructure.
4. Research the vulnerability of vital infrastructure (e.g. power lines, roads and railways) to flooding and repair the weaknesses in each infrastructure system.

Next steps

Furthermore, the following short term actions are necessary:

1. Legal embedding of the Masterplan and follow-up plans and projects;
2. Prolong the instalment of the stakeholder advisory board (SAB) as a permanent advisory board to CMB and as a basis for joint implementation;
3. Structurally control if future plans and projects are in line with the strategic vision of the Masterplan;
4. Implement the follow-up projects and start with projects 1 and 11;
5. Develop integrated and more detailed plans for all current and future parts of the city.



Punque River

Beira

**Mozambique channel
(Indian Ocean)**

Figure 1.1 Areal photograph
of Beira (www.google.com)