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ABSTRACT

The Maputo Development Corridor (MDC) project was initiated with a number of specific objectives. These objectives consisted of a mixture of “enabling factors” (e.g. investment in transport infrastructure and institutional arrangements with the aim of creating an enabling environment for economic growth and development) and “desired outcomes” (e.g. positive macro- and socio-economic impacts that are sustainable in terms of their impact on the environment). It is important to take stock of the situation which, in theory, should include both the “enabling factors” and “desired outcomes” in order to determine whether these objectives have been or are being met and, if this is not the case, to determine the reasons for this and suggest corrective measures.

1. BACKGROUND AND STUDY CONTEXT

The Maputo Development Corridor (MDC) is one of the most ambitious and exciting development initiatives undertaken within the southern African region since 1995, following the peace agreement in Mozambique and the first non-racial elections in South Africa in 1994. Coming at a time of substantial political change and growing co-operation within the region, the transport ministers of the two countries set in motion the MDC initiative as a joint undertaking of the Governments of South Africa and Mozambique, with the full support of the Southern African Development Community (SADC) and with the specific objective of (re-) establishing the development axis between Gauteng (South Africa’s industrial heartland) and Maputo.

The two countries agreed on the following four key objectives for the MDC:

- To rehabilitate the core infrastructure along the Corridor with minimum impact to the fiscus (road, rail, border post, port and dredging of the port);
- To maximise investment in both the inherent potential of the Corridor area and in the added opportunities which the infrastructure rehabilitation will create;
- To ensure that the development impact of this investment is maximised, particularly in disadvantaged communities, by changing the ownership base, and
- To ensure sustainability by developing policies, strategies and frameworks which encompass a holistic, participatory and integrated approach to development.

2. STUDY OBJECTIVES

The MDC initiative constitutes a mixture of “enabling factors” (e.g. investment in transport infrastructure and institutional arrangements with the aim of creating an enabling environment for economic growth and development) and “desired outcomes” (e.g. positive macro- and socio-economic impacts that are sustainable in terms of their impact on the environment). It is important to consider progress in terms of both “enabling factors” and “desired outcomes”, in order to determine whether these objectives have been met and, where this is not the case, to suggest corrective measures. The study deliverables will therefore serve to inform decision-makers and key
players about progress made and about the need for interventions where bottlenecks are hampering progress.

3. SCOPE OF STUDY

The scope of the study can be described from both a spatial and information perspective. From the spatial point of view, the study area involved the MDC area, as well as the reference area. The MDC area can be defined in terms of the following:

- The primary Corridor region – comprising the transport and communication infrastructure itself (roads, railways, ports and communications) which link Witbank and Maputo, including the main urban centres in the area between Witbank and Maputo Port;
- The secondary Corridor region – comprising regions which, in administrative terms, are immediately adjacent to the primary region in the provinces of Maputo (Mozambique), Mpumalanga and Gauteng (South Africa) and Swaziland, and
- Resource nodes and tertiary roads linked to the principal Corridor, such as the Matutune District (included in the Lubombo Spatial Development Initiative).

From an information point of view, the study involved a number of impacts that can be grouped under the headings “movement along the Corridor”, “macro-economic”, “socio-economic” and “environmental”.

4. ANALYSIS FRAMEWORK

A logical “immediate” consequence to be expected from the MDC initiative is increased levels of passenger and freight movement along the Corridor. The study therefore firstly involved an analysis of transport patterns along the Corridor during the analysis period. It then focused on changes in the values of selected indicators during this period. Indicators considered for this purpose can be grouped under the headings “macro-economic”, “socio-economic” and “environmental”. The objective of this analysis was to determine whether positive changes (in terms of these indicators) were more pronounced in those areas close to the Corridor than in areas further removed from the Corridor, from which the “success” or “failure” of the initiative could be inferred. This analysis of macro-economic impacts is supplemented by a comparison of actual performance with projections made by Capricon in 1995. Finally, attention was focused on constraints and opportunities regarding a number of success factors in respect of the MDC initiative, as established during interactions with key players from the private and public sector.

5. MAIN STUDY FINDINGS

5.1. Movement along the corridor

Movement along the Corridor was analysed in terms of the rate of change (growth) during the analysis period for a number of indicators. Regarding activity at the border post, the analysis shows that the total number of persons crossing the border increased substantially during the period 1995 to 2003. This increase represents a mean growth rate of about 17 per cent per annum (depending on the actual start and end date of the period). For road transport, the growth rate was in the order of 6 per cent per annum, substantially higher than the growth rates on other routes. For trucks alone, growth rates of more than 10 per cent per annum were found in some cases. Air transport grew by 9 per cent per annum between 1999 and 2003. In the case of rail transport, there was an initial increase in the volume of goods to South Africa, followed by a substantial decrease and a slow recovery. The poor performance in the case of rail can be ascribed to a number of causes, such as delays at the port, return of empty rolling stock and the lack of rolling stock. In summary,
therefore, the analysis shows that, with the exception of rail, transport activity on the Corridor revealed high growth rates.

5.2. Macro-economic impacts

5.2.1 Economic output
Mpumalanga’s growth during the analysis period, in terms of economic output (as measured by Gross Value Added (GVA)), was on a par with that of South Africa as a whole (about 2.5 per cent per annum). The analysis however revealed that areas close to the Corridor had a higher growth rate than those areas further removed from the Corridor. This applies to total economic output as well as to most of the individual sectors of the economy, in particular the manufacturing, electricity, construction, trade, transport and finance sectors. As regards GVA per capita, the analysis revealed that the GVA of Mpumalanga was slightly higher than the national average. Again, the analysis showed that areas close to the Corridor had a higher growth rate in terms of GVA per capita than those areas further removed from the Corridor.

On the Mozambican side, Maputo City constitutes the biggest player in Mozambique’s economy in general and in the economy of the southern region in particular. Maputo City contributes 73 per cent and the MDC area more than 80 per cent to the economy of the southern region. As regards economic growth, it is maintained that the MDC contributed to the already high economic growth rate in Maputo Province and City during the analysis period through investments and other actions associated with the MDC.

5.2.2 Employment
For Mpumalanga and, in the case of the manufacturing, construction, trade, transport sectors and, to a lesser extent the finance sector, there seems to be relatively a strong correlation between growth in employment during the analysis period and proximity to the corridor.

As regards the Mozambican section of the MDC, the 1996/97 official unemployment rate (formal wage-earning employment) was estimated at around 69 per cent. This figure is almost equivalent to the total number of people added to Mozambique’s population every year, most of whom, by definition, are not regarded as unemployed simply because they are not actively seeking employment. Although, on the one hand, Mozambique has about 350 000 people assumed to be unemployed in the formal economy, on the other hand, every year the subsistence and the informal economy contribute almost the same number of people to its existing economically active population. Moreover, more than 65 per cent (20 400) of the almost 31 000 companies in Mozambique are concentrated in Maputo, Gaza and Sofala provinces. Wholesale and retail trade (17 776 or 56 per cent of all registered companies), hotels and restaurants (5 984 or 18,9 per cent of all registered companies) and real estate, renting (including security services) and business activities (680 or 2,1 per cent of registered companies) are the main activities of registered companies in Mozambique. They represent almost 78 per cent of all companies and offer more than 52 per cent of all dependent employment opportunities in the private sector of Mozambique.

5.2.3 Income per capita
Income per capita for Mpumalanga is only about 80 per cent of the national average. The analysis however shows that income per capita has grown at a faster rate in those areas closer to the Corridor than in areas further removed from the Corridor.

In the case of Mozambique, the average GGP per capita in Maputo City and Province amounted to USD 652 in 2000, although the gap between the two areas comprising the MDC region remains very wide: Maputo City USD 1070 and Maputo Province USD 171.
5.3. **Socio-economic impacts**

5.3.1 **Demography**
At about 1.8 per cent per annum, the growth rate of Mpumalanga’s population is slightly higher than that of South Africa as a whole (at 1.5 per cent per annum). However, the analysis did not reveal any correlation between proximity to the Corridor and population growth rates.

On the Mozambican side, the population directly benefiting from the main road includes the people in urban districts 1 and 2 of Maputo City, as well as Matola city and the districts of Boane and Moamba in Maputo Province. A higher population growth rate can also be noticed in the districts directly affected by the N4 road. In the period 2000 to 2002, the annual growth rates in Maputo Province and City were 2.4 and 1.2 per cent respectively.

5.3.2 **Poverty**
Poverty for the whole of Mpumalanga (as measured by the “Poverty gap” indicator) increased at a slower rate in the districts close to the Corridor, particularly in the eastern parts of the study area than in areas further removed.

In the Mozambican part of the MDC area, contrary to the national trend, poverty incidence appears to have increased between 1996 and 2003. Estimated poverty headcount ratios in Maputo Province and Maputo City increased by 3.7 and 5.8 per cent respectively.

5.3.3 **Human development**
The analysis revealed that, in the case of Mpumalanga, there was a positive correlation between the rate of increase in human development (as measured by the “Human Development Index” and “Functional Literacy” indicators) and proximity to the Corridor. This relationship, however, is less pronounced than in the case of the macro-economic impacts (see above).

On the Mozambican side, the available data revealed a relatively high value for HDI for Maputo City and Province relative to the other selected areas. Maputo City is the only area of Mozambique with an HDI of above 0.5. This affects the overall average level of the southern region of the country. As regards the rate of change of this index during the analysis period, although the data available only cover the period 1996 – 2000, there are several indications that improvement in the various components of the HDI is likely to continue, including in the MDC region. However, more in-depth and localized studies are needed to determine the specific differences at district and local levels in relation to the three variables comprising the HDI, namely: income generation, life expectancy and educational level.

5.3.4 **Education**
For Mpumalanga as a whole, education levels (as measured by the “Functional Literacy” index) increased during the analysis period. The analysis however did not reveal a higher rate of increase in areas closer to the Corridor than in those areas further removed from the Corridor. These observations are also valid for the Mozambican part of the MDC.

6. **CONCLUSIONS**

6.1. **High logistics cost on the Maputo Corridor**
Although shipping charges through Maputo port compare favourably with those of South African ports, the combination of rail and road transport costs and toll fees makes this corridor substantially
more expensive than other South African corridors. This situation is aggravated by the limited backhaul opportunities and the lengthy clearing times at the border post.

6.2. Rail transport

The rail link between Gauteng and Maputo was noted as a critical building block and enabling factor. At present a number of problems are being experienced mainly due to the continued non-completion of the Ressano Garcia rail concession and ongoing efforts by Spoornet to constrain the transfer of business to the Maputo Line. Spoornet’s policy of selecting and directing specific cargos towards specific corridors and of not providing sufficient capacity on the Maputo Corridor line for Corridor-specific cargo aggravates this situation.

6.3. Road transport

A number of problems are experienced in this regard, especially bureaucracy constraints associated with the road corridor and border post.

6.4. Shipping lines

Shipping lines do not service Maputo port as they do other main ports, owing due to a lack of sufficient cargo.

6.5. Border post

Problems at the border post are the main constraints for trade in the Corridor. These seem to be mainly of an operational nature, such as limited operating hours, inappropriate operating procedures that lead to congestion and a lack of focus on the core traffic, which is transit cargo.

6.6. Formal system and reliable data for monitoring impacts

At present there is a lack of a dedicated system (including selected performance indicators and reliable data) for monitoring project impacts. This makes it difficult, if not impossible, to monitor impacts in a consistent and ongoing manner.

6.7. Capacity and infrastructure constraints at Maputo port

The port is one of the main building blocks of the Corridor and, as such, constitutes an important enabling factor. One of the priorities of the MDC is that the port be substantially rehabilitated and that operational improvements be effected. To achieve this objective the Mozambique Ports and Railways Company (CFM) initiated a process of privatisation (which now is complete – the port was concessioned to a public-private partnership on 14th April 2003 as a result of which a USD 70 million investment programme has been initiated). Subsequent to this the following has been achieved:

- Handling equipment worth USD 10 million has now been installed at the port.
- Increased tug capacity has been introduced in the form of the addition of two new 37-ton tugs.
- Dredging is underway to restore the channels to their design depths and widths by the end of January 2004.
- The container terminal has seen an investment of USD 12 million in rehabilitation of infrastructure and equipment.
A number of constraints are however still being experienced. These relate to an inadequate internal and access road network and to a limited facility for handling fruit exports.

6.8. **Infrastructure and institutional constraints at terminals**

Terminals at the port constitute another important enabling factor. A number of problems are, however, restricting their optimal utilisation. Examples are: lack of covered storage areas for steel products, limited and expensive cold storage facilities and limited storage space for bulk cargo handling.

6.9. **Negative perceptions**

Negative perceptions exist and are largely based on a long history of non-completion of the founding concessions relating to the Corridor, as well as on a lack of efficient marketing and communication of developments in the Corridor. It is also perceived that the current stricter visa requirements by South Africa have resulted in lower levels of cross-border trade and business.

7. **RECOMMENDATIONS**

7.1. **Missing building blocks**

It is critical that the missing building blocks be put into place as a matter of urgency. These building blocks (interventions at infrastructure and institutional levels) are a prerequisite for a better transport system in the Corridor that would result in lower transport costs, reduced transit times and increased reliability of the transport system and, ultimately, in economic growth and development in the region.

7.2. **Implementation agency**

There is a need for an independent implementation agency, tasked with the responsibility of ensuring the timely (speedy) implementation of the missing elements of the Corridor. This agency should also be tasked with facilitating communication between current and potential users of the Corridor and the relevant government institutions.

7.3. **Marketing**

The MDC initiative should be marketed in a well-planned and ongoing manner and success stories publicised in order to communicate its benefits to potential users. Marketing to government organisations needs to be integrated with marketing by the core investors and service providers along the Corridor, particularly the port, with full cognisance being taken of private sector recommendations and priorities.

7.4. **Institutional arrangement**

The objectives set out in the Agreement for the Co-ordination of the Maputo Investment Corridor between the Government of the Republic of Mozambique and the Government of the Republic of South Africa, enumerated and highlighted above, are still valid today. But, as Lindfield maintained as long ago as 1998, the institutions currently charged with implementation of the agreement cannot adequately address the scope of the key objectives. It is worthwhile recalling Lindfield’s
conclusions regarding the review of the institutional structure for implementation of the Corridor, including the Agreement:

- Some industrial, social and environmental development objectives are difficult to achieve under the current institutional structure;
- There continues to be a need for a co-ordinating a mechanism with the Corridor to achieve these objectives;
- The structure proposed in the early stages of implementation for this mechanism - a joint company encompassing the governments of both the South Africa and Mozambique, as well as the private sectors in these two countries, with technical co-ordination by the Ministry of Transport and Communications - no longer appears to be appropriate for the changed institutional, political and economic contexts on both sides of the border, and
- A new structure is needed for this co-ordination mechanism, enabling it to meet the objectives set out above and to promote economic development, employment creation and poverty alleviation, while reducing the environmental costs of this development - this structure should encompass both the Province and City of Maputo on the government side and a more focused approach to private sector participation.

This structure will match and complement developments taking place within South Africa in order to allow for more effective implementation of all the above objectives.

![Figure 1: Geographical definition of the MDC](image-url)
Figure 2: Human movements over time

Figure 3: Air transport passengers travelling between Gauteng and Maputo
(Source: ACSA, 2003)
Figure 4: Rate of change during the analysis period: Gross Value Added (all sectors)