

ex Post *Ex Post*

Ex Post Written and Audiovisual Evaluation of the Limpopo National Park Development Project

Authors Frédéric BAZIN (IRAM), Gaétan QUESNE (BAASTEL)

In collaboration with Camilo NHANCALE, Coordination Emilie ABERLEN (AFD)



Studies, Research and Knowledge

Evaluation and Capitalization Unit

Agence Française de Développement
5, rue Roland Barthes 75012 Paris < France
www.afd.fr

Steering committee

Rémi GOUIN (President), Emilie ABERLEN/Julien CALAS (AFD/EVA), Guillaume CHIRON (AFD/ARB), Constance Corbier BARTHAUX (FFEM), Ghislain RIEB/Maeva GAUDIN (Agence de Maputo), Julie GUILLONNEAU/Tanguy ABITTAN (AFD/CMN)

The Final Report of the Evaluation and its Annexes (including French versions of annexes not available in this translation) are available on the website <http://www.afd.fr/home/recherche/evaluation-capitalisation/autres-produits-de-capitalisation>, along with audiovideo footage of the Limpopo National Park Development Project in Mozambique.

Disclaimer

The analyses and conclusions in this document are formulated under the sole responsibility of the authors. They do not necessarily reflect the viewpoint of AFD or its partner institutions.

Publication director: Rémy RIOUX

Editorial director: Gaël GIRAUD

Legal deposit: 3rd quarter 2016

ISSN: 1962- 9761

Graphic design: Solange MÜNZER

Photo credit: © Gaétan QUESNE

Layout: Ferrari/Corporate – Tel.: 33 (1) 42 96 05 50 – J. Rouy/Coquelicot

Ex Post Evaluation

Ex Post Written
and Audiovisual Evaluation
of the Limpopo
National Park
Development Project

Authors

Frédéric BAZIN (*IRAM*)

Gaétan QUESNE (*BAASTEL*)

In collaboration with

Camilo NHANCALE

Coordination

Emilie ABERLEN (*AFD*)

Agence Française de Développement
IRAM
BAASTEL

Table of Contents

Introduction	5
<hr/>	
1. Overview	9
<hr/>	
1.1. Limpopo National Park Development Project	9
1.2. Evaluation Findings	13
1.3. Main Conclusions and Recommendations	20
1.4. Lessons Learned	25
2. Methodology	27
<hr/>	
2.1. Evaluation objectives	27
2.2. Methodological challenges presented by this evaluation	28
2.3. Organisational aspects of the evaluation	31
<hr/>	
3. The Project, Its Context and Its Development	35
<hr/>	
3.1. The Limpopo National Park (LNP)	35
3.2. The project financed by AFD	45
3.3. Changes in project context and content	50
<hr/>	
4. Main Outcomes of AFD Funding for the LNP	75
<hr/>	
4.1. Restore and preserve biodiversity	75
4.2. Developing sustainable tourism	89
4.3. Economic development of the Support Zone	98
4.4. Strengthening the administrative capacities of the Park	118
<hr/>	
5. Evaluation Analysis	125
<hr/>	
5.1. The project is relevant, but based on some unrealistic assumptions	125
5.2. The intervention strategy was coherent, but the logical framework was too general to be very useful	131
5.3. Effectiveness and efficiency	140
5.4. Impacts and sustainability	146
5.5. The added value brought by AFD	152

6. Conclusions and Recommendations	155
6.1. Conclusions and recommendations for the LNP	155
6.2. Conclusions and recommendations for AFD	164
7. Lessons Learned	169
7.1. Challenges associated with setting up a national park	169
7.2. How can national parks reconcile biodiversity protection with human development?	174
7.3. National park support projects must take account of the threat from international wildlife trafficking	177
List of Acronyms and Abbreviations	179
List of Annexes	182
Bibliography and References	195

Introduction

AFD wishes to build on its previous forest and fisheries management projects and develop its competences in managing protected areas. The agency's biodiversity portfolio grew rapidly between 2000 and 2008, when it was involved in five projects providing direct support to protected areas:¹

- Forest protection project in Ifrane province, Morocco: €9m loan from AFD, €2.288m grant from FGEF, project initiated in 2000 and launched in 2003.
- Meru protected area rehabilitation project, Kenya: €8.2m loan from AFD, €1.86m grant from FGEF, project initiated in 2001.
- Quirimbas National Park (marine areas) development project, Mozambique: €3.5m grant from AFD, €0.7m grant from FGEF, project initiated in 2003.
- Great Limpopo Transfrontier Park development project (Mozambique, South Africa and Zimbabwe): €11m grant from AFD, project initiated in 2006.
- Coral Reef Initiative for the South Pacific (CRISP): €5m grant from AFD, €2m grant from FGEF, projects launched in 2004 and 2008.

Projects that aim to directly exploit natural resources (such as forestry projects) have shown that there is a clear link between managing biodiversity and promoting sustainable economic development. AFD wants its interventions in protected areas to fit this paradigm, and is developing an approach that not only aims to reconcile conservation and economic development, but also "create a development dynamic based on joint protection and sustainable management of ecosystems."²

The Limpopo National Park (LNP) is one of the largest parks in Mozambique. It covers 11,230 km² (an area the size of Ile-de-France) and is part of a larger transfrontier park that encompasses the Kruger National Park (KNP) in South Africa and Gonarezhou Park in Zimbabwe. The LNP can generate particular ecological benefits because of the complementarity between its situation and that of the KNP: the sustainability of the ecosystems in the KNP is threatened by the over-abundance of wildlife, while the LNP's ecosystems are relatively intact but its

1 AFD (2010), Cartographie de portefeuille des projets biodiversité, Analyse sur la période 1996 – 2008, Evaluation and capitalisation Series, n° 30.

2 Idem.

wildlife was decimated during the civil war. The creation of the GLTP and partial removal of the barrier at the border between Mozambique and South Africa is expected to promote the free movement of wildlife between the two parks.

The LNP is also important in terms of economic development. The presence of a large population (20,000 to 30,000 people) inside the park means that it has to address the issue of how conservation objectives can be reconciled with the need for economic development. The management plan for the LNP is based on the premise that the park's long-term success will depend on whether it can build environmentally and socially beneficial relationships and improve its residents' socio-economic situation. There is considerable potential for economic development in the LNP, which could attract some of the approximately one million people who visit the Kruger National Park across the border.

The LNP was created in 2001, and was still struggling with the numerous challenges that face new parks when AFD became involved in the project, between 2003 and 2006. Despite technical and financial support from KfW, the World Bank and the Peace Parks Foundation, the LNP was clearly not up to the huge task of setting up an administration and establishing new rules to manage its territory. AFD became the LNP's principal donor when it decided to provide a grant of €11 million – the largest sum dedicated to protected areas at the time.

The Limpopo National Park is a prime example of the approach to developing protected areas that developed in the 2000s. The LNP development plan states that its aim is to establish a space “in which ecological processes are effectively maintained and which contributes to the welfare of the people of Mozambique through sustainable eco- and cultural tourism development and resource use which is compatible with the conservation objectives of the Park.”

The earlier vision of biodiversity sanctuaries – whose successes and failures are symbolised by South Africa's Kruger Park – are giving way to more inclusive approaches that accept the presence of local populations inside parks. These communities are regarded as allies rather than obstacles to natural resource protection, working on the assumption that a virtuous circle between biodiversity protection and local economic development will generate support for the parks' conservation objectives as they correspond with local people's interests. This more open approach to biodiversity preservation and the shift from completely enclosed protected areas to different levels of ecosystem protection according to territorial status also makes it easier for wildlife to move around.

AFD felt that an *Ex Post* evaluation of the LNP development project was needed to explore the important issues raised by the LNP, and because this project embodied the conservation approach that the Agency had developed in the 2000s. In addition to fulfilling the usual requirement for accountability, the evaluation would provide lessons about the issues typically associated with creating protected areas that could inform similar projects in the future. With this in mind, it was decided to conduct a dual written and filmed evaluation that could reach a wider audience and analyse the initiative from different perspectives.

This report is one of the deliverables for the *Ex Post* evaluation of AFD funding for the Limpopo National Park (LNP) Development Project. The other major deliverable is a fifty-two minute long documentary that was filmed in conjunction with the production of this written document. The film is available on the website: <http://www.afd.fr/home/recherche/evaluation-capitalisation/autres-produits-de-capitalisation>

The written report is divided into six main sections:

1. Presentation of the evaluation questions and methodology. This section describes how the teams responsible for the written and audio-visual evaluations worked together in order to produce coherent and complementary products.
2. Presentation of the project, its context and its evolution. This section identifies major changes in the context and organisation of the project, and shows how the interrelationship between programmes meant that problems with one programme could impact on the park's overall development.
3. Description of the main outcomes of AFD support for the LNP in each major component (biodiversity restoration and preservation, tourism development, economic development in the Support Zone, strengthening the Park's administrative capacities).
4. Analytical analysis according to the classical evaluation criteria of relevance, coherence, effectiveness, efficiency, impact and sustainability. This analysis also considered the added value brought by AFD.
5. Evaluation conclusions and recommendations for the LNP and for AFD.
6. The final section considers the main lessons identified by this evaluation with regard to the creation of protected areas, focusing on three complementary themes:

- The challenges of creating a national park, in terms of establishing both an institution responsible for managing a protected area and setting rules for management of the territory;
- The difficulties of reconciling biodiversity protection and local economic development;
- Addressing the challenges that large-scale poaching pose for conservation projects.

The key findings of the evaluation are summarised at the start of this document, in Section 2.

The evaluation teams would like to thank AFD and the LNP for their invaluable help in gathering documentation, expediting authorisations and contacting key actors involved with the project, which greatly facilitated their various missions in Mozambique.

1. Overview

1.1. Limpopo National Park Development Project

1.1.1. Limpopo National Park (LNP)

The Limpopo National Park (LNP) was created by the Government of Mozambique on the 27th of November, 2001. The park covers 11,230 km² of land that includes various types of habitat, mainly Miombo forests, savannah and semi-arid areas. It is a very isolated area, with virtually no infrastructure and some of the highest levels of poverty in Mozambique. At the time of its creation this former hunting concession was inhabited by over 20,000 people – mainly communities that had fled the civil war in Mozambique and then gradually returned in the 1990s. The LNP is part of the Great Limpopo Transfrontier Park (GLTP), which also includes Kruger National Park (KNP) in South Africa and Gonarezhou National Park in Zimbabwe.

The *Limpopo National Park Development Project*, which is supported by the Peace Parks Foundation, was designed to help the country respond to the challenges presented by the creation of this new national park. Between 2001 and 2016 it has contributed to phased support in preparing, financing and supporting implementation of the 2003 plan for the development and management of the LNP. This plan states that the LNP's general objective is to act as "part of a greater Transfrontier Conservation Area in which ecological processes are effectively maintained, and which contributes to the welfare of the people of Mozambique through sustainable eco- and cultural tourism development and resource use that is compatible with the conservation objectives of the Park."³ The conservation approach promoted by the plan places equal emphasis on ecological preservation objectives and economic development objectives, using tourism development as the main strategy for achieving these two objectives. The proposed approach is inclusive (community empowerment and participation in managing the park) and open (no enclosures, and a natural repopulation of the area). The plan is structured around eight thematic programmes supported by different donors: ecological management, tourism development, ecological and socio-economic research and monitoring, community development, cross-border cooperation, environmental management, biodiversity protection and administration.

3 Limpopo National Park Management and Development Plan, 2003, p. 25.

1.1.2. AFD support for the development of Limpopo National Park (LNP)

Support for the LNP started in 2001 as part of an integrated regional multi-donor approach. In the first phase of the *Limpopo National Park Development project* (2001–2006), the *Kreditanstalt für Wiederaufbau* (KfW) provided €6.1 million that was used to completely demarcate the zone and start developing the park's administrative and operational capacities.⁴ AFD's intervention began in 2007, in the second phase of the project, with an €11 million grant to help implement the LNP's management and development plan and achieve the three following specific objectives:

1. Restore and preserve biodiversity in the LNP (€1.7 million) by supporting implementation of the 'tourism', 'biodiversity protection', 'ecological research and monitoring', and 'environmental management' programmes;
2. Improve the livelihoods and living standards of people living in the LNP Support Zone⁵ (€8 million) by (i) supporting participatory planning and management of the SZ and (ii) developing road infrastructures.
3. Build the LNP's administrative capacities (€0.7 million) by covering its running costs for the first two years of the project, strengthening LNP staff capacities and improving donor coordination.

The implementation approach for this project is a prime example of the conservation approach developed by AFD between 2000 and 2010. The project itself is also noteworthy in several respects, as the LNP is part of a cross-border park, has to contend with the nearby presence of a conservation giant (Kruger Park), and has had to support the creation of a national park in a country whose legal framework and national institutions are still fragile. It was also one of AFD's first projects in this domain, and constituted a major financial commitment as well as a new line of work.

4 This meant recruiting staff, covering the park's running costs and installing basic infrastructure for its employees (including housing and offices).

5 The LNP consists of: 1) A core zone (which covers about 80% of the park), whose main functions are to protect biodiversity and develop tourism. This core zone (CZ) is uninhabited, apart from the Shingwedzi River valley, where villages are to be displaced in order to encourage tourism development; 2) A Support Zone (SZ) on the outer edges of the park. The SZ runs along the main watercourses; its natural resources are used to support economic activities (such as livestock rearing and agriculture) and it is home to the majority of the park's inhabitants.

A number of issues needed to be addressed when setting up the Limpopo National Park. These included:

- Putting in place an effective administration with the human and financial resources needed for sustainable territorial management, and defining and developing a legal framework and mechanisms for territorial governance (role of different institutions intervening in the area, popular participation, and the like).
- Developing new models for managing the relationship between people and ecosystems that reflect the park's objectives for the conservation and sustainable management of resources. These objectives need mechanisms to enable human and growing wildlife populations to live alongside each other, and entail displacing part of the population. More generally, the ways that natural resources are managed need to be reviewed in order to achieve the separate – and potentially contradictory – objectives of maintaining biodiversity and supporting local socio-economic development.
- Sharing the direct and indirect benefits generated by the park with its residents, who should be able to benefit both directly from tourism development and indirectly from legal mechanisms of income redistribution from a portion of the income generated by tourism in the park. The high levels of poverty in the park must be reduced while ensuring that local people support the LNP's conservation objectives.

1.1.3. Evaluation issues, objectives and methodological framework

This evaluation of AFD's intervention in the second phase of the project had two main aims. Firstly, to provide a reasoned, independent retrospective judgement of the work funded by AFD in order to help the agency make its assistance more effective, accountable and transparent.⁶ Secondly, to produce and exchange knowledge and thereby encourage debate about the project outcomes, raise awareness of the specific challenges presented by this type of integrated protected areas project, and foster operational learning by AFD teams and their partners.

⁶ Based on criteria established by the OECD Development Assistance Committee (DAC): relevance, effectiveness, efficiency, impact and sustainability, with the added value brought by AFD.

The specific objectives of the evaluation were to:

- Analyse the extent to which the project funded by AFD met its targets in terms of validity, implementation, outcomes and effects;
- Learn lessons that will help identify favourable conditions for the success of similar projects in the future;
- Encourage more meaningful dialogue about the evaluation findings with project partners;
- Increase awareness of the issues that need to be addressed when designing and implementing an integrated park project.

Two evaluation monitoring groups were set up to facilitate the learning process and to share the findings: one composed of representatives from different AFD departments, and the other of representatives of the Mozambican authorities (National Administration of Conservation Areas and the LNP) and the international partners (KfW, PPF and the World Bank). These groups were involved in framing the evaluation and reviewing and validating the deliverables.

The use of audio-visual assessments as a key element of this evaluation was a methodological innovation. AFD had already tested audiovisual tools in previous evaluations,⁷ and wanted to continue the process by conducting parallel audiovisual and written appraisals of this intervention so that the evaluation would be enriched by these complementary processes.

Conducting both written and filmed evaluations is a real challenge, especially when their results are intended to be coherent (so that people will have the same understanding of the findings whether they *read* or *watch* the evaluation report) and complementary (each medium presents the information in different ways). The team followed two principles in order to achieve such cohesion: 1) Ensuring that work for the written and audiovisual evaluations was fully coordinated at every stage of the process; 2) Selecting the medium according to the type of information available and the advantages/disadvantages of conveying it in writing or on film (for example, interviews and contextual images were filmed, and data, graphs and diagrams were presented in the written report).

7 Prey Nup, a community built around water (2008); the Soweto Water project 2005–2010 (2010), and Palestinian municipalities: looking for the future (2012).

As the project funded by AFD was part of a broader, multi-donor programme to develop the LNP, the evaluation considered the project funded by AFD in terms of its initial logical framework and in the broader context of the 2003 LNP Development Plan, whose implementation it aimed to facilitate. Support financed by other donors was only assessed when data were available and when this support affected components funded by AFD, such as the resettlement component financed by KfW.

Contextual changes, such as the significant upsurge in poaching from 2010 onwards and its impacts on biodiversity and tourism, were also taken into account in order to look beyond the initial logical framework when assessing the relevance of changes that were made to the project as it was implemented.

1.2. Evaluation Findings

1.2.1. The project objectives and strategy were relevant but largely impracticable

The objectives of the project funded by AFD were broadly pertinent to the local and regional context, national policies and the needs of the LNP as stated in its development plan.

- The protection and restoration of biodiversity corresponded to the LNP's priorities and the objectives that led to the creation of the GLTP, particularly the conservation and economic development issues in the different countries concerned;
- Improving the living conditions of the park's residents reflected local communities' priorities and needs, as the LNP Support Zone is extremely isolated and is the poorest area in the locality;
- Human and institutional capacity building was an appropriate response to the human and institutional resources in both the LNP and its supervisory body, the National Directorate for Conservation Areas (DNAC), which became the National Administration of Conservation Areas (ANAC) in May 2011.

However, the initial intervention logic lacked clarity and was largely impracticable. The logical framework did not provide any details about the activities that were expected to help deliver the expected outcomes. The activities – and, in certain domains, the strategies – to be implemented should have been specified from the outset in order to help achieve the desired results. Nevertheless, this lack of detail did allow the project to adapt to changing needs

and contexts – most notably in terms of implementing actions to tackle the unprecedented upsurge in poaching from 2010 onwards, which could not have been anticipated from the outset.

The planned institutional setup, which positioned the Mozambican authorities as the contracting authority, was consistent with the desire to strengthen the management competencies, capacities and autonomy of the ANAC and LNP. However, delays in the progress of the project, which were partly due to difficulties with procurement and contracting procedures, show that the need for technical assistance was underestimated. Furthermore, technical assistance for the SZ was not supplied to the Project Implementation Unit (PIU), which was responsible for the operational management of this component.

Finally, while the project objectives and approach adopted by AFD were relevant, some of their underlying hypotheses were unrealistic – particularly the assumption that the income from tourism would enable the LNP to cover its running costs in the space of just two years. This schedule did not reflect the actual opportunities to develop tourism or the time needed to resettle local people, install infrastructures and repopulate the LNP with wildlife.

1.2.2. Partial success in achieving the expected outcomes

▷ The ecological integrity of the LNP has been preserved, but it still faces challenges in the medium term

The ecological integrity of the LNP has been preserved and wildlife is increasing. Animals now circulate freely between the KNP and the LNP, but are currently concentrated along the border with the KNP and in the north of the LNP. This is largely because the programme to resettle communities living inside the LNP took much longer to implement than initially anticipated, especially around Shingwedzi River, and also because of intense pressure from poaching, particularly of elephants and rhinos. The LNP and KNP are taking appropriate measures to address this issue, which are starting to produce favourable results.

If these results are to be sustainable, the protection and surveillance structure will need to be maintained in the long term with ongoing government support to cover the cost of staff salaries. Continued efforts are still needed to build the LNP's logistical, material, strategic and human capacities by improving infrastructures and amenities and tackling corruption, which can be an issue with protection staff. It is also essential to strengthen regional collaboration with the KNP and with relevant actors at the national level (police, customs and the judicial authorities). Action needs to be taken to accelerate the resettlement of communities living

inside the LNP, given that certain individuals within these communities are involved in poaching activities, and to strengthen support for the park's objectives among residents of the SZ, mainly by improving the management of human-wildlife conflicts.

Activities to monitor biodiversity, conduct research and manage data were very limited during the AFD project. The LNP currently lacks an appropriate and effective ecological monitoring system, and the human resources to establish and maintain such a system across its vast territory.

Limited progress in developing the potential for tourism, but good progress in legal and strategic terms

The annual number of tourists visiting the LNP is still lower than anticipated, and revenues generated by tourism remain modest. At the moment they only cover a small percentage of the park's operating costs, and tourism development generates relatively little direct/indirect revenues for communities in the park.

Despite AFD's support in improving tourist accommodation and reception areas and funding improvements to the road infrastructures, the LNP remains a relatively unattractive tourist destination as it is still difficult to observe wildlife and the park lacks the infrastructure and tourism products needed to retain visitors. This is mainly due to delays in setting up the tourism concessions and in the voluntary resettlement of communities in the Core Zone, where these concessions are supposed to be established. However, the LNP does have a recent strategic tourism development plan (2012), and guidelines for putting tourism concessions in place were approved in 2015. This should provide a solid basis for tourism development in the near future, although it will likely take several years for wildlife to become sufficiently established to draw more tourists into the park, and to grant and develop tourism concessions, infrastructures, amenities and services. This will have financial consequences for the LNP.

Little real progress in improving the living conditions of LNP residents

It has taken a long time to get this component up and running. The community support programme (PAC) responsible for its implementation started later than planned, with support from a technical assistant (April 2010 – December 2012) and outreach workers who were recruited in 2011. The development plan produced by the PAC with support from the technical assistant provides general guidelines for the development of the Support Zone, but contains few feasible activities based on a solid assessment of the situation. Some capacity building was provided for the PAC team, but not enough to enable them to use this document to implement activities. More time would have been needed to get this component up and running, but the

reallocation of AFD's budget to the Infrastructures component in April 2012 (mainly for fencing to limit human-wildlife conflicts that were source of numerous complaints from residents) effectively precluded the possibility of using AFD funds to invest in the SZ.

Socio-economic development in the Support Zone is well below expectations

The €4.5 million budget for socio-economic development of the Support Zone accounted for a large part of AFD's contribution to the development of the LNP, yet barely a third of the available budget was spent by the end of 2015. Expenditure on income-generating activities (IGAs) in the SZ was particularly low: most money went on community irrigation projects, but these only accounted for €290,000 of the €2.5 million available (barely twelve percent). These figures are indicative of the ineffectiveness of this component and reflect a shift away from the initial project priorities.

It is safe to say that community irrigation schemes have had a positive impact on beneficiary families' food security, even though there are no detailed data to support this assertion. However, the impact is very limited in terms of numbers, and at least thirty percent of the systems in the eighteen villages with irrigation schemes no longer function due to maintenance and organisational problems.

Restricting access to natural resources has protected most economic activities, but weakens vulnerable populations

Demarcating the boundaries of the SZ (see Map 1) helped residents maintain access to areas they usually use to rear livestock and grow crops. This means that they have not lost income from these activities. However, the use of forest and wildlife resources is currently restricted by the LNP, which did not negotiate rules for their sustainable use with local people. As these products play a key role in the food security and incomes of the poorest families there is a risk that the restrictions imposed by the LNP will increase their vulnerability, as they do not benefit from irrigation schemes, the revenues distributed by the LNP or those generated by tourism.

No account was taken of the need to strengthen community organisations

The lack of a capacity-building strategy for communities in the SZ meant that the project did not improve their organisational capacities, environmental awareness or their ability to negotiate with different authorities. Although some of the revenues generated by the LNP do go to local communities in accordance with the law in effect in Mozambique, the LNP did not seize the opportunity to strengthen the organisational capacities of residents in

the SZ. If these communities are expected to receive more money from tourism in the LNP, it is important to prioritise efforts to build their committees' capacities and strengthen monitoring mechanisms, to ensure that this money is properly managed.

Infrastructure: the fence has had positive impacts, but the success of the roads is not as clear

Local producers have been affected by the resurgence in wildlife, particularly elephants, which often destroy irrigated crops as they go to the river to drink. At the moment herders have not been affected by wildlife as there are few carnivores and herd mortality rates have stayed at normal levels. In the southeastern section of the SZ the fence provides effective protection and has greatly reduced the incidence of human-wildlife conflicts. By including all the southeastern section of the LNP in the SZ it also increased the amount of available grazing for the section, which supports sixty percent of the livestock in the SZ according to the LNP. However, the fence severely limits the possibilities of developing community-based wildlife tourism, which was one of the main strategies for local economic development.

The road works seem to have had very little impact on socio-economic development in the SZ. Most roads lack any form of drainage system and will deteriorate unless they are regularly maintained, making driving conditions increasingly difficult. As neither the LNP nor the districts had plans for a maintenance mechanism before the work was done, it is unclear how long the effects of this investment will last. In any case, people living in the southeast of the SZ do not use the new road as it is quicker for them to cross the Limpopo or Olifants rivers on foot or by boat in order to access the social and economic infrastructures they need.

Human resources have improved but still lack the capacity to fulfil their strategic missions or ensure financial sustainability in the short term

Some aspects of the LNP's institutional, technical and human capacities have been strengthened, and although capacity building will still be needed in the coming years, the LNP now has an institutional and organisational structure that allows it to start managing the park in a sustainable manner.

In terms of human resources, the LNP is almost fully staffed except for certain programmes such as protection (managing human-wildlife conflicts) and ecological monitoring. However, individual capacities remain limited and work is still needed to build each person's specific skills.

The LNP's capacities and resources significantly improved over the course of this project, and it now has satisfactory management infrastructures and logistical resources. The support from AFD played an important role in this process (providing specific equipment, building a workshop and constructing two houses for LNP staff).

The distribution of roles and responsibilities between LNP staff and PPF's technical assistant have been clarified, and the technical assistant has started transferring skills to LNP staff by involving them more closely in preparing annual technical plans and managing departmental work plans. However, the delegation of responsibilities within the LNP administration remains relatively limited, particularly for finance, and the technical assistant still oversees most of the day-to-day management tasks.

The financial sustainability of the LNP is more problematic. The government's long-term commitment to cover rangers' salaries is a very positive outcome of the project, but the LNP is likely to face financial gaps and have difficulty covering its running costs unless the revenues from tourism increase significantly in the coming years. Another possible source of support could be the Mozambican foundation for biodiversity conservation (Biofund), which was created in 2011 and which AFD should support.

1.2.3. The added value of AFD

AFD was able to adapt its funding to changes in the LNP's needs and in the project context. For example, the project covered a large proportion of the LNP's running costs between 2009 and 2011 because the park did not generate enough revenues to progressively cover its running costs, as originally planned. The project also mobilized considerable sums when local communities and the Mozambican authorities asked for a fence to limit human-wildlife conflicts, and responded to the sharp increase in poaching by using money left over from the road contract to create the rangers' unit for the Intensive Protection Zone (IPZ). Its rapid support for efforts to tackle poaching helped ease diplomatic tensions with the KNP and South Africa.

However, the opportunistic use of AFD funds could also be seen as symptomatic of a lack of vision and strategic planning by both the LNP and AFD, which led to disappointing results in the development of the Support Zone. AFD's intervention did not lead to greater account being taken of the development aspects of a biodiversity project, or to the development of an innovative approach that can be replicated elsewhere.

The funding from AFD did add significant value by establishing an institutional setup that positions the Mozambican authorities as a contracting authority. This led to them becoming more closely involved in conservation issues, strengthened the capacities of Mozambican officials, and helped rebalance the management of the LNP.

Finally, AFD played an important role in developing Mozambique’s institutional framework, in conjunction with other donors involved in biodiversity interventions – through the 2014 law on protected areas, the clarification of the mechanisms for distributing the revenues from tourism generated by the park, and the setting up the National Administration of Conservation Areas (ANAC).

1.3. Main Conclusions and Recommendations

1.3.1. For the LNP

▷ Regarding biodiversity conservation

The ecological integrity of the LNP has been preserved, but there are medium-term challenges that need to be addressed and little has been done to monitor its effects on conservation.

Recommendations	Type	Level of priority
R1. Maintain the LNP’s structure and mechanisms for protection and surveillance in the long term, with ongoing government coverage of protection costs.	Strategic	1
R2. Strengthen the LNP’s ecological monitoring system and resources.	Operational	1
R3. Review and strengthen the system for managing HWCs.	Operational	1

▷ Regarding the development of tourism

There is potential for tourism in the LNP but little has been done to develop it. In the short term, progressive efforts to grant and develop tourist concessions and attractions will not generate sufficient revenues to balance the LNP’s finances.

Recommendations	Type	Level of priority
R5. Secure access to the west of the LNP along the border with the KNP and in the north of the LNP where wildlife is concentrated, and develop road infrastructures so that tourists can travel around these zones easily.	Strategic	2

▷ Regarding development of the Support Zone

The strategy proposed in the development plan for the SZ has not produced any meaningful results. The PAC/LNP team has little capacity to act now that the funding from AFD has come to an end, and there is no strategy to strengthen the capacities of local populations.

Recommendations	Type	Level of priority
R6. Set up joint SZ development frameworks that include the district and provincial technical services and local populations, and draw up a road map based on consensually agreed activities.	Strategic	1
R18. Strengthen the competences of the PAC/LNP teams in participatory approaches and capacity building.	Operational	1
R19. Plan an NGO intervention to build the capacities of local people and their organisations.	Operational	1
R20. Develop a strategy to ensure that lessons can be learned from pilot projects.	Strategic	2

Although the LNP sees tourism as a key vector for the economic development of communities in the SZ, local actors have very little capacity to benefit from tourism. The pilot irrigation projects that have been put in place do not appear to be sustainable or replicable, and irrigation cannot be the only means of intensifying agricultural production systems. More work needs to be done to improve rain-fed and livestock rearing systems so that they can contribute to food security while limiting their impact on biodiversity.

Recommendations	Type	Level of priority
R7. Make strengthening local actors' capacity to engage in tourism one of the priorities of the LNP's development plan for the SZ.	Strategic	1
R9. Conduct a detailed assessment of the difficulties with existing irrigation projects, with workable recommendations to improve and extend them.	Operational	2
R10. Identify the type of support that existing groups of irrigators need to overcome their difficulties.	Operational	1
R12. Make the sustainable development of rain-fed agriculture and livestock rearing one of the priorities in the SZ development plan.	Strategic	1
R11. Conduct action-research on rain-fed crop systems in order to analyse their possible effects on ecosystems and investigate ways of improving productivity without increasing risks for producers.	Operational	2

Negotiated rules for natural resource management must be established.

Recommendations	Type	Level of priority
R13. Conduct a participatory assessment of the ways that the park's residents use wildlife resources and non-timber forest products.	Operational	1
R14. Set up mechanisms that will enable the LNP and its residents to negotiate rules for managing the resources that are most important to them.	Operational	1
R15. Put in place a resource monitoring system so that the sustainability of different types of resource use can be evaluated.	Operational	2

1.3.2. For AFD

AFD's initial design procedure did not result in a completely coherent project or provide details about the activities to be undertaken.

Recommendations	Type	Level of priority
R1. The feasibility study should be preceded by strategic, institutional, operational and technical appraisals undertaken by external experts. These should be validated by all stakeholders in order to provide a sound basis for the external feasibility study.	Operational	1
R2. The terms of reference for the feasibility study should prioritise partners' objectives and expectations.	Operational	2
R3. The external feasibility study should include: <ul style="list-style-type: none"> • An institutional and organisational assessment of the structure of the park and all key institutions concerned, in order to plan support that will enable each entity to fulfil their role in the project. • An analysis of the underlying assumptions of the park's management and development plan, and realistic scenarios for its development and funding. • ToR for the technical assistance so that TAs can be recruited before suspensive conditions are satisfied or waived, in order to avoid delays in project implementation. 	Operational	1

The institutional setup based on the PIU that was in place was relevant, but the lack of additional on-site technical assistance resulted in poor financial management and procurement procedures in the early years of the project.

Recommendation	Type	Level of priority
R4. Make a thorough assessment of the support that will be needed to build financial management and procurement capacities, and provide the funding and technical assistance required to meet these needs.	Operational	1

The fact that the technical assistance to the SZ was not supplied to the PIU created operational problems, and meant that it was not possible to influence the way that conservation actors viewed the development of the park.

Recommendation	Type	Level of priority
R5. Ensure that the institutional and financial setup gives TAs the resources and mandate to execute their activities and influence the strategic and operational guidelines for the development of the park.	Operational	1

The assumptions on which the financial support for the LNP was based did not reflect its needs, and proved wildly optimistic about the park’s capacity to generate its own revenues through tourism.

Recommendation	Type	Level of priority
R6. The justification for the project’s viability and funding should be based on analysis of the economic and social benefits generated by the park, which should merit a budgetary transfer from the State.	Operational	1

The project designed by AFD focused on the LNP, and took little account of the administrative authorities that are mandated to intervene in the development of the territories where the SZ is located.

Recommendation	Type	Level of priority
R9. Plan specific support that will enable the institutions and local authorities concerned to play their role in the project, and include them in the steering committee in order to facilitate inter-sectoral and inter-institutional dialogue.	Operational	1

The complexity and schedule of the legal and institutional changes were underestimated. The programme focused on actions in the park and had few resources to make progress on these issues at the central level.

Recommendation	Type	Level of priority
R11. Determine whether the changes envisaged at the national level (such as legal and institutional changes) will be led by AFD staff or whether they should be covered by specific TA at the ministerial level.	Operational	2

The success of the project depended on several assumptions that needed a long time to come to fruition, such as wildlife repopulation, the benefits generated by ecosystem conservation, the development of new models of resource use and the adoption of a new legal framework.

Recommendation	Type	Level of priority
R12. AFD should finance ten- to fifteen-year programmes with mid-term evaluations, which are better suited to objectives, rather than five-year projects with a projected second phase.	Strategic	1

1.4. Lessons Learned

As the LNP development project is a prime example of the approach that AFD used to support protected areas between 2000 and 2010, it is worth reviewing its underlying assumptions to determine what broader lessons might be learned from this project.

AFD had assumed that the strong link between development and biodiversity conservation seen in fishery and forestry programmes might also exist in projects to manage protected areas, and that local people with an economic interest in protecting biodiversity would support the State's decision (made without consultation) to create a national park. The evaluation of the LNP shows that the park has generated few benefits for its residents in the fifteen years since it was created, and that they have little enthusiasm for its conservation objectives.

This is partly due to the minimal development of tourism in the park and poor strategies for understanding how its residents use natural resources, which could have helped establish a link between healthy ecosystems and local livelihoods. Residents soon felt the negative impacts of biodiversity conservation (more HWCs, loss of access to certain productive resources), but have yet to see their positive effects. The question here is how to strengthen local support for conservation measures in the long transition period before they generate any tangible benefits.

A second hypothesis, largely posited by the Mozambican authorities, was that an open conservation approach would enable animals to circulate and allow humans and wildlife to live alongside each other successfully. The fact that residents asked the LNP to erect a fence to reduce HWCs in the most populated area of the park (which it duly did) shows that putting this open approach into practice is a complex business. Questions have been raised about this approach (much of the park is open but current projects in the LNP aim to enclose the whole SZ), about the LNP's strategies for managing HWCs and about its general approach, which does not involve local communities in managing wildlife in the park. The LNP does not implement the activities to reduce HWCs that were developed with AFD funding, as it prefers a more classic approach in which conflicts are exclusively dealt with by rangers.

Finally, creating a protected area entails defining rules that will apply to a particular territory, and differentiating it from neighbouring territories while ensuring that their inhabitants are treated equitably. Local people do not lose all their rights to these areas and local administrations retain some mandate to develop them when they are given protected status. Called for here are mechanisms for consultation about the way protected areas will be

governed, which should be negotiated as part of a territorial project. The lack of such mechanisms was the main weakness in the LNP's strategy, and explains the huge discrepancy between the ambitious objectives for joint territorial management set out in the 2003 development plan and the current mechanisms for planning and implementing actions to develop the park.

2. Methodology

2.1. Evaluation objectives

The written and audiovisual *Ex Post* evaluation of AFD's intervention in the second phase of the Limpopo National Park Support Project in Mozambique (2007–2015) had two main aims. The first was to provide reasoned, independent judgement of the work funded by AFD based on criteria established by the OECD Development Assistance Committee (DAC).⁸ This *Ex Post* evaluation would serve as the final evaluation of the project and contribute to the objective of making AFD assistance more effective, accountable and transparent, and assessing the added value that AFD's intervention brought to the project. The second evaluation objective was to produce and exchange knowledge, in order to encourage debate about the project outcomes, to raise awareness of the specific challenges of this type of integrated protected areas project and to foster operational learning for the AFD teams and their partners.

This exercise also posed a methodological challenge, as the classic written evaluation would be complemented by a simultaneous audiovisual assessment. AFD had already tested audiovisual tools in previous evaluation exercises, and wanted to continue the process by conducting parallel audiovisual and written appraisals of this intervention so that the evaluation would be enriched by these complementary processes.

The teams had to deliver a full set of written and audiovisual outputs (evaluation report, documentary film, short bonus film, photos and rushes) that would complement each other but also serve as stand-alone materials that can be stored on an internet platform. The specific objectives of the evaluation were to:

- Analyse the extent to which the project funded by AFD met its targets in terms of validity, implementation, outcomes and effects;
- Learn lessons that will help identify favourable conditions for the success of similar projects in the future;
- Encourage more meaningful dialogue about the evaluation findings with project partners;
- Increase awareness of the issues associated with the design and implementation of an integrated park project.

⁸ These criteria are: relevance, effectiveness, efficiency, impact and sustainability.

2.2. Methodological challenges presented by this evaluation

The evaluation had to address three main methodological challenges in order to:

1. Evaluate AFD's funding within the much broader multi-donor programme to support the creation and development of the Limpopo National Park;
2. Conduct coherent simultaneous written and filmed evaluations;
3. Provide an account of this particular project while identifying broader lessons to be learned about support for protected areas.

2.2.1. Analytical framework for the evaluation of AFD funding for the LNP

One of the challenges for the evaluation team was the fact that AFD's funding (which began in 2007) contributed to a wider-ranging, regional multi-donor project providing integrated support for the development of the LNP, which had started in 2001. The LNP is part of a much larger entity – the Great Limpopo Transfrontier Park (GLTP) – whose development is mainly supported by the World Bank. The funding from AFD was to help implement the LNP Management and Development Plan; it targeted specific programmes within this plan while other donors targeted other programmes. Therefore, the evaluation team needed to show the overall project logic without evaluating all the programmes that were implemented within it.

The team adopted the following strategy to frame its work:

- As the AFD project that they were to evaluate started in the second phase of the LNP Development Project, they took the situation at the end of the first phase (2001–2006) as the baseline situation for AFD's intervention.
- The evaluation was supposed to focus on elements of the project financed by AFD. However, AFD funding ultimately affected virtually every component apart from the resettlement programme, and it would have been pointless to try to assess its impact in isolation because the LNP management team combined funding from different sources in order to implement the plan to develop the Park. The evaluation team therefore considered the situation in all the components where AFD finance was used, with a particular focus on activities funded by AFD. The analysis of population displacement was limited to its impact on the components funded by AFD.

- Finally, the relationship between components was such that it was not unusual for a component that was funded by other donors to have direct consequences on one funded by AFD. For example, the KfW-funded resettlement component directly affected AFD's interventions in tourism and community development. In such cases, the team needed to obtain relevant information about the component without conducting a full evaluation of it. In order to do this, they needed to understand:

- The main difficulties that delayed the resettlement process, and the consequences of these delays on the progress of the project funded by AFD; and

- The procedures that have been put in place to enable displaced families to access land and improve their livelihoods, in order to evaluate their potential impacts on host communities and the implementation of activities funded by AFD.

- The evaluation was conducted for the Limpopo National Park, not the Great Limpopo Transfrontier Park. It only touched on activities in the GLTP that had a direct impact on project components supported by AFD (such as reintroducing wildlife or efforts to combat poaching).

- The team analysed the project funded by AFD in terms of its initial logical framework and in the broader context of the 2003 LNP Development Plan, whose implementation it initially aimed to facilitate. Contextual changes were also taken into account in order to look beyond the initial logical framework when assessing the relevance of the changes that were made to the project as it was implemented.

2.2.2. Articulation between the written and audiovisual elements of the evaluation

Conducting a simultaneous written and filmed evaluation is a real challenge, especially when their results are intended to be coherent (so that people will have the same understanding of the findings whether they *read* or *watch* the evaluation report) and complementary (each medium presents the information in different ways). The team followed two key principles in order to achieve this:

The first principle was to ensure that the work for the written and audiovisual evaluations was fully coordinated at every stage of the process, from the literature review through the data collection, interviews and field visits to the final analyses and recommendations.

The second principle that guided this interaction was selecting the medium according to the type of information available and the advantages/disadvantages of each medium in conveying it. By their very nature, written and filmed reports present events in different ways.

Information has a different impact and content depending on whether it is watched, heard or read. For example, audiovisual material can be used to put across different viewpoints, while written reports are better suited to data analysis. The teams aimed to exploit the comparative advantages of each medium, using film for interviews and contextual images, and written reports for data, graphs and diagrams.

2.2.3. Project evaluation and crosscutting learning processes

The *Ex Post* evaluation was complicated by the fact that the team did not have a final evaluation report or a completion report for the project. This meant that they had to draw on scattered sources to reconstruct technical and financial information about the project, activities that had been implemented and problems encountered during the intervention. More detailed information was needed for activities funded by AFD.

It was difficult to look beyond the specific situation that was being evaluated in order to learn lessons that would not only be useful for those involved in this project, but also for other actors and institutions working in the field of biodiversity. There was a risk of generalising a very specific situation that has not been considered in relation to other conservation areas in Mozambique or the sub-region. The team specifically chose two key themes so that this evaluation could provide the basis for broader reflection:

- What lessons can be learned about the financial, institutional and territorial challenges associated with creating a national park?
- What lessons can be learned about reconciling the needs of biodiversity protection and sustainable community development?

2.3. Organisational aspects of the evaluation

2.3.1. Monitoring and steering the evaluation

An evaluation reference group composed of representatives from different AFD departments was put in place to help frame the evaluation and validate the deliverables.⁹ A Mozambican consultative committee composed of representatives of the Mozambican authorities (ANAC, LNP) and international partners (KfW, PPF and the World Bank) was consulted at key stages of the evaluation for advice and comments on the terms of reference, main deliverables, and the like.

2.3.2. Evaluation methodology

▷ a. Evaluation questions

Specific evaluation questions were identified for each of the six classic evaluation criteria (relevance, effectiveness, efficiency, impact and sustainability) and the added value brought by AFD. In order to answer these questions, an evaluation matrix – a functional analytical structure covering the evaluation questions, indicators and possible sources of information for each criterion – was established in order to structure the next stages of data collection and analysis.

▷ b. Sources of information

The main sources of information for the evaluation were:

- Documents, correspondence and project monitoring data from (1) files kept by AFD staff responsible for designing and monitoring the project; (2) LNP management; (3) other bibliographic sources.
- Primary sources included: (1) AFD staff who had been involved in setting up and/or monitoring the project; (2) officials from organisations that had been involved in steering or implementing the project (LNP, PPF, KfW, World Bank, ANAC, Lupa, Ambero, etc.); (3) project beneficiaries in local communities.

⁹ The evaluation reference group included representatives from ARB, AFR, CMN, AFD office in Maputo, FGEF, and EVA.

Most of the interviews took place during two missions to Mozambique in July and November 2015. Additional interviews with people who were unavailable in the field were conducted in Paris (AFD) or by telephone.

2.3.3. The different phases of the evaluation

The four main stages of the evaluation are summarised in Annex 1 and described below:

- **Phase 1 – Structuring.** In this phase, the team: 1) Explored the issues and established the frame of reference for the evaluation; 2) Defined the methodology for the field visits and designed the data-gathering tools; 3) Determined the working procedures for the teams responsible for the written and filmed evaluations. This phase included a partial review of the available literature, interviews with AFD and a short field visit to Maputo in July 2015 to inform the LNP and other relevant institutions about the evaluation objectives, methodology and timetable, and prepare for the second mission. These preparations mainly focused on organising visits to communities living in the park and identifying locations for the filmed evaluation. The methodological framework document and synopsis of the film were also prepared during this phase.

- **Phase 2 – Initial analysis.** This phase included a field trip (approximately seventeen days in November 2015), most of which was spent in the Limpopo National Park. The team analysed the outcomes and impacts of the project through interviews with members of the steering committee, the contracting authority, institutions responsible for project implementation in the LNP (management, officials from different departments), other actors (district services, NGOs, service providers, and the like) and people living in the LNP. The villages visited by the teams were selected according to their ecological and administrative diversity, the location of different activities funded by AFD, and other LNP development activities not funded by AFD.

- **Phase 3 – Detailed analysis and recommendations.** The teams prepared the draft evaluation report and first cut of the film. This involved numerous discussions between the two teams to share their analyses and ensure that the written and filmed reports complemented each other. The draft report was submitted to the monitoring and consultative committees for review and comment.

- **Workshop to discuss the recommendations,** attended by experts from AFD. This workshop was used to refine the recommendations, draft the final version of the report and produce the final cut of the film.

3. The Project, Its Context and Its Development

3.1. The Limpopo National Park (LNP)

3.1.1. Peace Parks and the Great Limpopo Transfrontier Park

The Great Limpopo Transfrontier Park (GLTP) is a Peace Park composed of the Kruger National Park (KNP) in South Africa, the Limpopo National Park (LNP) in Mozambique and the Gonarezhou National Park in Zimbabwe. Following the Mozambique Peace Accord of 1992, the Global Environment Facility (GEF) funded feasibility studies on the implementation of a pilot Transfrontier Conservation Area (TFCA) project. On 10 November 2000, the governments of Mozambique, South Africa and Zimbabwe signed a trilateral agreement on the establishment and development of a park and transfrontier conservation area on their territories (see Box 1 below). In 2002, President Joachim Chissano of Mozambique, President Thabo Mbeki of South Africa and President Robert Mugabe of Zimbabwe signed an international treaty in Xai-Xai, Mozambique, regarding the creation of the Great Limpopo Transfrontier Park (GLTP). This opened the way for the formal proclamation of the GLTP and provided a platform for the future development and implementation of the Great Limpopo Transfrontier Conservation Area (GLTFCA).

Box 1: Transfrontier parks and conservation areas (TFCA)

Transfrontier parks (or peace parks) bring together national parks located on different sides of a shared border.

Transfrontier conservation areas (TFCA) are defined as relatively large areas that straddle the borders between two or more countries and ecosystems in one or more protected areas. They extend beyond protected areas and may include ecological corridors, hunting reserves and concessions, and community-managed natural resource zones.

...



...

Transfrontier parks and TFCAs aim to encourage nature conservation and socio-economic development outside national borders through shared or collaborative management of a territory and its resources, rather than by managing each area as a separate entity.

Map source: <http://www.peaceparks.org/story.php?pid=1005&mid=1048>

The GLTP serves a range of political, ecological and economic objectives.

- **Political:** Southern Africa was one of the fields where the Cold War played out between the 1970s and 1990s, particularly with South Africa's involvement in the post-independence conflict in Mozambique.¹⁰ After Apartheid ended in the 1990s, Nelson Mandela wanted to set up transfrontier parks – or peace parks – as a symbol of cooperation and greater openness between countries. On the 4th of October 2001, he symbolically opened the barrier between the Limpopo National Park in Mozambique and Kruger National Park in South Africa to allow lorries carrying the first elephants to be transferred from KNP to the LNP to cross the border.

The idea was that international cooperation and the contacts facilitated by these parks would help strengthen or re-establish friendly relations between these countries, and build trust and mutual understanding. The concept of Peace Parks also extended to social relations and economic development at the local level. Unlike the KNP, whose park had led to forced population displacements, Peace Parks were supposed to enable local people to benefit from the ecological and economic opportunities created by cross-border tourism and socio-economic development programmes in the parks concerned.¹¹

- **Ecological:** Transfrontier parks provide favourable conditions for conservation at scales that are more appropriate to ecosystem dynamics. They are also intended to encourage more integrated and holistic efforts to conserve natural resources and ecosystems, by harmonising the management of different national plans and strengthening collaboration between diverse actors – thereby leading to more effective exchanges of information and

10 Sylvain Guyot, *Les parcs naturels d'Afrique australe: d'autres territoires de conflits, Géoconfluences* <http://geoconfluences.ens-lyon.fr/doc/etpays/Afsubsah/AfsubsahScient2.htm>, Last accessed 18 August 2016.

11 Great Limpopo Transfrontier Park, About GLTP, <http://www.greatlimpopo.org/about-gltp>, Last accessed 12 August 2016.

research and to joint management initiatives. These protected transfrontier zones make it easier to address many cross-border problems, particularly poaching. The ecological benefits of the GLTP are also due to the complementarity between the situations in the KNP and LNP, as the overabundance of wildlife in the KNP threatens the sustainability of its ecosystems, while the LNP's ecosystems are relatively intact but its wildlife was decimated during the civil war. The creation of the GLTP and removal of the barrier at the border between Mozambique and South Africa should therefore reduce overpopulation in the KNP by allowing wildlife to move freely from South Africa to Mozambique.

- **Economic:** The development of tourism can make Peace Parks a real economic asset. The KNP, which is the largest park in South Africa, attracts a million visitors and generates over €10 million in revenues each year. The LNP could benefit from this as visitors can easily cross the border between the two countries inside the park. This economic potential is also supposed to benefit local communities by generating employment and activities, particularly in eco-tourism.

The GLTP has the five following strategic objectives:¹²

- Foster transnational collaboration and cooperation between the parties who will facilitate effective ecosystem management in the area comprising the GLTP.
- Promote alliances in the management of biological natural resources, by encouraging socio-economic and other partnerships among the parties, including private sector, local communities and non-governmental organisations.
- Enhance ecosystem integrity and natural ecological processes, by harmonising environmental management procedures across international boundaries and striving to remove artificial barriers that impede the natural movement of wildlife.
- Facilitate the establishment and maintenance of a sustainable sub-regional economic base through appropriate development frameworks, strategies and work plans.
- Develop trans-border ecotourism as a means of fostering regional socio-economic development.
- Establish mechanisms to facilitate the exchange of technical, scientific and legal information for the joint management of the ecosystem.

¹² <http://www.greatlimpopo.org/about-gltp>, Last accessed 12 August 2016.

Creating this kind of transnational conservation area presents a number of challenges. These include establishing cross-border measures to combat poaching, agreeing a border-crossing protocol for rangers, developing transfrontier tourism products, standardising rates and entry fees, identifying and demarcating ecological corridors, and managing veterinary issues in order to limit the spread of animal diseases.

3.1.2. The creation of the LNP and results of the first phase of support

In order to set up the GLTP, the authorities in Mozambique changed the status of the land from a hunting concession (Coutada 16) to that of a national park, and created the Limpopo National Park on the 27th of November 2001. Before the war this territory was occupied by herders who also hunted and grew crops alongside watercourses. Communities that had fled during the war gradually returned in the 1990s, and by the time the area was declared a national park in 2001 it was home to some 20,000 people.

This change in legal status had a number of consequences. In legal terms, a hunting concession is a conservation area set aside for hunting activities and the protection of species and ecosystems. Local communities are permitted to use forest and wildlife resources in the area as long as this is done in a sustainable manner. A national park is a total conservation area set aside to preserve the wildlife and flora within its boundaries. Certain activities are forbidden within the area, most notably hunting, forestry, agriculture and livestock rearing, which are the main activities local people rely upon for their livelihoods.¹³

The vegetation in the LNP is relatively well-preserved as the territory is protected by its enclosed position between the Limpopo and South Africa, and the fact that population densities are limited by its semi-arid climate. However, large animals in the area were decimated during the war.

The LNP was created less than ten years after Mozambique had emerged from civil war. The country's conservation policy was shaky, its institutional framework was outdated – it did not allow for the possibility of people living in the parks, or consider how natural resources in the park could be exploited for tourism – and there were insufficient human and financial resources to implement the conservation policy.

The Limpopo National Park Development Project, which is supported by the Peace Parks Foundation, has helped the country respond to the challenges it faced in creating the

¹³ Lei do Ambiente n° 20/97, *Lei de Floresta e Fauna bravia* n° 10/1999.

new Limpopo National Park. In the first phase of this support (2001–2006), Kreditanstalt für Wiederaufbau (KfW) provided €6.1 million that was used to completely de-mine the zone (€1 million) and develop the administrative and operational capacities of the LNP by recruiting staff (particularly rangers, of whom there were eighty by the end of 2005), covering the park's running costs and installing basic infrastructures for its staff (housing, offices).

Other activities in this first phase included determining what was needed in terms of infrastructures, preparing a management and development plan for the LNP, and drafting a business plan for 2004–2006.

A tourism development plan was also produced in 2004. The official opening of the Giryondo border crossing between South Africa and Mozambique on the 7th of December 2005 allowed tourists to move between the KNP and the LNP; and the park's first tourist amenities included a ticket office for the LNP, campsites, rough tracks for 4x4 vehicles and, at the end of 2005 a privately managed lodge in Machampane and a campsite directly managed by the park.

In terms of biodiversity, it should be noted that the LNP has progressively been repopulated thanks to the active reintroduction of different species in a 'sanctuary' in 2003 and the removal of thirty kilometres of fencing (between the Kruger and Limpopo parks in the north, and sections in the south of the LNP).

3.1.3. The LNP development and management plan

A plan to develop and manage the LNP was produced in 2003 to guide the setup and first five years of the park's development (until 2008).¹⁴ This plan defines the general vision of the LNP as "part of a greater Transfrontier Conservation Area, in which ecological processes are effectively maintained and which contributes to the welfare of the people of Mozambique through sustainable eco-and cultural tourism development and resource use which is compatible with the conservation objectives of the Park."¹⁵

The conservation approach adopted by the plan places equal emphasis on the ecological preservation objectives and the economic development objectives. The main strategy for achieving these two objectives is by developing tourism. The approach is inclusive (community empowerment and participation in managing the park) and open (no enclosures, natural repopulation).

¹⁴ Limpopo National Park Management and Development Plan, 2003, p.i.

¹⁵ Limpopo National Park Management and Development Plan, 2003, p. 25.

The LNP development plan shows how the park will be divided into different zones (see details and map in Annex 3. LNP zoning in 2003), with:

- A support zone (covering about twenty percent of the LNP) that runs along the main watercourses (the Olifants and Limpopo rivers). The majority of the park's population are found in this zone, whose natural resources are used to support economic activities (livestock rearing and agriculture); and
- A central, core zone (covering about eighty percent of the LNP) whose key functions are to preserve biodiversity and develop tourism. This core zone is inhabited, apart from the Shingwedzi River valley, which has high potential for tourism.

When the LNP management plan was being drafted it was clear that there were insufficient natural resources available in the SZ to meet the needs of the people who depended upon them for their livelihoods.¹⁶ Therefore, the management plan anticipated that the boundaries of the SZ would be reviewed to reflect the way that local communities actually used the land.

The plan identified eight thematic programmes and set out their guiding principles, objectives and activities. The eight themes are: ecological management, tourism development, ecological research and monitoring, community development, cross-border cooperation, environmental management, protection and administration.

The coherence of the LNP development plan is based on a number of key assumptions, namely that:¹⁷

- The balance between ecosystems in the Kruger and Limpopo parks will re-establish itself naturally as animals migrate into areas where fences have been removed;
- It will be possible to capture some of the annual flow of tourists who visit the Kruger National Park by emphasising the 'wilder' nature of the LNP;
- Tourism development is a vector for national and local economic development;
- The development of tourism will ensure the financial viability of the LNP in the medium term;
- The economic development of the SZ is a condition for local acceptance of the park.

¹⁶ The 2003 Management and Development plan states that the boundaries of the SZ will be redrawn, p.33.

¹⁷ The links between the programmes and the critical assumptions are analysed in section 3.3.1.

3.1.4. Brief description of the LNP

The Limpopo National Park covers 1,123,000 hectares, a very large area the size of the Ile-de-France region. To the west it is bounded by the border with South Africa (the KNP and LNP share about 200 kilometres of this border), while the Limpopo River forms the eastern and northern boundary, and the Olifants (Elefantes) River and Massingir Dam mark its southern limits. It is located in the west of Gaza Province, and spreads over three administrative districts: Chicualacuala in the north, Mabalane in the east and Massingir in the south.¹⁸

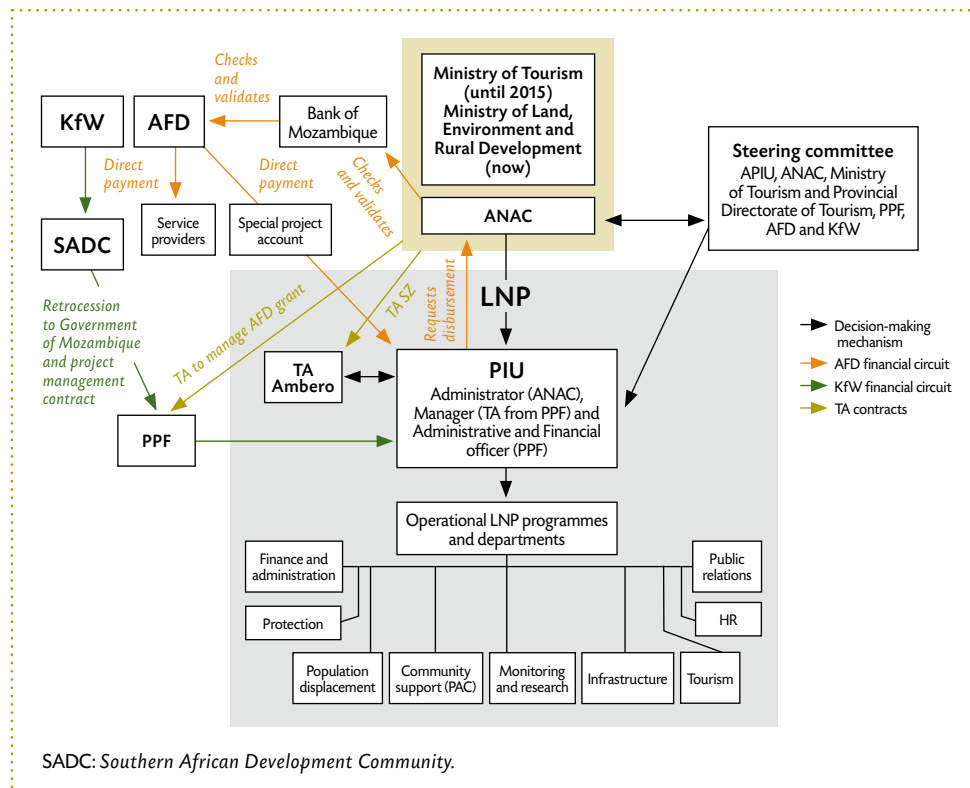
Responsibility for the management and development of the LNP currently rests with the National Administration of Conservation Areas (ANAC), an autonomous public agency created in May 2011 by Decree n°11/2011. ANAC is tasked with managing all the conservation areas in Mozambique.¹⁹ Since the LNP was established, it has been managed by a Project Implementation Unit (PIU) that includes a Park Administrator (appointed by ANAC), a park manager (provided by the Peace Parks Foundation, PPF)²⁰ and an administrative and technical officer (from PPF). There is also a steering committee composed of representatives from the Ministry of Tourism, the Peace Parks Foundation and ANAC, and donors who sit on it as observers (see Diagram 1 below).

18 BRL/ICS/Impacto, Feasibility study for the development of the Limpopo National Park and its support zone, June 2006.

19 World Bank, *Conservation Areas for Biodiversity and Development Project. Project Appraisal*, 2014, p.2.

20 The Peace Parks Foundation is a South African foundation that was set up in 1996. Its founding members include Nelson Mandela, Prince Bernhard of the Netherlands and Anton Rupert, President of WWF-South Africa. PPF provides planning, management and financial support for transfrontier parks in southern Africa. The creation of the GLTP owes much to the activism of Anton Rupert even before the PPF was established. The PPF has provided financial and technical support for the GLTP since its creation.

Diagram 1 – LNP institutional setup, management and financial circuits followed by AFD and KfW



Source: Authors.

The climate of the region is classified as semi-arid subtropical. It is one of the driest areas in Mozambique, receiving between 360 and 500 mm rainfall per annum.²¹ Geologically, the LNP is part of a larger sedimentary basin contained within the alluvial systems of the Limpopo to the northeast and the Olifants to the southwest. Soils are generally poor, apart from a narrow strip of alluvial sediments along the Limpopo and the Olifants that can be used for agriculture. In the area immediately upstream, soils are derived from calcareous sedimentary rocks and interspersed with infertile sandy areas. The sand- and clay-based soils are covered with a rough mosaic of mopane forest, while the depressions that feed into the Limpopo and Olifants rivers are populated with acacias.

21 Limpopo National Park Management and Development Plan, 2003, p.9.

The main ethnic group in the LNP is the Changane, who live in an area straddling the borders between South Africa, Mozambique and Zimbabwe. Many families fled to South Africa during the civil war in Mozambique (1977–1992), and started returning to their homes in the early 1990s. The population in Massingir district nearly doubled between 1980 and 1996.

Today, around 27,000 people live in the park, in about fifty villages located near the Limpopo, Olifants and Schingwedzi rivers. Due to the semi-arid climate and local vegetation, their main activity is rearing livestock, supplemented by rain-fed and irrigated agriculture and hunting for domestic purposes. Most of the population (around 20,000 people) is concentrated in forty-four villages along the right bank of the Limpopo and the left bank of the Olifants, where the alluvial soils are suitable for arable crops. This is the area that was classified as the Support Zone (SZ), while the rest of the park was designated as the Core Zone (CZ). In order to take account of all the resources the villages use for agriculture and livestock rearing, the original boundaries of the SZ defined in the 2003 LNP Management Plan were revised. These can be found in Annex 3: LNP zoning in 2003. The SZ now includes the largest part of the resource use zone, and when a fence was erected in 2013 to reduce human-wildlife conflict in the southeastern section of the LNP, the territory south of the fence was also incorporated into the SZ (see Map 1).²²

22 The area of the Support Zone was initially estimated at 2,349 km² (Limpopo National Park Management and Development Plan, 2003). Although this area must have increased when the borders were revised and the land to the south of the fence was included in the SZ, the figure in the report on the development of the revised SZ is only 2,337 km² (PNL: *Plano de desenvolvimento sustentável da zona tampão. Junho de 2012. Versão atualizada pelo PAC em agosto de 2015*). The mission cannot explain these figures, although it is possible that the data in the 2003 plan, which were estimated, were overstated. Other data from the strategic tourism development plan give the initial area of the SZ as 188,950 ha. After realignment and fencing this increased by 40,000 ha, giving a new figure of 229,347 ha.

Map 1 – Boundaries of the Support Zone (2015)



Source: Authors.

About 7,000 people live in eight villages along the Shingwedzi River in the Core Zone of the park. This area is close to the KNP and wildlife reintroduction sites, and its water resources make it very attractive to animals and, ultimately, for tourists. The LNP Management Plan envisaged that some of these villages would wish to move in order to improve their living conditions and avoid the risks and constraints associated with an increase in the wildlife population. This resettlement process is called 'voluntary' because national policy forbids forced evictions.

The Support Zone is very isolated, as there are few points where it is possible to cross the Limpopo or the Olifants. There is virtually no social infrastructure (schools, health centres, drinking water, and the like), and it is difficult to get to urban centres and the main district towns where there are more substantial amenities. Many men migrate to South Africa in search of work.

3.2. The project financed by AFD

The intervention by the Agence Française de Développement (AFD) was designed after the first phase of support for the creation and development of the LNP. One of its objectives was to develop AFD's then relatively modest biodiversity portfolio. The project appraisal began with a pre-identification mission in June 2003, and the main guidelines for AFD funding for the LNP were drawn up after further missions in February 2004 and December 2005. As KfW was ready to commit €5.8 million for a second phase of support targeting the voluntary resettlement of communities in the park's Core Zone, it was proposed that most of AFD's funding would focus on complementary work in the Support Zone. The LNP management recognised that the creation of the park had been a top-down decision made without local consultation, and that community support would be a crucial factor in the park's success, so the plan was to build local support for the LNP by fostering the socio-economic development of its resident communities. AFD's intervention would also help reduce pressure on natural resources, thereby contributing to the LNP's conservation objectives, and facilitate the resettlement of families that had been moved from the River Shingwedzi area. In choosing to support the SZ, AFD focused most of its intervention on an area in which it had proven experience and skills – rural development.

In 2005/2006, a consortium of consultants conducted a detailed feasibility study on the type of support needed for sustainable development in the Support Zone,²³ and set out the possible development options and proposals for five components for this initiative:

- **Support for the social sector:** Activities to combat AIDS and improve health conditions, with a community development fund for investments in the social sector;
- **Developing income-generating activities:** This included setting up pilot projects to improve food security (small irrigation projects, poultry rearing, community-based monitoring of livestock epidemiology); support for SMEs to develop the use of animal traction in agriculture, artisanal activities, flour production and pump maintenance; tourism development; and micro-credit schemes.
- **Biodiversity conservation:** This component mainly focused on developing conservation agriculture and community-based wildlife management, erecting a fence to reduce human-wildlife conflicts (HWC) and demarcating an ecological corridor between the LNP and Banhine Park (see map in Box 1 page 35).
- **Capacity building:** Constructing community centres to facilitate communication between the LNP and resident communities, and mobilizing local people to participate in other activities.
- **Strengthening LNP infrastructures:** Including the construction of roads, rangers' camps, and the communication system.

AFD criticised this feasibility study on several counts, but especially for taking insufficient account of the objectives and strategies defined in the 2003 LNP Development Plan and related business plan, whose implementation was to be funded by AFD. An ex-ante evaluation mission undertaken by AFD in September 2006 introduced the idea of two main intervention themes: (i) support for the development of the LNP (Core Zone, infrastructures and part of its running costs), and (ii) support for community development in the SZ by implementing pilot biodiversity management and economic development projects. This provided the basis for the project document (NCS) submitted to AFD's supervisory board in November 2006.

The full timeline for the project, from identification to execution can be found in Annex 4. Chronology of the LNP development project.

²³ Feasibility study for the development of the Limpopo National Park and its support zone, BRL/ICS/Impacto, June 2006.

The overall budget for this second phase was €30.99 million. AFD was the main donor, contributing €11 million (with €0.6 million for various and unforeseen expenses). The other major donors for this second phase were KfW, which provided €5.8 million to resettle residents in the Core Zone of the LNP; the World Bank (€0.9 million) through its Transfrontier Conservation Area and Tourism Development project (TFCA-TD), which includes the LNP; the PPF, which participates in the project as a co-funder (€1.3 million) and implementation agency for KfW funding; and the Government of Mozambique (€0.39 million).²⁴

The support from AFD was originally designed with the three following objectives:

1. Restore and preserve the biodiversity of the LNP (€1.7 million) by supporting implementation of the following programmes identified in the LNP Development and Management Plan: tourism, biodiversity protection, research and surveillance, environmental awareness-raising;
2. Improve the livelihoods and living standards of people living in the LNP (€8 million) by (i) supporting participatory planning and management of the SZ (preparing and implementing a management and development plan for the SZ); (ii) developing road infrastructures.
3. Build the LNP's administrative capacities (€0.7 million) by covering the LNP's running costs for the first two years, building the capacities of LNP staff and strengthening donor coordination.

The initial logical framework provided in AFD's project document is presented in Annex 5. – Logical framework of AFD intervention as shown in the project document. It sets out the specific objectives, the three components and the expected outputs for each component – but there is little evidence of the proposals made in the feasibility study: the social sector support component was not retained, and there are no details about activities for the three components that were retained. However, the budget (see Annex 6. – Budget for the LNP development project financed by AFD) shows that some of the infrastructures mentioned in the feasibility study have been retained: roads, the fence to reduce HWC, community and tourist information centres.

The AFD project was initially expected to run from 2007 to 2010, but it did not start properly until 2008 and was extended to 2015.²⁵ The project intervention logic evolved over time in response to various factors and constraints (see Section 3.3 below).

²⁴ 11.6 million Euros still needed to be found to balance the budget for this second phase.

²⁵ See explanations in sections 3.3.1 and 3.3.4

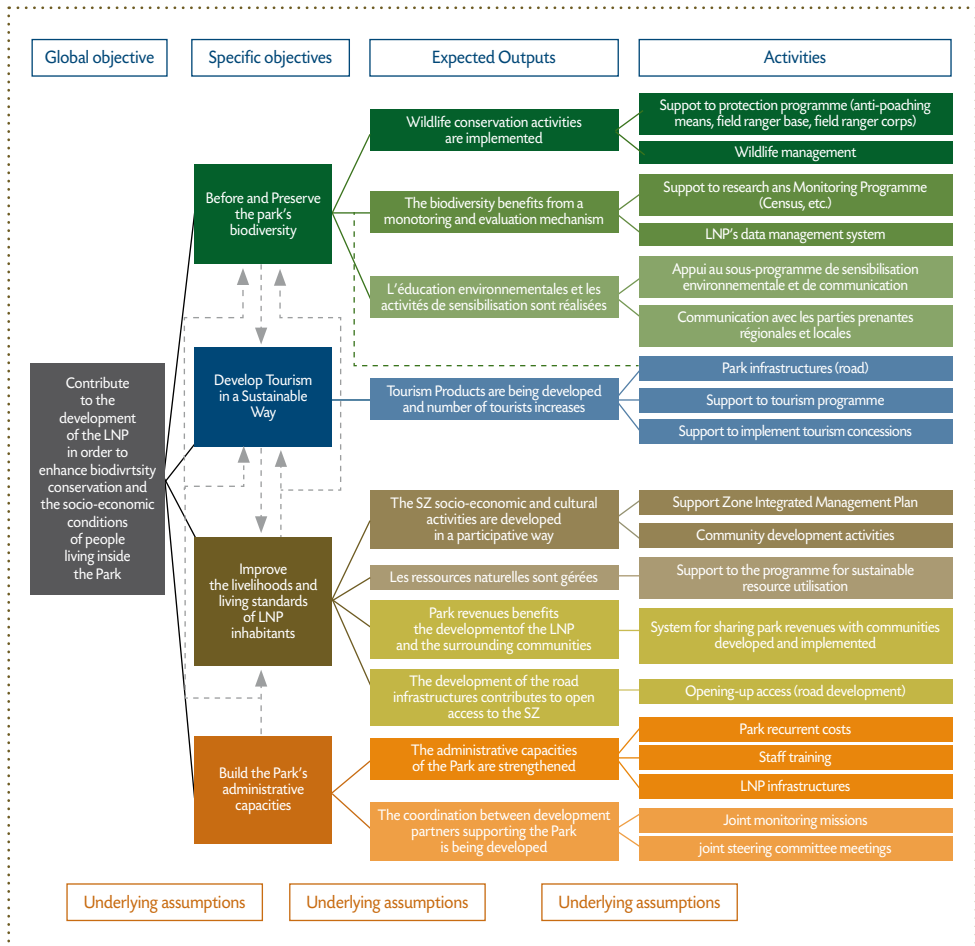
The intervention logic presented in Diagram 2 below covers the different domains supported by AFD in the eight years of project implementation. To make up for the lack of detail in the original logical framework, the evaluation team used the available documentation and field missions to reconstruct the intervention logic. This provided a clear frame of reference for the analysis and enabled the team to determine what had been done in relation with what was planned. The logical framework presented below shows the three components that were initially presented as specific project objectives, with the addition of tourism development.²⁶

Infrastructures are treated as a separate programme in the reporting documents on the LNP. However, the evaluation team felt that they contributed to the specific objectives of the park²⁷ – even though it is sometimes hard to link particular infrastructures to a specific objective. When the project was designed, was it envisaged that the roads inside the park and the SZ would contribute to community development, tourism development or facilitate the rangers' work? And was the fencing to reduce HWC (and limit human presence in the CZ) expected to contribute to the protection programme or to the development of the SZ?

26 Tourism development was part of the biodiversity restoration and protection component in the initial logical framework for AFD funding, but features as a specific programme in the 2003 LNP Management Plan. Furthermore, although tourism generates revenues that contribute to sustainable development of the LNP, it does not contribute directly to the restoration and protection of biodiversity in the park, which is one of the conditions for the sustainable development of tourism. Tourism development was made a specific project objective in order to take account of its key role in the project's intervention logic.

27 For example, the wooden chalets in Albufeira, the LNP reception centre, the road network between Giryiondo and Massingir and the extension of the campsites help achieve the specific objective of tourism development; the road network inside the SZ contributes to the specific objective of improving residents' living conditions in the SZ; the construction of a workshop for the LNP and houses for LNP staff contribute to the specific objective of building administrative capacities; and the rangers' base camp in Mapai contributes to the specific objective of protection.

Diagram 2 – Reconstituted logical framework for the project



Source: Authors.

The project document identified the following risks:

- i) The development of tourism activities would place excessive pressure on the setting and risk destroying the biological diversity of the Park;
- ii) The benefits of tourism activities will not be sufficient to enable the Park to self-fund protection and conservation activities in the medium term, or substantial enough to encourage local communities to support and appropriate the LNP Development Programme;

iii) Issues with the voluntary resettlement of people living in Shingwedzi.

The project funded by AFD was managed by the DNAC/ANAC and implemented by the LNP, represented by its Director. The LNP was responsible for the administration, coordination and technical and financial monitoring and evaluation of the project. Other duties included recruiting and contracting companies, consultants and NGOs in accordance with the procedures manual, which set out the administrative, management, accounting and financial procedures for the project and anticipated that PPF would support the administration of the LNP.

Oversight of the AFD project was assigned to the LNP steering committee (see Diagram 1 page 42). This body, which was set up at the start of the first phase of funding, was responsible for checking and approving the action plans and annual budgets, supervising the revenue collection mechanisms, revising fees, supervising tendering procedures, and mobilizing the support and financial resources needed to implement the development programmes.²⁸

3.3. Changes in project context and content

3.3.1. Theory of change and critical path for the LNP Development Project

The theory of change is based on the principle that changes in organisations are complex processes that need to be properly understood. It does not aim to predict how the changes will come about, but to identify the necessary conditions for change and the assumptions on which these conditions are based.

In the case of the LNP, it is possible to reconstruct the initial assumptions about how the main programmes would help the park achieve its aim – defined in the LNP Development Plan as “the preservation of ecological processes within a transfrontier conservation area and contribution to the wellbeing of the population of Mozambique” – and analyse the underlying assumptions and preconditions for executing each programme. The process of reconstructing the six main LNP programmes (administration, ecology, resettlement, community development, protection and tourism) is shown in Diagram 3 below.

28 AFD Limpopo National Park Project (LNP) Project document, November 2005, p.12.

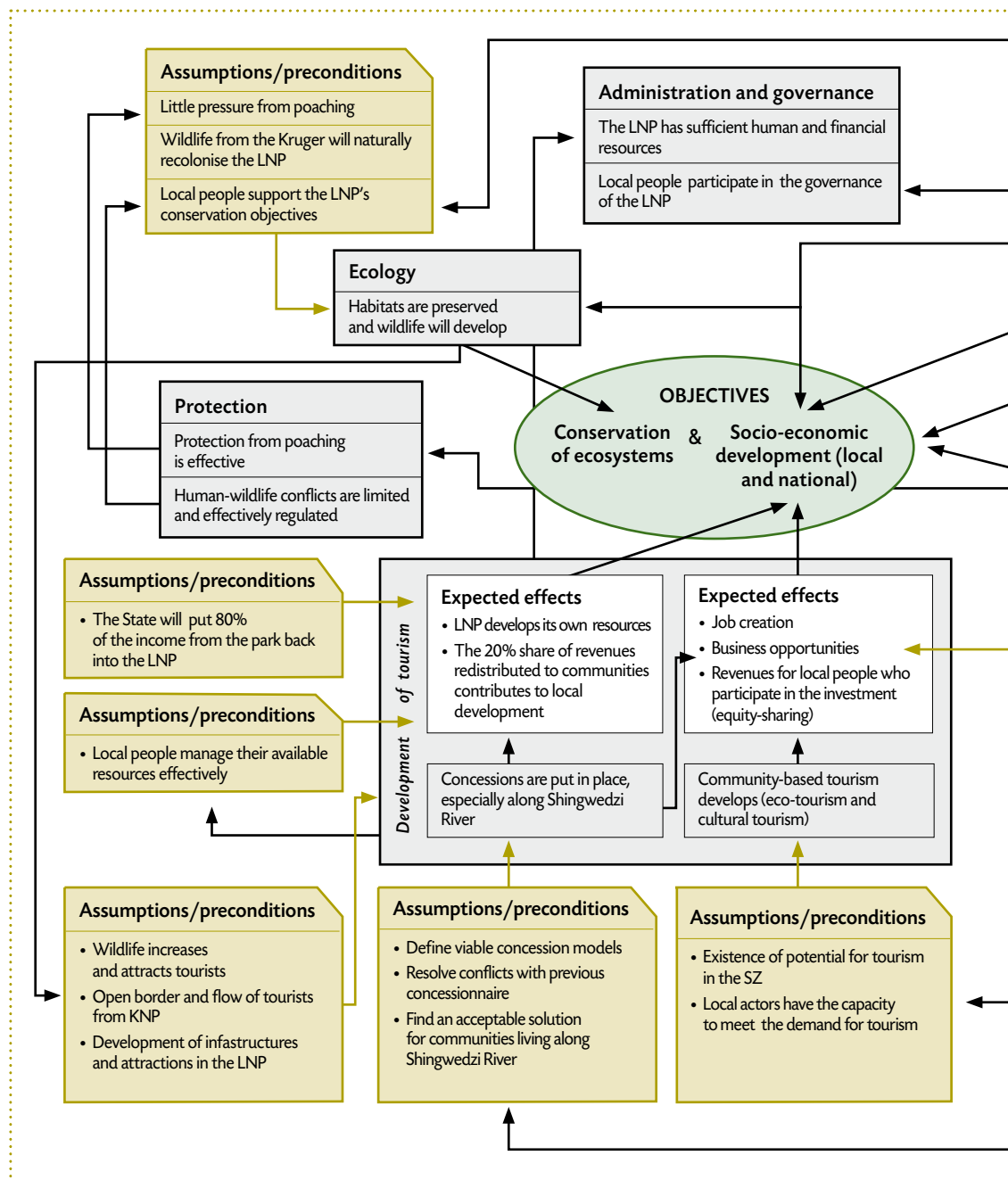
This reconstruction can be used to analyse the links between the different programmes and determine the extent to which the progress of one programme depends on the outcomes of the others. The evaluation team found that:

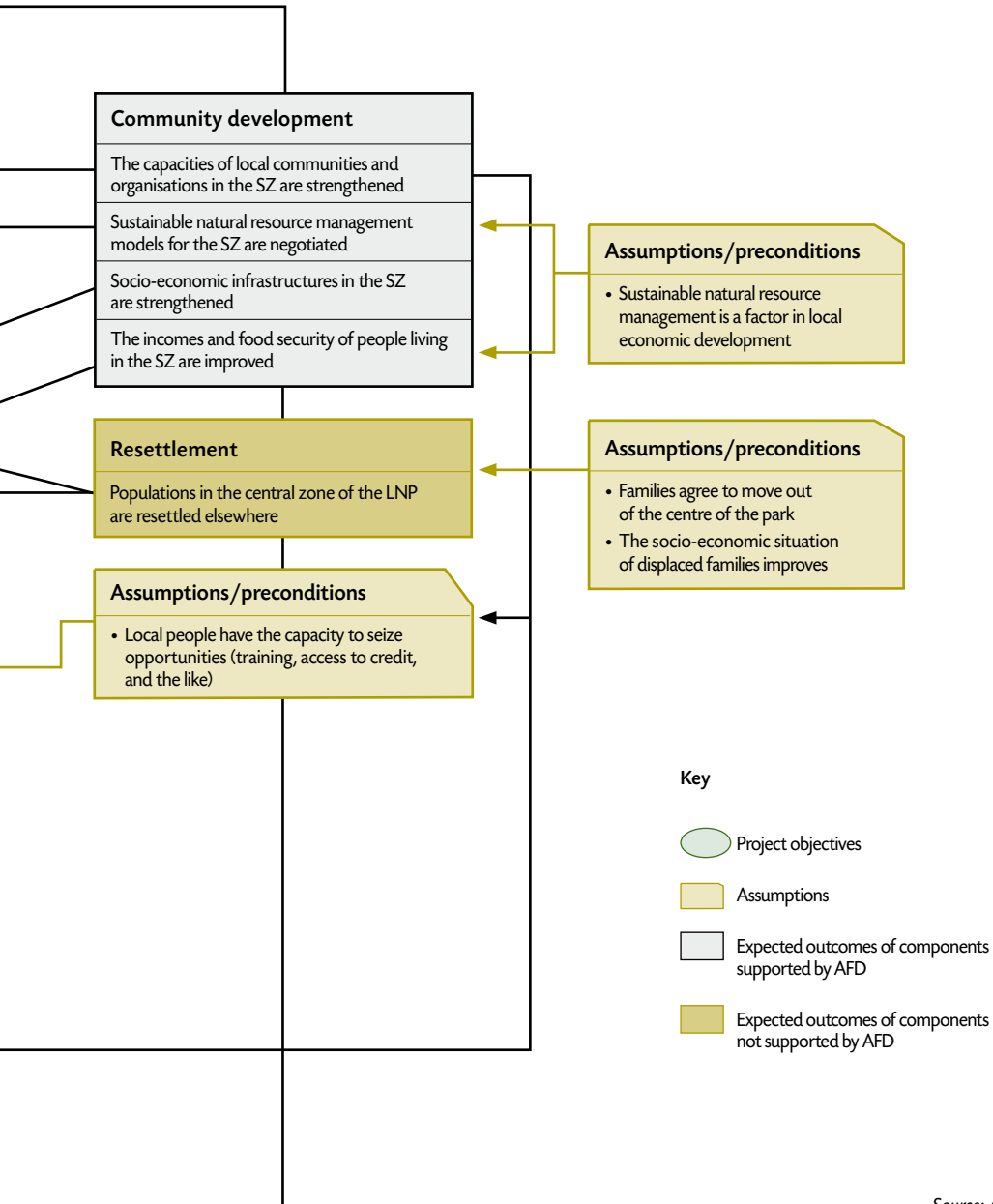
- The expected outcomes of the different programmes were based on numerous assumptions and conditions, which were described more or less explicitly in the project documents (for example, tourism development depended on a concession model being defined).
- The ability to achieve the expected outcomes of each programme depended on the other programmes: for example, preserving the integrity of the ecosystems depends on the protection and community development programmes. The different programmes were inter-related, and a lack of attention or progress in one programme could have more or less long-term impacts on the expected outcomes of another programme.

The progress of the project funded by AFD between 2008 and 2015 was shaped by three key internal and external factors. These factors, and their influence on the whole project are summarised below:

- Delays in the component to resettle families living inside the LNP had an impact on the implementation of other components and on the LNP's finances.
- An external factor, *the upsurge in poaching*, which could not be foreseen when the project was first designed, made it necessary to adapt the LNP development strategy and thus the project funded by AFD.
- Finally, *problems with the tendering processes and financial management* disrupted and significantly delayed the project. This was one of the main reasons why the project period was extended from four to eight years, and for its poor performance in achieving certain expected outcomes, particularly in developing the Support Zone.

Diagram 3 – Interrelationships between components, and critical assumptions regarding the LNP Development Project





Source: Authors.

3.3.2. Delays in the population resettlement programme

Although the evaluation did not cover this resettlement programme, we must discuss it in order to understand its effect on the development of the LNP, the implementation of components funded by AFD, and its possible effects on the sustainability of what has been achieved.

This section describes the progress of the resettlement programme and conclusions about its past and present dynamics based on the limited documentation available, responses to field surveys (with NGOs, villagers who have been or will be displaced, host villages, LNP staff) and a telephone interview with an expert from KfW.

The LNP Management Plan anticipated that residents in the Core Zone would be offered two alternatives as part of a 'voluntary resettlement' process: resettlement in the SZ or outside the park boundaries, or remaining in enclaves within the CZ.²⁹ It was assumed that families would want to move because it would give them access to better living conditions,³⁰ but it soon became clear that incentives were necessary.

The plans made in 2003 anticipated that the resettlement programme would last for seven years.³¹ However, it has been subject to numerous delays and so far only two of the eight villages in the CZ have been resettled.³² The process is at a fairly advanced stage for three villages (Massingir Velho, Makandazulo and Bingo), and discussions are still under way with three villages (Mavodze, Machamba and Chimangue) that have not formally agreed to be resettled (see Map 2).

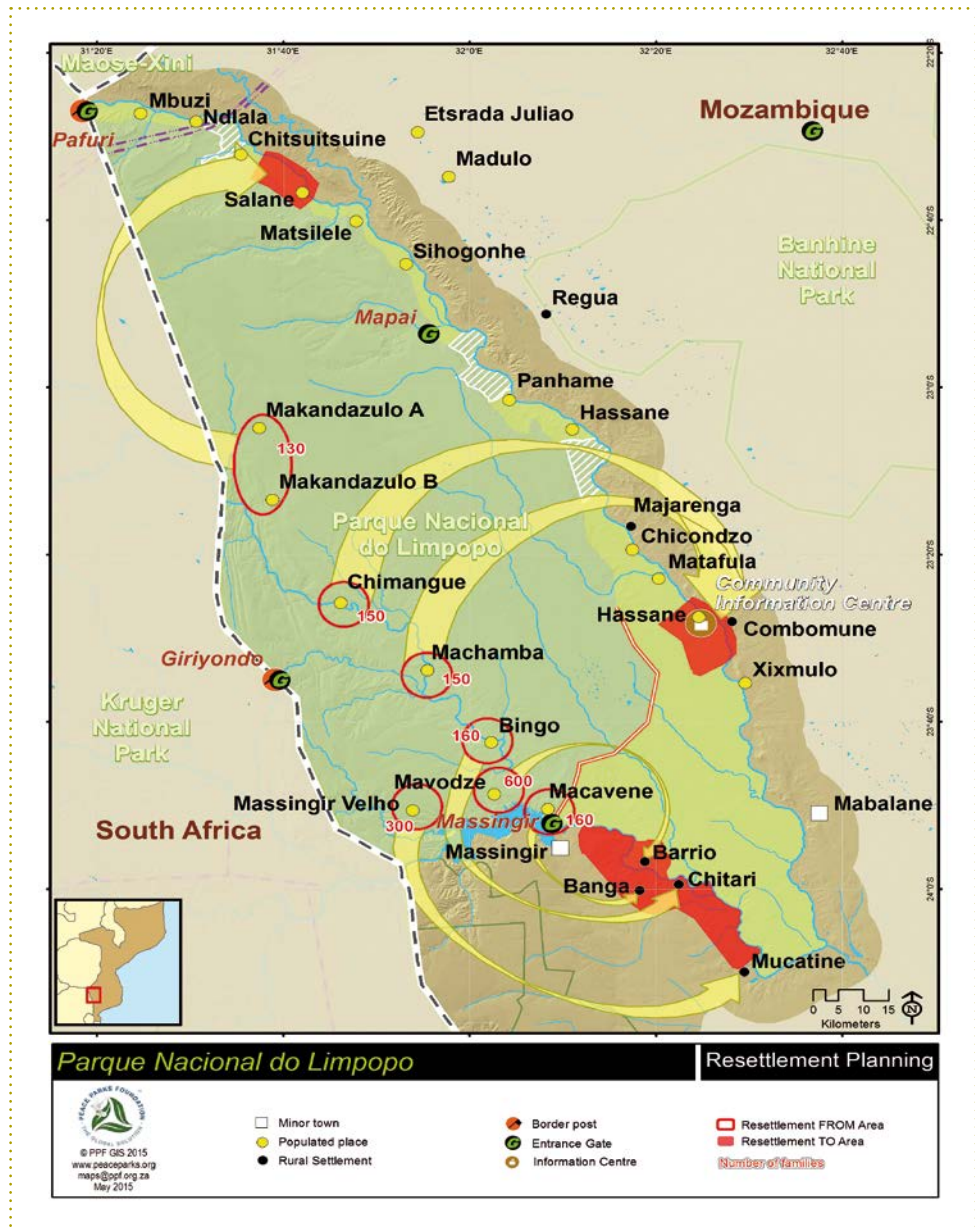
29 LNP Management and Development plan, 2003, chapter 8, p.71.

30 The LNP business plan for 2004–2006 talks of a 'win-win situation', p.50.

31 LNP business plan 2004–2006, p.26.

32 The village of Nanguene in Chihangane (pilot resettlement of eighteen families, finalised in 2008) and the village of Macavene in Banga & Tihovene (164 families, finalised in 2013).

Map 2 – Planned population displacements in the core zone of the LNP



Source: LNP.

There are several reasons for these delays. Firstly, the scale and complexity of the task were clearly under-estimated, which meant that the plans were overly optimistic and insufficient resources were allocated for the initiative (especially human resources). The limitations of the strategy adopted during the pilot phase, where the LNP was responsible for the whole process became clear when a conflict erupted in 2007/2008 because the land set aside for families displaced by the LNP was allocated to the Pocana project.³³ In order to resolve this conflict and oblige the Government of Mozambique to secure land to resettle displaced families, KfW suspended its financial assistance for the resettlement process for several months. The impact of this decision continued after the suspension was lifted because contracts had to be suspended or cancelled when the funding stopped, and tendering processes had to be restarted when it resumed. Financial constraints also delayed the resumption of the programme, and were only resolved when a new funding agreement between KfW and the Government of Mozambique was signed through the Southern African Development Community (SADC) in 2010.

The resettlement process restarted in 2011, entering a new phase as the LNP decided that all the families in the Core Zone of the park needed to be resettled in order to develop its potential for tourism. This shift to involuntary resettlement of resident populations, who were no longer offered the option of remaining in enclaves within the CZ, was also prompted by the increase in poaching and suspicions that some LNP residents were complicit in this activity. The Government of Mozambique became closely involved in the decision-making, operational and financial aspects of the new resettlement strategy,³⁴ which meant that local institutions (provincial and district authorities and services) were directly involved in resettlement, and that the LNP now played a support role in the process.

33 In October 2007, in accordance with the Land Law of 1997, the Government of Mozambique assigned 10,000 hectares of land in Massingir district to CAMEC/Procana for a renewable period of fifty years. The land was to be used to produce ethanol from sugar cane irrigated with water from the Massingir dam on the Olifants River. However, the Ministry of Tourism had promised this land to resettle families from the Central Zone of the Limpopo National Park. Tensions then arose between the Ministry of Tourism and the Ministry of Agriculture, and between the national government and the district government in Massingir. (Source: <http://ejatlas.org/conflict/procana-sugar-plantation-limpopo-mozambique>, Last accessed 15 August 2016).

34 In 2011, the council of ministers made the National Disasters Management Institute (INGO) responsible for coordinating implementation of the LNP resettlement programme on the basis of its experience with resettlement and reconstruction initiatives.

These changes did little to increase the pace of resettlement. For example, the village of Makandazulo had agreed in 2008 to be resettled in the SZ on territory belonging to the community of Salane. The Resettlement Action Plan (RAP) was not finalised until 2014, and housebuilding progressed very slowly when work finally started in 2015.³⁵ It must be said that this process involves numerous local institutions whose capacities have not been significantly strengthened, and which lack the human and financial resources that would enable them to make much progress in resettling families in several communities at the same time. Although the coordination between government institutions and with the LNP improved considerably with the creation of district-level technical coordination committees, the whole process is still taking a very long time. The financial involvement of the Government also means that its progress is dictated by the availability of government funds, and this can cause difficulties when money starts to run short, as it did in 2015.

A visit to the community in Macavene shows that the resettlement process is not only slow, but has also failed to fulfil some of its promises. One of the preconditions for the move was that land in the new site would be prepared so that villagers could immediately start cultivating the rain-fed crops on which they rely for their food security. In reality they were unable to do this until 2015, two years after they were resettled. And despite the fact that it is surrounded by power lines, the village still has no electricity because the Government does not have the money to connect it to the power supply. There have also been technical problems with the water supply. These are apparently being resolved, but the system is expensive to run and although the LNP resettlement department currently covers these costs, this is not a viable solution for the medium term. There have also been complaints about the quality of the houses, which interviewees said had been built by inexperienced masons.

The greatest cause for concern is the amount of land available for crops and pastures in the resettlement zones. Household food security depends on rain-fed crops grown in extensive systems that are adapted to the semi-arid climate, and which aim to minimise the risk of total crop failure.³⁶ The amount of land cultivated depends on the household's human and financial resources, and varies from one village to the next according to the availability of suitable agricultural land. In Macavene, the median area cultivated by families that have fields

35 Construction stopped at the end of 2015 due to the lack of government funding, and restarted in 2016.

36 Intensification strategies are very risky in a semi-arid climate if irrigation is not possible, as money spent on inputs (fertilisers, seed, pesticides) will be lost if there is a drought. Producers prefer to plant large areas and invest as little money as possible in them. They often plant several parcels at different times to limit the risk of producing nothing.

is 4.2 hectares.³⁷ The resettlement action plan (RAP) for Macavene anticipated that each family would receive a minimum equivalent of 0.4 hectares of cultivable land per person.³⁸ Assuming that the average family includes five people,³⁹ this would provide an average of two hectares per family.⁴⁰ This RAP also envisaged that families that cultivated more than the minimum calculated area would receive financial compensation based on the cost of clearing the extra land, and that a certain amount of land would be set aside for this and to meet the future needs of resettled families. However, the compensation that families in Macavene actually received bears very little relation to these initial calculations. In the end, each family received one single hectare of cleared land, regardless of their original situation, and has been compensated for the cost of clearing one hectare less than the amount of land they had before the scheme. As negotiations with the host community in Banga only covered the amount of land needed to ensure that each family would have one hectare, it is unclear what opportunities resettled families will have to obtain more land to clear and cultivate. According to customary rules, this will depend on the goodwill of the host community, so there is no guarantee that the families from Macavene will be able to regain the productive capacity they had before they were resettled.

In 2008, the RAP estimated that 106 of the 128 families in Macavene that would be displaced reared livestock, with an average of nine cattle and seven small ruminants per family. The RAP anticipated that the community pastures that Macavene lost would be compensated by: (1) Shared use of available grazing in Banga with the host community. However, this land has a limited carrying capacity of around 200 head of livestock, while Macavene and Banga jointly hold over 1,400 animals; (2) The complementary use of community grazing in Mbindzo, under a memorandum of understanding between Procana and the government that makes this land available to neighbouring communities.⁴¹ Data from the RAP show that the amount of available land, whose estimated carrying capacity is around 4,000 head of cattle, is insufficient

37 LNP: *Resettlement of people living in the Shingwedzi river valley – Resettlement action plan for Macavene village*, April 2008, Appendix 6.

38 The calculation of 0.4 hectares is the minimum area needed to ensure food security for one person. LNP: *Resettlement of people living in the Shingwedzi river valley – resettlement action plan for Macavene village*, April 2008, pp.49–50 and Appendix 9.

39 From an average of 691 people from 128 families, which means 5.4 people per family. LNP: *Resettlement of people living in the Shingwedzi river valley – Resettlement action plan for Macavene village*, April 2008, p.24.

40 Or put otherwise, about half of the median cultivated area. This is due to the fact that the theoretical calculation does not take account of producers' extensive strategies to cope with the risk of drought.

41 This agreement was also accepted by Massingir Agroindustrial (MAI), the company that took over the concession after Procana lost it due to non-compliance with the contractual clauses.

for the 4,800 head of livestock in the communities of Banga, Novo Macavene and Tihovene, which could also be joined by some of the livestock from Massingir Novo and possibly Bingo.⁴² It should also be noted that the pastures in Mbindzo are several kilometres from the village of Novo Macavene, and that there is no water, which makes it hard to use in the dry season. Procana (and then MAI) promised to increase the carrying capacity of these grazing areas with water points, enclosures, improved pastures, etc., but never made the promised investments. Finally, there is no proof that they will be compatible with current livestock rearing systems, or that they will be economically viable.

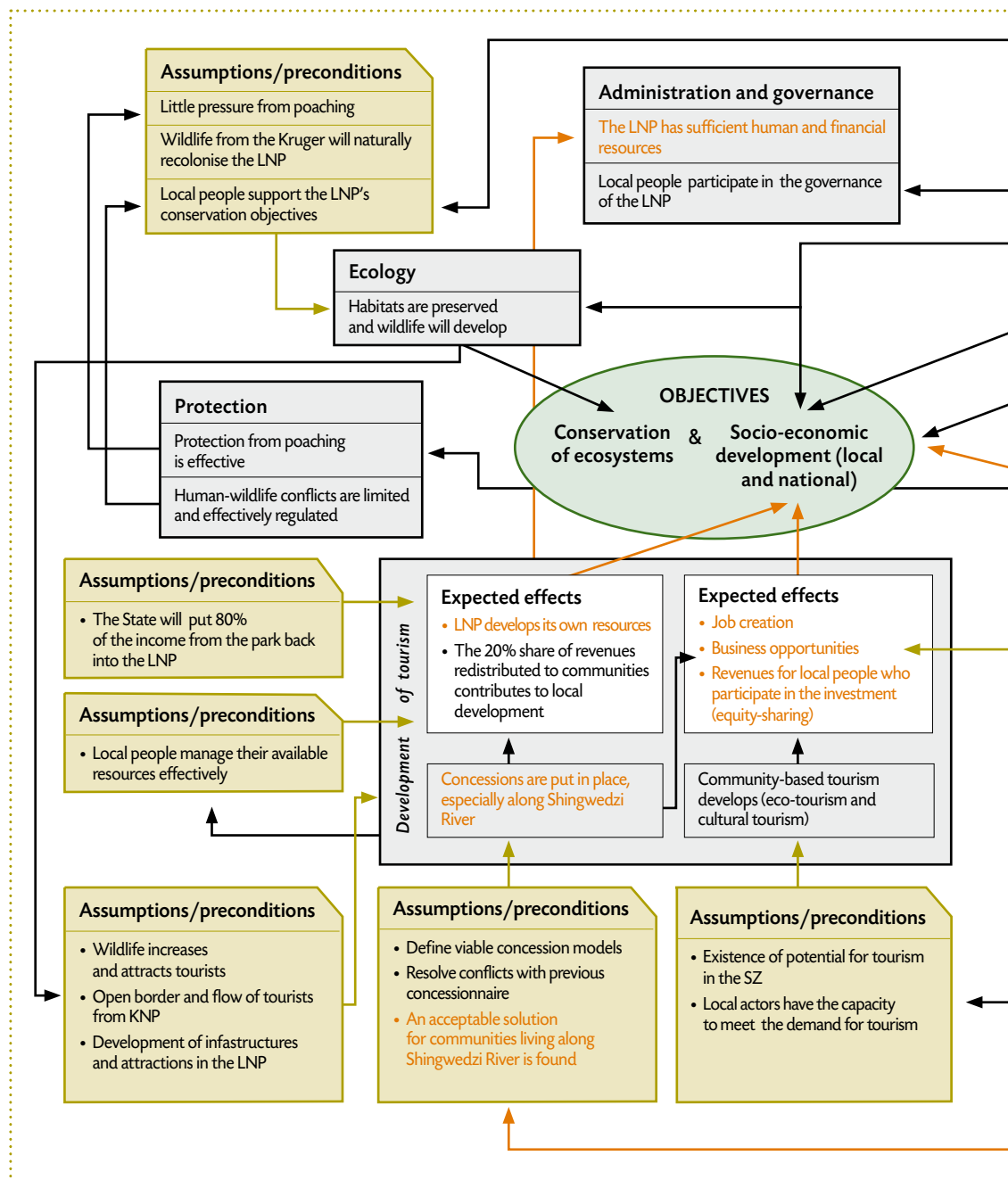
The resettlement processes that are currently in place offer no guarantees that displaced people's living conditions will be the same or better than they were before they were moved.⁴³ This contravenes the law on conservation and World Bank standards for involuntary resettlement.⁴⁴ While it is likely that the process will lead to an improvement in social conditions for these families (access to education, healthcare and housing), there is a danger that their economic conditions and food security will be worse. And while some villagers from the Shingwedzi River valley clearly profit from the upsurge in poaching in the Limpopo and Kruger Parks, it would be wrong to see this as the sole cause of resistance to resettlement. Discussions with the villages that had agreed to be resettled show that they resigned themselves to the situation under pressure from the authorities, despite fears that their economic conditions would be worse after the move.

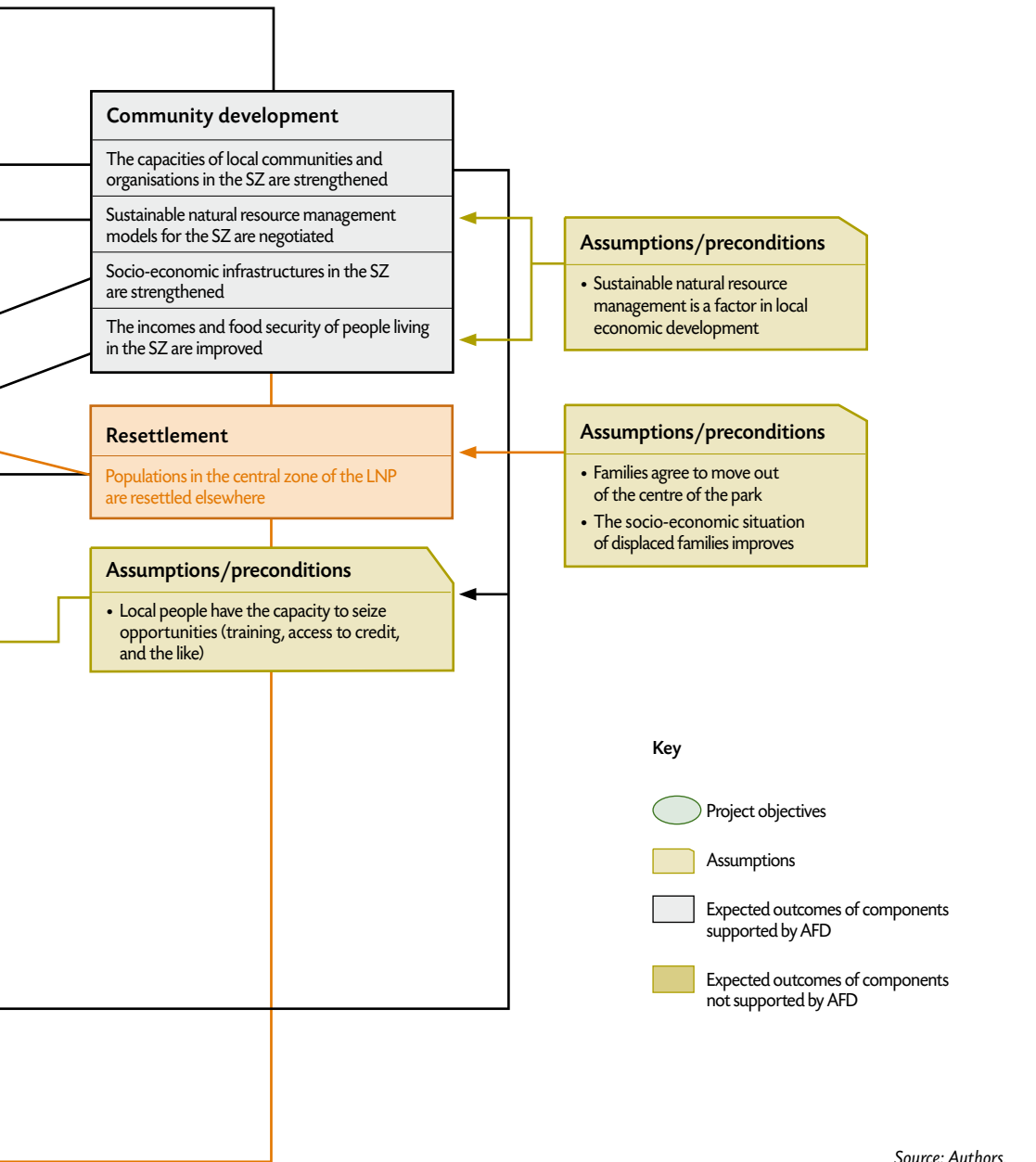
42 LNP: *Resettlement of people living in the Shingwedzi river valley - Resettlement action plan for Macavene village*, April 2008, p.61, and LNP: *Resettlement of people living in the Shingwedzi river valley - resettlement action plan for Massingir Velho village*, April 2013, p.70.

43 The RAPs did not evaluate the families' economic situation before displacement, or estimate their potential income after resettlement. The estimated minimum area that ensures food security, presented in the RAP for Macavene, does not feature in more recent RAPs. In addition to this, the anticipated land compensation is insufficient to maintain productive systems and thus family incomes at pre-displacement levels.

44 Respectively: *Law N°16/2014, of 20 June 2014, Articles 48-2;* and *World Bank Operational Policy 4.12: Involuntary Resettlement*: "Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher." http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064610~menuPK:64701637~pagePK:64709096~piPK:64709108~theSitePK:502184,00.html#_ftn12, Last accessed 16 August, 2016.

Diagram 4 – Critical path between population displacement and tourism development





Source: Authors.

Successive delays, lack of transparency, changes in direction and leadership and broken promises have also undermined local people's confidence in the resettlement process.⁴⁵ Some have escalated their claims in the hope of obtaining better compensation, while others have delayed the process in order to continue their lucrative poaching activities. This continued resistance could ultimately have significant consequences for the development of the LNP, especially on biodiversity and the development of tourism.

Developing tourism and wildlife are long-term processes that require a phased approach and continuous support. The continued presence of communities along the Shingwedzi River has slowed down the increase of wildlife and made it difficult to use this zone for concessions. Delays in the resettlement process have had a significant impact on the tourism projects, and thus on LNP revenues (see the critical path in orange in Diagram 4 above).

AFD funding is integrated into the overall management of the LNP by the PIU. The priority given to dealing with the resettlement process and the difficulties it has caused has diverted attention and resources away from the other components, including those funded by AFD.

3.3.3. The LNP has suffered from an unprecedented increase in poaching at the global level

In the last few years, Mozambique has faced an unprecedented increase in the scale and intensity of commercial poaching, both on its own territory and by poachers in South Africa operating out of Mozambique. This phenomenon is not specific to Mozambique or even southern Africa. It affects every country, even those with well-established biodiversity preservation policies, and reflects increased demand for illicit products at the global level. In 2012, WWF and its dedicated international wildlife trade monitoring programme (TRAFFIC) estimated that the illegal international traffic in wildlife alone (not counting fish or wood) was worth between US\$7.8 and US\$10 million per annum.^{46 47} Poaching for ivory or rhino horn

⁴⁵ Gaye Thompson, *Mozambique Trans-frontier conservation area and tourism development project: Resettlement activities in the Limpopo National Park. Evaluation of implementation of RAP 1 et RAP 2A*. Draft final report, August 2011.

⁴⁶ WWF / Dalberg, 2012, *Fighting illicit wildlife trafficking: A consultation with governments*, WWF International, Gland, Switzerland.

⁴⁷ The illegal traffic in wildlife (including trade in timber and fish products) is the fourth largest illegal international trade after drugs, human trafficking and counterfeit goods.

is driven by the growing demand in Asia for medicinal (rhino horn) and ornamental (ivory) products, and increased purchasing power of 'consumers' in countries such as Vietnam, China and the Philippines.⁴⁸

Today this traffic is controlled by international criminal networks rather than individuals. The sophisticated resources these networks have at their disposal outstrip the modest protection and surveillance systems in parks such as the LNP, whose protection structure has had a chequered existence since the park was created (fluctuations in the number of rangers – see Section 4.1.2 – arms, and the like).

The two species that are particularly targeted, and whose very existence is threatened by poachers, are elephants (for ivory) and rhinos (for their horn). The MIKE programme, which monitors the illegal killing of elephants under the Convention on International Trade in Endangered Species of wild flora and fauna (CITES), shows that the elephant mortality rates have overtaken their reproduction rates on the African continent since 2011. The aerial census of elephants in Mozambique conducted between September and October 2014 showed that the number of elephants in the country as a whole had fallen by forty-eight percent in the previous six years, with a sixty percent reduction in the population in the north;⁴⁹ while analysis of the aerial censuses undertaken in the LNP (see Section 4.1.2) shows that the number of elephants in the LNP fell by nearly twenty-five percent between 2010 and 2014.

Rhino poaching in South Africa also increased dramatically between 2007 and 2014: Graph 1 below shows that it increased by a factor of nearly 1,000. The LNP is a particular target for poachers, not only because of the animals that live there (elephants), but also because it provides an entry point into the KNP in South Africa. The KNP is home to fifty percent of the country's rhino population, and accounted for over 60% of the rhinos killed in South Africa in 2013. Before 2015, the great majority of poachers came from Mozambique, crossing the border through the LNP or further south (about seventy percent of incursions into the KNP were from Mozambique). Many Mozambicans have been arrested or killed by KNP rangers.⁵⁰

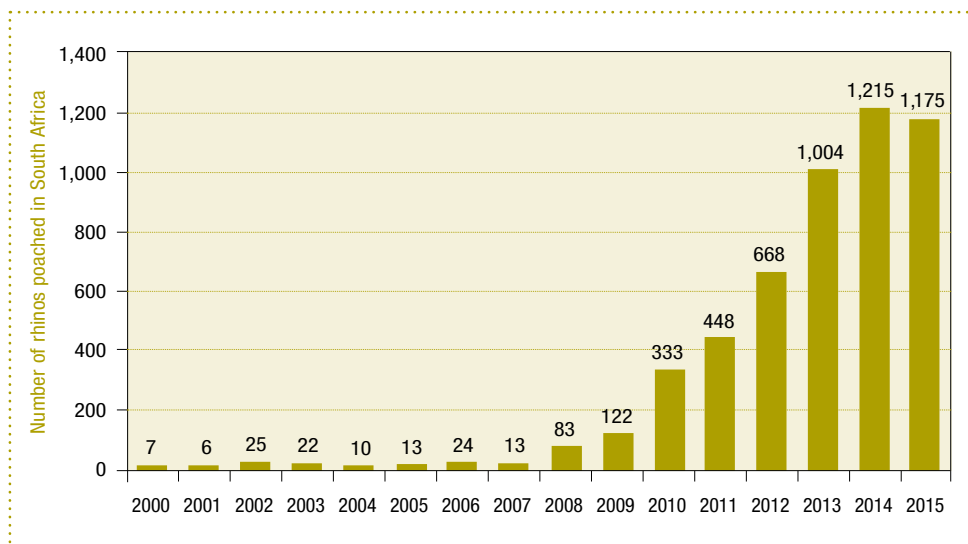
48 AFD, *Programme d'appui d'urgence à la lutte contre le braconnage au Mozambique*, fiche d'identification de projet.

49 Government of Mozambique, WCS, USAID, *Great Elephant Census*, October 2015. Update on the status and trends in elephant populations in Mozambique. Summary of findings by the aerial census of 2014.

50 According to the Chissano Foundation, 500 Mozambicans have been killed in Kruger National Park since 2010. However, these figures seem excessively high and have not been confirmed by the South African or Mozambican authorities. Rede Angola internacional: *Seis caçadores furtivos moçambicanos mortos no Kruger* <http://www.redeangola.info/seis-cacadores-furtivos-mocambicanos-mortos-no-kruger>, Last accessed 16 August 2016.

These numbers have dropped a bit since 2015, and poachers entering the KNP from Mozambique are now thought to account for thirty percent of all intrusions. The number of poached rhinos also fell slightly in 2015, after increasing constantly for seven consecutive years.

Graph 1 – Number of rhinos poached in South Africa



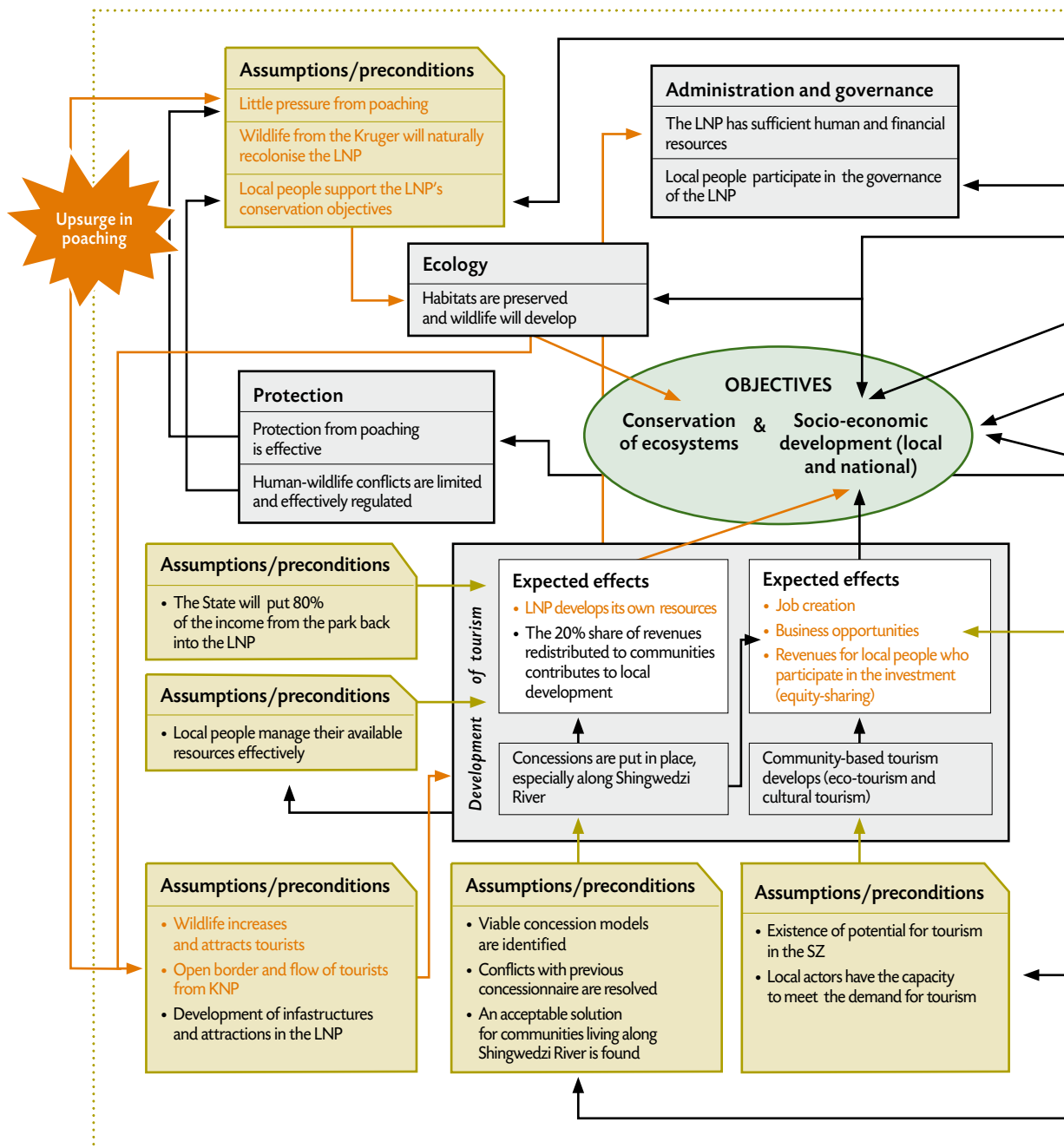
Source: Data from the South African Department for Environmental Affairs (2016)

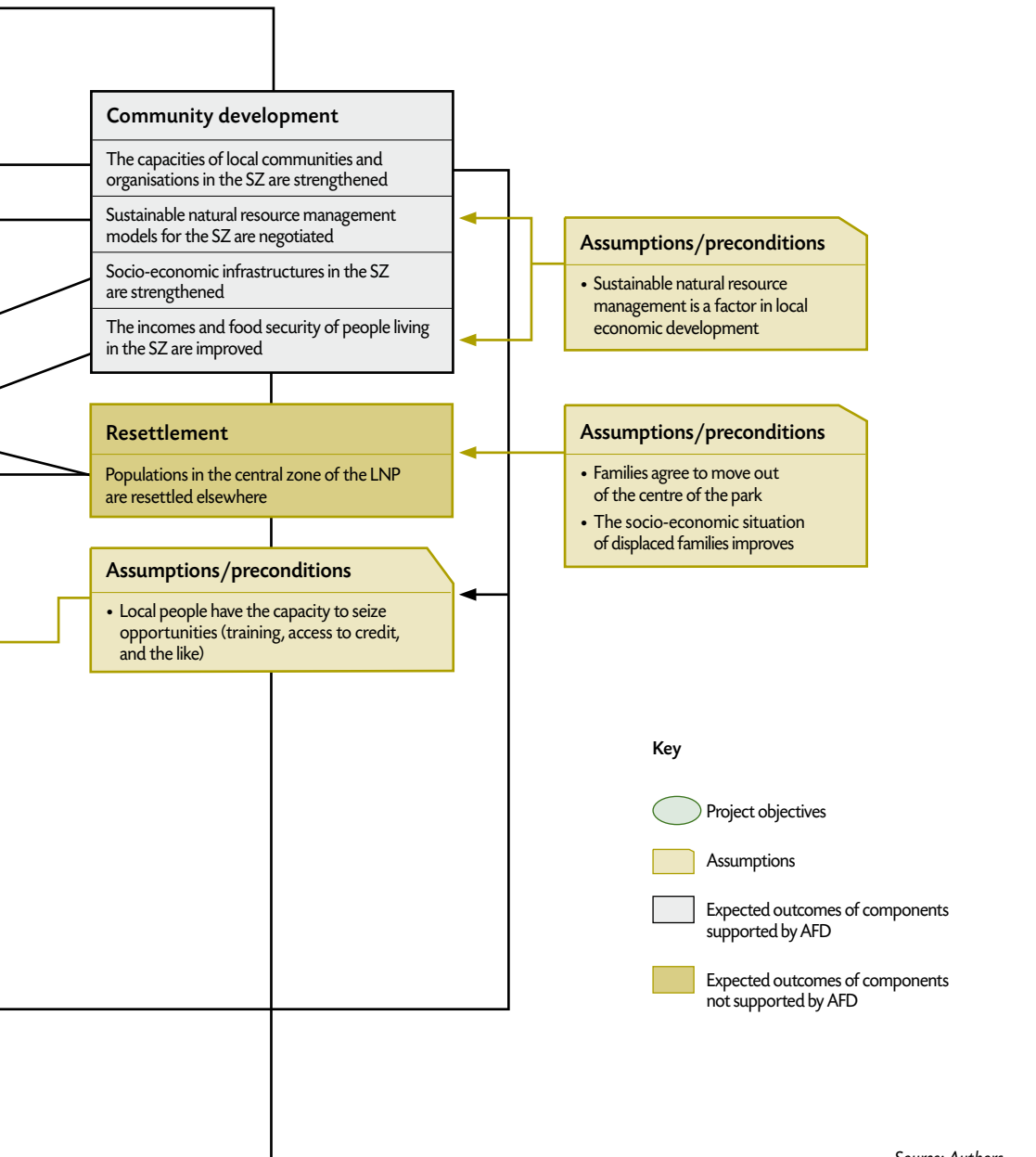
This increase in poaching has considerable impacts on the LNP. Firstly, it limits the expected effects of repopulation initiatives and of the removal of the fence between the LNP and KNP on the development of wildlife in the park. Tourism could suffer as a direct consequence of poaching and the low number of animals in the park, and there are also diplomatic repercussions and implications for internal security. The marked increase in poaching between 2008 and 2014 created tensions between South Africa and Mozambique, which were partly due to Mozambican poachers entering the KNP from the LNP, and the LNP's very limited capacity to respond to the problem until 2012–2013 (see Section 4.1.2). These tensions led South Africa to threaten to close the transit area between the KNP and LNP if Mozambique did not act to prevent poachers from passing through the LNP. This would have had a very negative impact on the development of tourism in the LNP, which relies heavily on the influx of tourists from South Africa, and raised questions about the cross-border approach

to territorial governance and regional cooperation and peace that informed the original project design. Mozambique finally responded to South African accusations that it was giving poachers a free rein, and started implementing a firmer policy in 2013. In April 2014 it passed a law that made poaching a criminal offence, with prison sentences of eight to twelve years for poaching, handling, transporting and selling protected animal species. However, this law has yet to become fully effective.

Poaching has therefore been an important element in changing the context in which LNP development project interventions have taken place. In addition to its diplomatic repercussions and effects on the achievement of certain expected outcomes, it also affected the organisation of the project, as the LNP management team had to change its priorities and find additional resources for protection activities. This naturally affected the very foundations of the park and its development (see Diagram 5 below).

Diagram 5 – Critical path between the upsurge in poaching and development of tourism





Source: Authors.

3.3.4. Major delays in recruiting service providers and delivering services

The funding agreement between AFD and the Republic of Mozambique was signed on the 23rd of April 2007. Suspensive conditions were lifted in December 2007, and the contract between the Mozambican Ministry of Tourism and the PPF regarding technical and financial assistance with the implementation of AFD funding was signed on the 29th of February 2008. The first disbursements were made in 2008.

The LNP support project funded by AFD has been subject to numerous delays, particularly in the first two years when there were problems with the procurement and tendering procedures. It seems that certain procedures were poorly managed, files that had not been translated into Portuguese caused delays and problems arose when the bids for tender were assessed. Several calls for tender had to be repeated for various reasons (missed deadlines, procedural irregularities), including certain key contracts that had a significant impact on the project (roads, technical assistance for the SZ). In addition to this, public procurements for the LNP exceeding €30,000 are dealt with by the ANAC in Maputo. Although a focal point in the ANAC is responsible for these processes, the geographic distance between Maputo and Massinger and lack of capacity to manage these procurement procedures led to serious delays in launching calls for tender and contracting service providers. For example, tendering processes for construction of the roads and fence began in 2010, but contracts were not signed until the beginning of 2012.

In addition to this, problems with the LNP's administrative and financial accounts and technical assistance delayed payments into the imprest account over several consecutive months, thereby reducing the funds available for the park and slowing the implementation of certain activities.⁵¹ Other delays arose because selected companies had difficulty executing their contracts within the agreed timeframe (as with the road construction and study on land use and carrying capacity).

The technical assistant responsible for providing support with the AFD funding was supposed to be recruited when the project started and stay in post for four years. He did not arrive until April 2010, two years after the project began, and left two years and nine months later in December 2012 (deadline for the final funding payment). This not only meant that he

⁵¹ AFD: Note to the director of the AFR department regarding the revision of the financial plan for the LNP Development Project – CMZ 6e007 01L 14/09/2010.

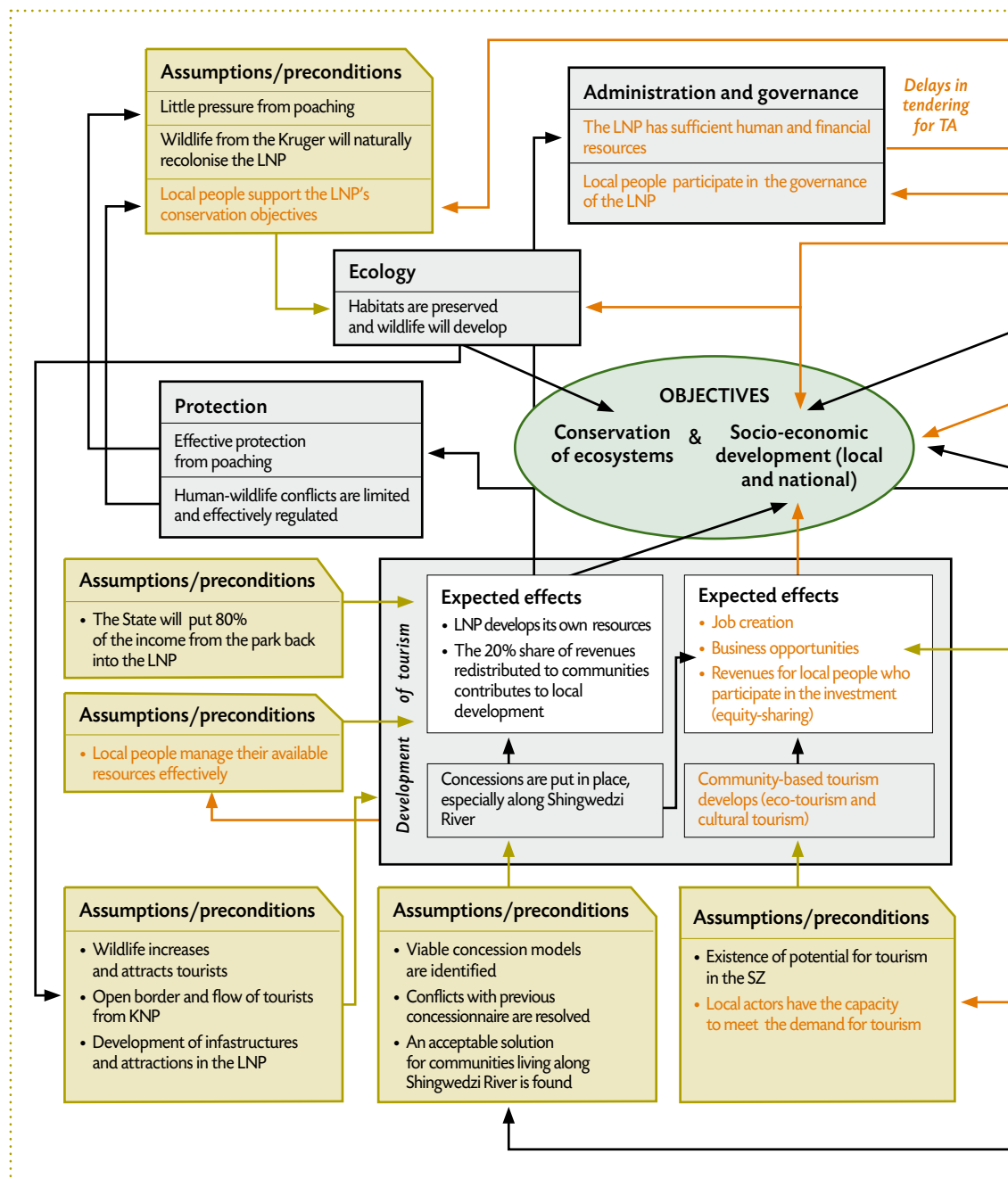
had very little time to carry out the planned activities (recruit and train staff, prepare a participatory plan for the whole SZ, implement priority actions), but also that he arrived at a late stage in the evolution of the LNP and the project. This limited his capacity to train the LNP teams responsible for community development, gave him little opportunity to implement AFD-funded priority activities in the SZ, and affected production of the management and development plan for the SZ.

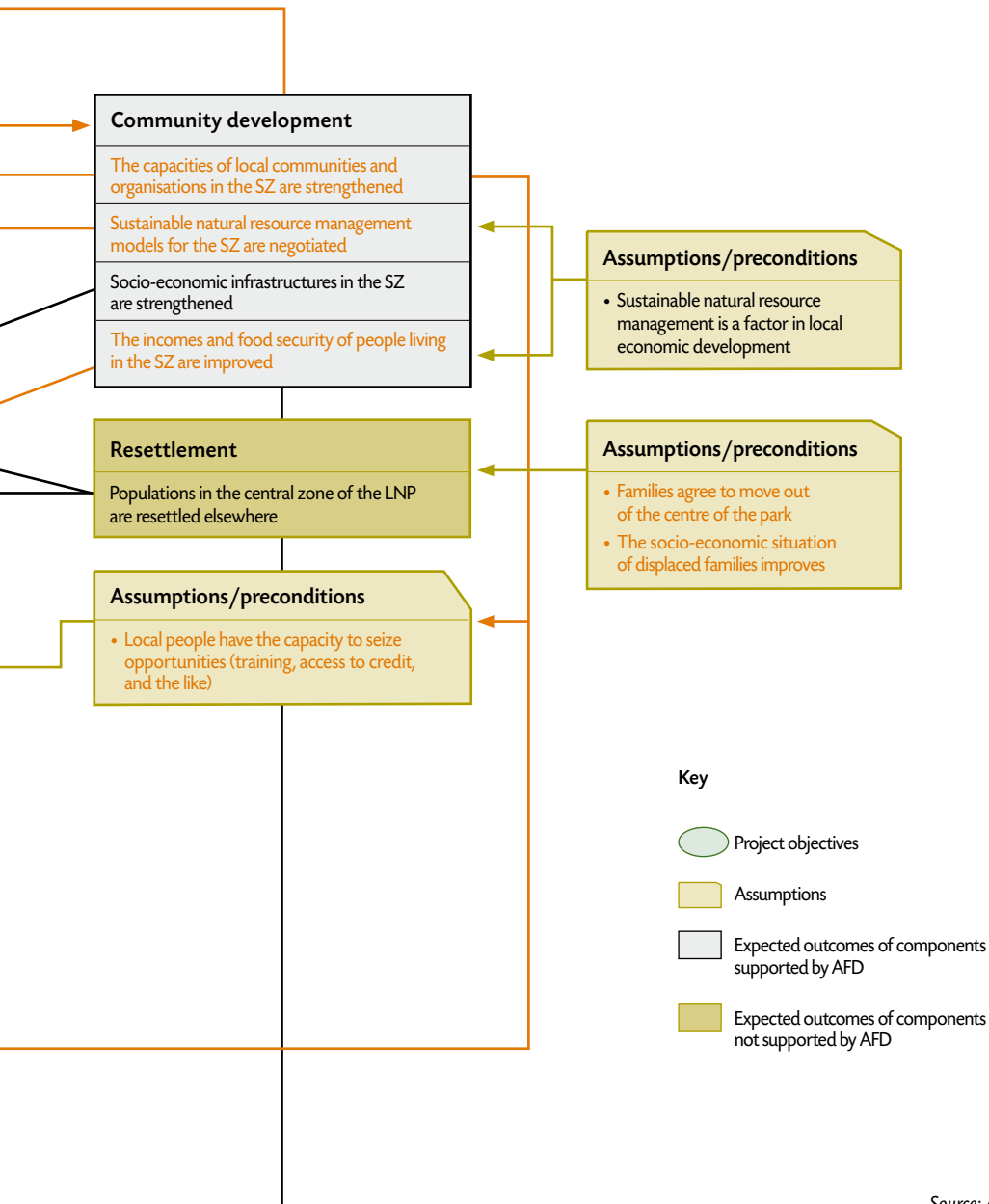
The delays in recruiting the technical assistant were caused by many factors. The evaluation team was unable to get to the bottom of them all, but it seems that the initial plan for technical assistance was prepared with GIZ, which has considerable experience in decentralised forest management in an area near the LNP. GIZ should have provided technical assistance for the planning phase of the community development component, while another technical assistant recruited through a tendering process would be responsible for implementing the planned activities. An initial call for tender launched in mid-2008 on this basis was cancelled, and a second attempt in 2009 called for a single technical assistant for all the support for the SZ. In the end a contract was signed with the company Ambero in early 2010, and the technical assistant arrived in April 2010 rather than 2008 (see above).

Other contracts started having problems when the calls for tender were launched, and suffered more delays in the implementation process. For example, a study on land use and carrying capacity was commissioned to provide information on the potential carrying capacity and cultivable land in the SZ. The call for tender was launched in mid-2008 and cancelled by the Ministry of Tourism in 2009 because the deadlines had been missed and procedures had not been followed. After a second call proved unsuccessful, a negotiated contract was awarded in July 2010. The study was supposed to be finished in August 2011, but staff and transport (which was supposed to be provided by the LNP) problems delayed completion until December 2012. Because of this delay, the study was not ready until after the technical assistant had left, and we were told that it was never used.

Diagram 6 below shows the impact that the delay in recruiting the technical assistant had on the community development programme, and the knock-on effects on other LNP programmes.

Diagram 6 – Critical path between delays in recruiting the technical assistant and the community development component





Source: Authors.

3.3.5. Main changes to the project

Due to the delays and difficulties with disbursements, the project lasted twice as long as intended – running for eight years (2008–2016) instead of the planned four (2007–2010). Five amendment agreements were signed, changing not only the deadline for the final funding payment, but also the initial structure of the budget.

The two main changes to the initial budget were: (1) Significant increases in the ‘Finance and administration’ budget line, with a final figure nearly three times the original one. This was due to the LNP’s problems balancing its operating budget between 2008 and 2009;⁵² and (2) A significant increase in the budget for ‘Infrastructures’, which rose from €3.5 million to €5.2 million in the first amendment agreement, and then €7.1 million in the next one.

This reallocation was made largely at the expense of two budget lines: ‘Protection & biodiversity’, which dropped from €1.7 million to €750,000,⁵³ and ‘Development of the SZ’, which was slashed from €4.5 million to €1.5 million.

These budgetary reallocations seem to have been made in response to the financial needs and disbursement capacities of the different components. They made it possible to transfer money from components that were underspending – such as development of the SZ – to components whose needs were greater than anticipated (infrastructures). So it was both a response to new needs and a strategy to offset criticisms from AFD head office about low levels of expenditure that could have compromised the possibility of extending the project beyond 2012.

For instance, the annual budget execution rates for the component ‘Development of the SZ’ were very low (6% in 2008, 22% in 2009, and 16% in 2010), with total expenditure at the end of 2010 representing less than ten percent of the available budget. Conversely, in 2010, the ‘Infrastructures’ budget line had already been used to spend around €1 million even though none of the main planned infrastructures (roads and fence) had been put in place. The initial budget of €500,000 for the fence to limit human-wildlife conflict was reduced to

52 This situation was largely due to problems with the funding from KfW, which was initially supposed to be responsible for the functioning of the LNP. In order to help the situation, AFD’s budget included €340,000 for salaries that were not anticipated in the initial budget. See budget details in Annex 12. – Comparison between initial budget and actual project expenditure.

53 It is likely that the planned amount to construct the fence (500,000 Euros in the budget) was transferred from the ‘Protection’ budget line to the ‘Infrastructures’ budget line in order to keep it consistent with the LNP budget monitoring mechanism, meaning that the reduction was smaller than it initially seems.

€200,000 in 2009 when it seemed that the EU might contribute to the cost. The estimated cost of the fence then rose to €1 million when this option was withdrawn in 2010, so AFD made the first amendment to the funding agreement, substantially increasing the Infrastructures budget (+€1.7 million) and reducing the budget for Development of the SZ (–€1.3 million). In 2011, after the call for tenders for the fence, its cost was readjusted to nearly €3 million and the ‘Infrastructure’ budget line was increased accordingly (+€1.9 million), while the line for ‘Development of the SZ’ fell by €1.6 million.

Table 1 – Budgetary changes in the project funded by AFD

	A Initial budget as per NCS	B Amendment 1 05/10/2010	C Amendment 2 26/04/2012	D Amendment 3 11/02/2013	E Amendment 4 18/02/2015	E/A %
Finance and administration	461	1,200	1,340	1,404	1,469	319
Development of the SZ	4,537	3,200	1,630	1,530	1,556	34
Protection and biodiversity	1,709	750	760	858	940	55
Infrastructures	3,500	5,200	7,120	7,036	6,819	195
PIU	200	100	100	50	135	68
Misc. & unforeseen expenses	593	550	50	72	81	14
Population resettlement	0	0	0	0	0	-
Total	11,000	11,000	11,000	10,950	11,000	100

Source : authors, adapted from AFD 2005, AFD, République du Mozambique 2010, 2012, 2013, 2015).

Then, in order to deal with the upsurge in poaching and strengthen the government’s political will to tackle this problem, AFD reallocated money to the ‘Protection and Biodiversity’ budget line (+€190,000 between the second and the fourth agreed amendment). Most of this money came from what was left of the ‘Infrastructures’ budget. A detailed breakdown of the expenditure from each budget line and comparison with the planned budget can be found in Annex 12. – Comparison between initial budget and actual project expenditure.

4. Main Outcomes of AFD Funding for the LNP

This section uses the intervention logic reconstructed in Section 3.2 to describe the project activities and results achieved in each component, and presents the factual elements that support the evaluative judgements given in Section 5. It was decided to provide a very detailed account in order to give the clearest possible picture of what the project achieved in seven years, and compare this with what was planned in 2007.

4.1. Restore and preserve biodiversity

4.1.1. Review of the objectives of this component

Our reconstruction shows that one of the four specific objectives of AFD's funding was to restore and protect biodiversity in the park. The main aim of this component was to help finance the programmes identified in the LNP Management Plan, namely: tourism (which is dealt with in the next sub-section), protection, biodiversity research and monitoring, and environmental education. Although AFD's project document did not specify the activities and expected outcomes of its intervention in each programme, the LNP Management Plan can be used to identify the following activities and expected outcomes:

- Implement wildlife conservation activities: (i) support the protection programme (anti-poaching measures, rangers' base, and rangers' teams); (ii) wildlife management;
- Strengthen the mechanism for monitoring biodiversity: (i) support the monitoring and research programme; (ii) put in place a data management system for the LNP;
- Promote environmental education and awareness-raising activities: (i) support the environmental awareness and communication sub-programme; (ii) mechanisms for communication with regional and local stakeholders.

4.1.2. Wildlife conservation, protection and management

▷ a. Reintroduction and development of wildlife in the LNP

There were several wildlife reintroduction campaigns between 2001 and 2008, mainly through the Transfrontier Conservation Areas Pilot and Institutional Strengthening Project (TFCA I) between 1998 and 2003, and the TFCA-TD project. Other activities to re-introduce wildlife were envisaged at various points between 2009 and 2015, mainly using AFD funding for transport and logistical aspects of the work.⁵⁴ In the end, only one initiative took place in this period, when impala, zebra and waterbuck were translocated in July 2015. The successive postponements of these re-introduction campaigns from 2010 were due to various political, social and institutional factors (such as the tensions caused by the increase in poaching, the expected completion of the resettlement of Nanguene and Macavene villages, and formalisation of the agreement between the KNP and LNP regarding this re-introduction campaign).

Several aerial censuses were undertaken to monitor wildlife during this period: (i) one in 2006 to analyse the wildlife dynamics in the Shingwedzi River zone where the sanctuary was located and wildlife had been reintroduced between 2001 and 2006; (ii) one in 2010; (iii) one in 2013; and (iv) one in 2014.

Graph 2, opposite, shows population changes between 2010 and 2015 in several species that had been reintroduced into the LNP. These are estimated figures extrapolated from observations made during aerial transects that only covered thirty percent of the total area of the park in 2010 and 2013,⁵⁵ and ten to twenty percent of the park in 2014.⁵⁶ Despite the methodological flaws and biases in these counts,⁵⁷ they do show that the populations of certain species have increased in relation to the number of animals re-introduced (particularly elephant, buffalo, kudu, nyala and waterbuck), suggesting that animals have either naturally migrated from the KNP to the LNP, or that there has been a natural increase in the number of animals in the LNP. Although the estimated elephant population is still above 1,000 it fell by

54 LNP activity reports from June 2011, September 2011 and February 2012.

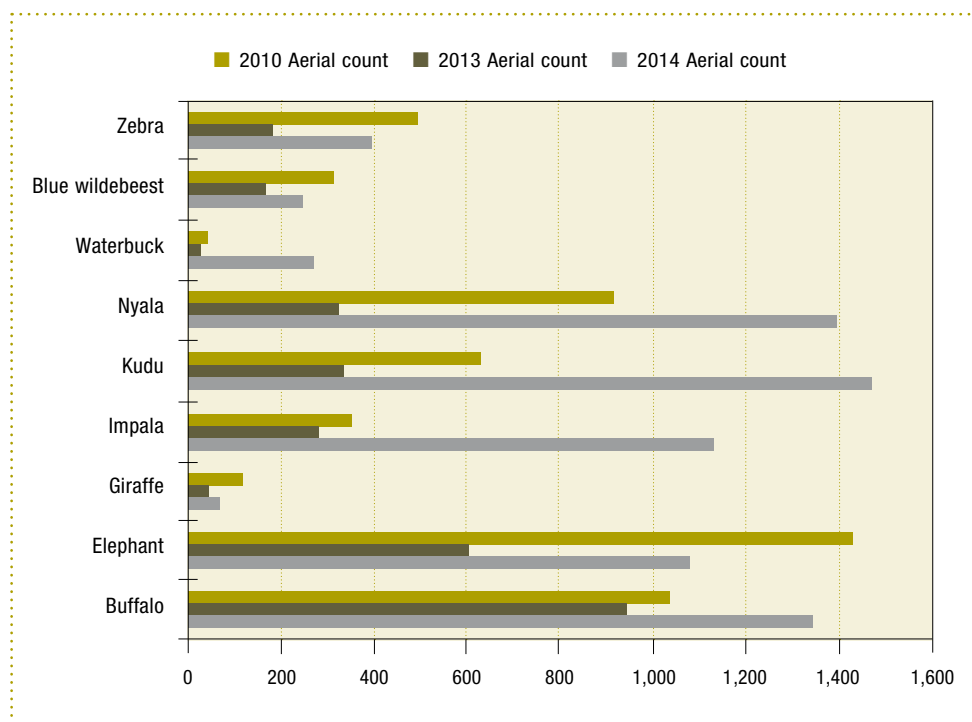
55 Aerial censuses of LNP conducted by Wildlife Management Services in 2010 and 2013. p.3.

56 Aerial census conducted in 2014 by the Wildlife Conservation Society. p.4.

57 The same organisation conducted the aerial censuses of 2010 and 2013. The one in 2014, which was supposed to focus solely on elephants, ended up counting other animals in order to supplement the data gathered during the 2013 census, whose findings were challenged by the LNP management team. A strict comparison of the results of these censuses cannot be made, as the counting/observation methodologies were not always implemented at the same altitude or the same speed, and the observation teams were not always the same.

twenty to twenty-five percent between the censuses taken in 2010 and 2014. This is due to the increase in poaching, natural migration of elephants to zones in the KNP that are under less pressure, and the different statistical assumptions and counting methods used during the two counts. At the moment there are over 1,000 buffalo in the LNP, but relatively few giraffe (approximately fifty). The numbers of zebra, wildebeest and impala estimated during the different counts are lower than the numbers of reintroduced impala, wildebeest and zebra.⁵⁸

Graph 2 – Population levels of several key species in the LNP



Source: the authors, data supplied by the LNP

58 As impala and blue wildebeest are difficult to see and count from the air, their numbers have probably been underestimated. Zebra are nomadic animals, so it is possible that re-introduced zebra have travelled long distances and returned to the KNP.

This graph also shows that the numbers of animals counted and estimated varies considerably between the different censuses. For example, the results of the aerial count done in 2013 are lower than all the other counts, for all animals. This highlights the need for caution when analysing and using data from aerial counts, and shows that the LNP management team's data on fauna and flora are far from reliable. This is a serious constraint when its tourism development model is based on an increase in the number and variety of animals in the park.

The different people that we met during the evaluation confirmed that wildlife in the LNP has increased over the last ten years, corroborating the results of the aerial censuses. The two bio-indicator species (elephant and zebra) identified by the TFCA-TD project increased between 2006 (baseline situation) and 2014,⁵⁹ but this increase has been limited by high pressure from poaching observed in recent years, particularly on elephants and rhinos. The three maps in Annex 7. – Maps showing the location of elephants, buffalo and giraffes in the LNP in 2014, made from the last count, clearly show that wildlife is concentrated along the border with the KNP, where animals can access water, and in the north of the LNP where there are no human populations in the park and where most of the fence between the KNP and the LNP has been removed.

In comparison, the available statistics on wildlife in the KNP shown in Annex 8. – Available statistics on fauna in the KNP – show that the density of wildlife is much higher in the KNP than in the LNP, which therefore has a good margin for growth in terms of wildlife.⁶⁰

▷ **b. Anti-poaching and protection measures**

In terms of conservation and protection, the LNP has had to deal with a huge increase in pressure and threats from poaching (as has the KNP). In 2010–2012 the LNP had limited capacity to tackle poaching and protect wildlife (with fewer rangers than the KNP, no coordinator for the protection department, conflicts over salaries that led to a rangers' strike, and corruption issues), and was perceived by its neighbours as doing little to tackle this threat in a pro-active manner.

59 World Bank, *Final evaluation of the TransFrontier Conservation Area and Tourism Development project*, 22 December 2014. p.55.

60 Statistics for 2011 can be found at: http://www.sanparks.org/parks/kruger/conservation/scientific/ff/biodiversity_statistics.php, Last accessed 16 August 2016.

Map 3. LNP Intensive Protection Zone



Source: LNP

However, the LNP has managed to strengthen its structure and protection capacities since then, and especially since 2013. The people we spoke to said that AFD support played a key role in these improvements. AFD helped put in place a more mobile and strategic structure, through the purchase of rangers' equipment and ten Land Cruiser vehicles that strengthened the capacities of the mobile patrol in 2009, and the creation of the Intensive Protection Zone (IPZ) Unit in 2013. This IPZ covers the northern section of the LNP and the border with the KNP, as shown in Map 3 opposite. It was specifically created to strengthen anti-poaching measures and patrols in these strategic zones where wildlife is concentrated and poachers particularly active, and which are used as transit corridors between the KNP and the LNP.

The IPZ is protected by a specially created team of about thirty rangers, who were recruited through a highly selective process and given the same advanced training as rangers in the KNP. This unit is coordinated by a former member of the Portuguese special forces, and isolated from the other teams of rangers. It is based in the west of the park at Gaza Safaris/Makandazulo and focuses its patrols along the border with the KNP.

The IPZ unit is better equipped than the other teams, as each ranger is armed and the unit has two new Land Cruisers. Interviews during the evaluation showed that members of this unit are younger and more motivated than rangers in the other units. It runs joint patrols along the border with the KNP, and a protocol for cross-border patrols has been developed. Work is currently under way to enable rangers to work on both sides of the border, mainly by obtaining passports for the Mozambican rangers. Members of this unit are paid according to the same salary scales as the other rangers in the LNP, and their salaries are now covered by the Government of Mozambique. Some rangers from the IPZ and other units that we spoke to during the evaluation felt that their salaries are too low (despite a slight increase after the strike in 2011, when additional allowances were made for location and risk), and reported that living conditions in the bases are difficult, especially in Makandazulo. Although this is understandable when compared with those of the South African rangers, the LNP rangers still work in better conditions and are certainly better equipped than their counterparts in other parks in Mozambique.

The number of staff in the protection department increased between 2011 and 2015, and there are now 114 active rangers and thirty guards, meaning that there should be forty-five rangers in the field at any time when rest and holiday periods are taken into account.⁶¹ In terms of the total number of rangers in relation to the area of the park, the LNP has about one ranger for every 100 km², while the KNP has one ranger per 50 km², meaning that the LNP has significantly less capacity to tackle poaching than the KNP. Although the LNP claims that it is below international standards,⁶² this level of coverage is comparable to that of other parks, such as the Parc national de Pendjari in Benin, which has about one forest ranger and/or eco-guard per 100 km².

AFD funded the construction of the Mapai field ranger base in the north of the LNP, which helped improve the working conditions for rangers in this zone. Due to its location, rangers at this base are strategically well-placed to work closely with the IPZ unit in the north of the LNP. A new base is currently being constructed in the south of the LNP, close to the park's main administrative offices, which should improve living conditions for rangers in this zone.

The LNP also recently upgraded its communication system to a digital radio system (funded by PPF) that enables all the rangers' units in the LNP to communicate with each other, with the KNP ranger unit working along the border, and directly with each other in private if necessary. It will soon be using the Spatial Monitoring and Reporting Tool (SMART)⁶³ – which will improve systematic data collection from field patrols, intelligence gathering and the transmission of data to LNP Headquarters, and increase the accountability of the different actors involved in anti-poaching efforts. A session to train trainers in the use of SMART was organised in the LNP during the evaluation mission.

The people we spoke to during the evaluation said that the restructuring of the protection system has already had some effect: there are fewer poaching incidents on the Mozambican side, incursions into the KNP from Mozambique have fallen from seventy percent to thirty percent of all incursions, and the number of arrests and confiscated rifles

61 LNP anti-poaching strategy, 2015.

62 Idem.

63 SMART is free, open-source, non-patented software that can be used to measure, evaluate and improve the effectiveness of anti-poaching patrols and conservation activities. It provides accurate, up-to-date information on the location, nature and actors involved in poaching, illegal logging and other direct threats to biodiversity. It can be used to collect and review the latest field data and information, and enables managers of protected areas and field staff to communicate quickly with each other. See: <http://www.smartconservationsoftware.org>. Last accessed 16 August 2016.

has increased since 2011. Although the number of fines issued has also increased since 2011, very little is received in fines (see Table 2 below). This low rate of payment is partly due to a weak and flawed judicial system, and partly because the new wildlife law is not properly enforced.⁶⁴

Table 2 – Fines issued and paid between 2011 and 2015

	2011		2012		2013		2014		2015 (Jan-June)	
	MZN	EUR ⁶⁵	MZN	EUR	MZN	EUR	MZN	EUR	MZN	EUR
Fines issued	626,400	12,046	948,000	18,231	10,906,250	209,736	45,971,850	884,074	403,090	7,752
Fines paid	-	-	540,000	10,385	314,200	6,042	2,000	38	30,200	581

Source: LNP.

▷ c. Managing wildlife and conflicts between humans and wildlife

AFD funded some work on human-wildlife conflicts (HWC), which was undertaken in two phases in 2011. The first phase consisted of an assessment of HWC management in Mozambique and in the LNP, initial training for field rangers and extension agents on using the BIO-HUB/FAO HWC toolkit for HWC mitigation to record HWC events,⁶⁶ and training LNP’s HWC focal point on the management of HWC data. The second phase focused on HWC training for community HWC scouts in each village, which was attended by twenty-six people. An HWC reporting system was also developed during this consultancy, and a dedicated team

64 Government of Mozambique. Law n°16/2014.

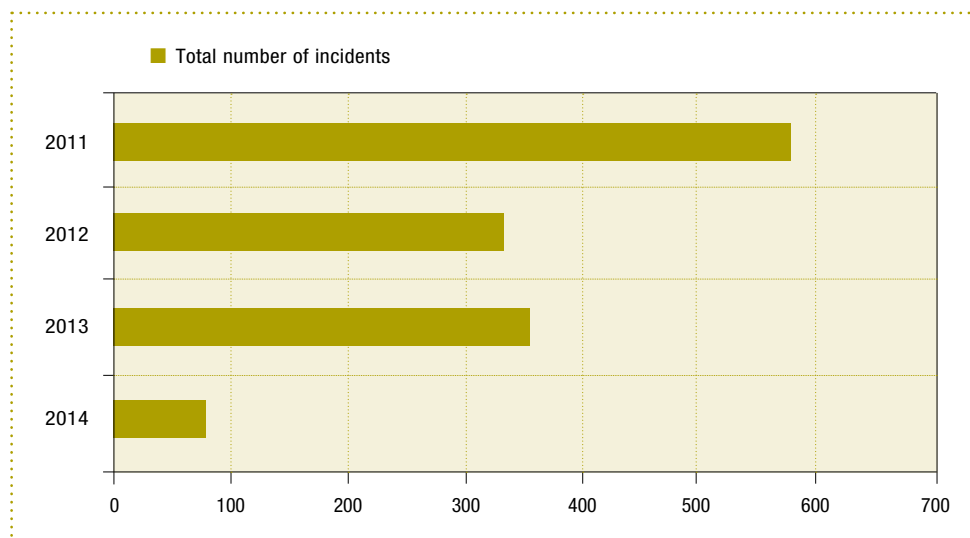
65 At an exchange rate of 1 Euro for 52 MZN.

66 In partnership with several organisations (CIRAD, WWF, CAMPFIRE, etc.), FAO and Bio-hub have developed a set of practical tools that extension agents can use to manage HWCs. These tools are classified according to five colours: (i) blue – awareness raising; (ii) green – preventing wildlife access; (iii) brown – relocation; (iv) yellow – driving wildlife away; and (v) red – as a last resort, lethal control. A booklet lists the different measures in each category, and describes their advantages and disadvantages. CIRAD recently adapted this tool for Central Africa. The updated toolbox includes a canvas satchel containing five documents: 1) the Wildlife Book, which lists the seventeen problem species or groups of species, with elephants at the top of the list; 2) the Conflict Book, which presents the four major categories of conflict caused by wildlife: (i) agriculture, (ii) the health and lives of villagers, (iii) village life, (iv) livestock, (v) access to water; 3) the Solution Book, which includes a range of forty-five practical solutions aimed at (i) preventing conflict, (ii) blocking access by wild animals, (iii) repelling wild animals and (iv) removing the most dangerous animals; 4) the Legislation Book, which is adapted to each national context and provides information about actions that are permitted in conflicts with wildlife; 5) the Evaluation Book, which sets out a strategy for monitoring and evaluating HWCs.

of HWC rangers has been put in place. The current procedure for HWC incidents is for the village scout to contact the HWC focal point at LNP headquarters, who then assigns a ranger to deal with the problem.

Some of the local people that we spoke to during the evaluation said that the current system for resolving HWCs is not effective, mainly because it takes a long time for rangers to respond and come to the scene of the incident. This may be due to several factors: there are only four rangers currently assigned to manage HWC incidents, rather than the original team of six to nine rangers shown in the most recent LNP organisational flow chart; they do not have a vehicle (the team currently has partial access to a car); and community scouts don't have access to the HWC equipment they were shown during the training (chili guns to repel elephants). Further training sessions were planned for extension agents and community scouts, but they did not take place. It also seems that extension agents are not linked in with current HWC mechanisms and procedures.

Graph 3 – Number of HWC incidents between 2011 and 2014



Source: LNP.

Graph 3 presents the available statistics on HWCs, which show that the number of incidents has declined considerably since 2011. This could be evidence that the system that has been put in place is generally effective, but feedback from the community during the evaluation mission and concerns about the reliability of the system for collecting and sending data to the LNP offices suggests that this data should be handled carefully. The LNP also said that it could be due to the fact that possible incidents with elephants are not always reported to the LNP, or are directly managed by certain communities in conjunction with potential poachers. The number of incidents with elephants could also be affected by poaching, which reduces the number of elephants in inhabited areas.

Photo 1 – Fence erected in the south of the SZ



Photo courtesy of: Gaétan Quesne (BAASTEL).

In response to requests from local communities to reduce HWCs, which were passed on by the Mozambican authorities, AFD funded the installation a 56-km fence in the south of the SZ to demarcate areas for wildlife and human activities. Interviewees told the evaluation team that this has had a number of positive impacts:

- It is effective in reducing HWCs, particularly those involving elephants. There is a correlation between the fall in the number of HWC incidents since 2012 and the construction of the fence;
- It is in good condition, and the LNP teams think that it costs relatively little to maintain (two people are responsible for periodically checking and carrying out small repairs to the fence);
- It facilitated the extension of the SZ with the possibility of developing and securing local people's activities in an area that is favourable for agriculture beside the Olifants River. It also demarcates the boundaries of zones dedicated to human activities and wildlife conservation.

The construction of this fence could be regarded as quite expensive: it was initially budgeted at €500,000 in the finance plan for the AFD project, and ended up costing €2.9 million excluding VAT. However, these costs may seem more reasonable when measured against the benefits generated by the fence. The initial evaluation after a specific feasibility study in 2007 indicated a probable cost of €18,500 per kilometre, which is comparable to the cost of fencing in other parks. The final cost came to nearly €50,000 per kilometre. This can partly be explained by the fact that the price of steel doubled between the beginning of 2007 and mid-2008,⁶⁷ and the additional cost of the work done in Mozambique, which was higher than estimates largely based on South African parks. There were also considerable delays in the procurement and contracting processes for the construction of this fence (calls for tender for the environmental impact study were launched in April 2009, and the contract for construction was signed in January 2012).

Finally, two wildlife corridors have been identified to ensure ecological continuity with Banhine National Park to the east of the LNP. When the evaluation team visited the LNP in 2015, they were due to be re-measured by the LNP in conjunction with local communities. However, discussions with these communities showed that they were not very clear about the purpose of these corridors, or the effect they would have on their farming activities and livelihoods. For example, grazing is not permitted within corridors due to the risk of diseases being transmitted from wildlife to cattle (see below). This means that communities near these corridors will lose access to grazing land, and at the moment there are no plans to compensate them for this.

67 Source: World steel market between January 2007 and March 2016, *Trading Economics*.

▷ d. Transmission of diseases

There were concerns that the creation and development of the LNP would spread diseases from wild animals to livestock, such as tuberculosis or Foot and Mouth Disease (FMD), which livestock can catch from infected buffalo.⁶⁸ AFD was going to fund a veterinarian, who was to be recruited to deal with this issue, but the position was never advertised and the post is still vacant, even though it is shown on the LNP's organisational flow chart. This suggests that it is not a high priority for the LNP management team. However, the evaluation team was told that there have not been any outbreaks so far in the districts of Chicualacuala, Mabalane and Massingir, within whose limits the LNP is included.

A working group was set up to monitor and check animal health, working under the aegis of the Wildlife Conservation Society (WCS) as part of cross-border cooperation and the GLTP. Going by the name of 'Animal health for the environment and development' (AHEAD) this working group brings together several research centres and universities. It focuses on three main areas: (i) animal health and diseases; (ii) land use, ecosystem products and services and animal health; (iii) livelihoods, animal health and ecosystem health. Although the group apparently still meets, the available data from its work date back to 2011,⁶⁹ which makes it hard to assess the current situation with regard to animal health.

68 The study published by the Onderstepoort Institute for Exotic Diseases in South Africa (Jori F et al. *Characteristics of Foot-and-Mouth Disease Viral Strains Circulating at the Wildlife/livestock Interface of the Great Limpopo Transfrontier Conservation Area*. April 2014) shows that "most of the buffalo populations that live freely in Africa, or at least southern Africa, present high rates of infection by SAT-type viruses, except in the south of the zone where they are present", i.e., in the north of KwaZulu-Natal region in South Africa.

69 http://www.wcs-ahead.org/workinggrps_limpopo.html, Last accessed 16 August 2016.

4.1.3. Biodiversity monitoring, research and data management

In the period between 2006 and 2015, ecological and biodiversity monitoring activities were limited to the aforementioned aerial censuses conducted in 2006, 2010, 2013 and 2014.

The LNP has yet to make a more systematic inventory of the wildlife and plant species present in the park to supplement these aerial counts. The counts only covered large animals, and certain species (such as impala) are hard to observe. The park does not have an effective mechanism for ecological monitoring, a database for reference data or clearly defined procedures, roles and responsibilities.⁷⁰

Rangers report on the wild animals they observe while on foot patrol, but these reports mainly cover mammals and do not record other animals. The LNP will soon start using the Spatial Monitoring and Reporting Tool (SMART), which can record wildlife observations during field patrols with their exact location, numbers, etc., as well as measuring, evaluating and improving the effectiveness of the patrols. This system could therefore be a great help in improving day-to-day ecological monitoring in the field.

There were plans to recruit an ecologist as part of the AFD-funded project, in order to strengthen the LNP's ecological monitoring and research mechanisms. Terms of reference for the post were set and a job advert drafted, but in the end the recruitment process was cancelled because the PPF felt that it had the relevant technical expertise for ecological monitoring in the PIU team, and the LNP's institutional and organisational structure was perceived as too weak to train and mentor a new expert. AFD did not dispute the PIU's argument that this recruitment was not necessary, even though it would probably have greatly strengthened the ecological monitoring system. The shift in priorities and lack of emphasis on these aspects of monitoring was probably also partly due to the marked increase in pressure from poaching at this time.

⁷⁰ The TFCA-TD project monitored two bio-indicator species between 2006 and 2012, but the LNP does not have a specific system for monitoring bio-indicator species, or indicators to monitor the effectiveness of the park's management, which would be linked with the conservation objectives set in the LNP Management and Development Plan. The 2003 management plan notes the need to define indicators for the integrity of the ecosystem and effectiveness of park management, but does not make any specific proposals in this respect.

4.1.4. Environmental education, information and communication

AFD funded the construction of a Community Resource Centre (CRC) at the start of the project. The 2004–2006 LNP Management and Development Plan envisages these centres as places where communities can obtain basic information about the development and management of the LNP, including information about legislation, policies, proposed development activities, and so on. They are also expected to facilitate communication and the flow of information between communities and the LNP – in other words, be places where local people can go to report problems or potential conflicts and state their needs, helping build trust between the LNP and communities in the SZ.

Photo 2 – Current situation of the community resource centre, financed by AFD, recently vandalized



Photo courtesy of: Frédéric Bazin (IRAM).

However, the CRC was built in quite an isolated site at some distance from the villages in the SZ, and has hardly been used. A ranger lived there until the ground floor was flooded in 2013, but the fact that it was recently vandalised suggests either a lack of local interest or that this was a form of protest and resistance to the LNP.

AFD also funded an environmental awareness (EA) company that developed some EA teaching materials, manuals and posters. The literature review for this evaluation showed that teachers and influential community leaders were trained to use these tools, and there have been several EA campaigns in schools in the SZ focusing on the benefits of the LNP, anti-poaching, land/tree conservation, HWC management, and sanitation. The LNP also ran a community awareness theatre in thirty villages in 2013–2014, and sponsored a soccer team.

4.2. Developing sustainable tourism

4.2.1. Review of the objectives of this component

Although tourism was initially included in AFD's first specific funding objective, to 'restore and preserve biodiversity', the evaluation team decided to treat tourism development as a component in its own right (see Section 3.2).

As with the protection, biodiversity research and monitoring and environmental education programmes, AFD's project document did not specify the planned activities and expected outcomes of its tourism programme. However, the LNP Management Plan can be used to identify the expected outcomes of this programme: the development of tourist attractions and activities and an increase in the number of tourists, mainly by improving the park's infrastructures (particularly roads inside the park), supporting the tourism programme and implementing the tourism development strategy.

4.2.2. The tourism development strategy

The first strategic tourism development plan (STDP) for the LNP was produced in 2004,⁷¹ and then updated in 2012. The later version presents the medium- and long-term objectives of tourism development in terms of preserving the wilderness aspects of the park by (i) Limiting the development of infrastructures and access that would change its character, and (ii) Close collaboration with the KNP to facilitate access to different zones of the LNP.

This strategic plan was structured around three main components: i) Facilitating access to the park; ii) Providing tourist accommodation; and iii) Proposing tourism activities.

The strategy identified three ways of facilitating tourist access to the LNP: i) identifying entry points to enable tourists to cross the border easily; ii) developing air bases to receive incoming tourists; and iii) developing roads to enable tourists to visit the park. Map 4 (opposite) is taken from the strategic plan.

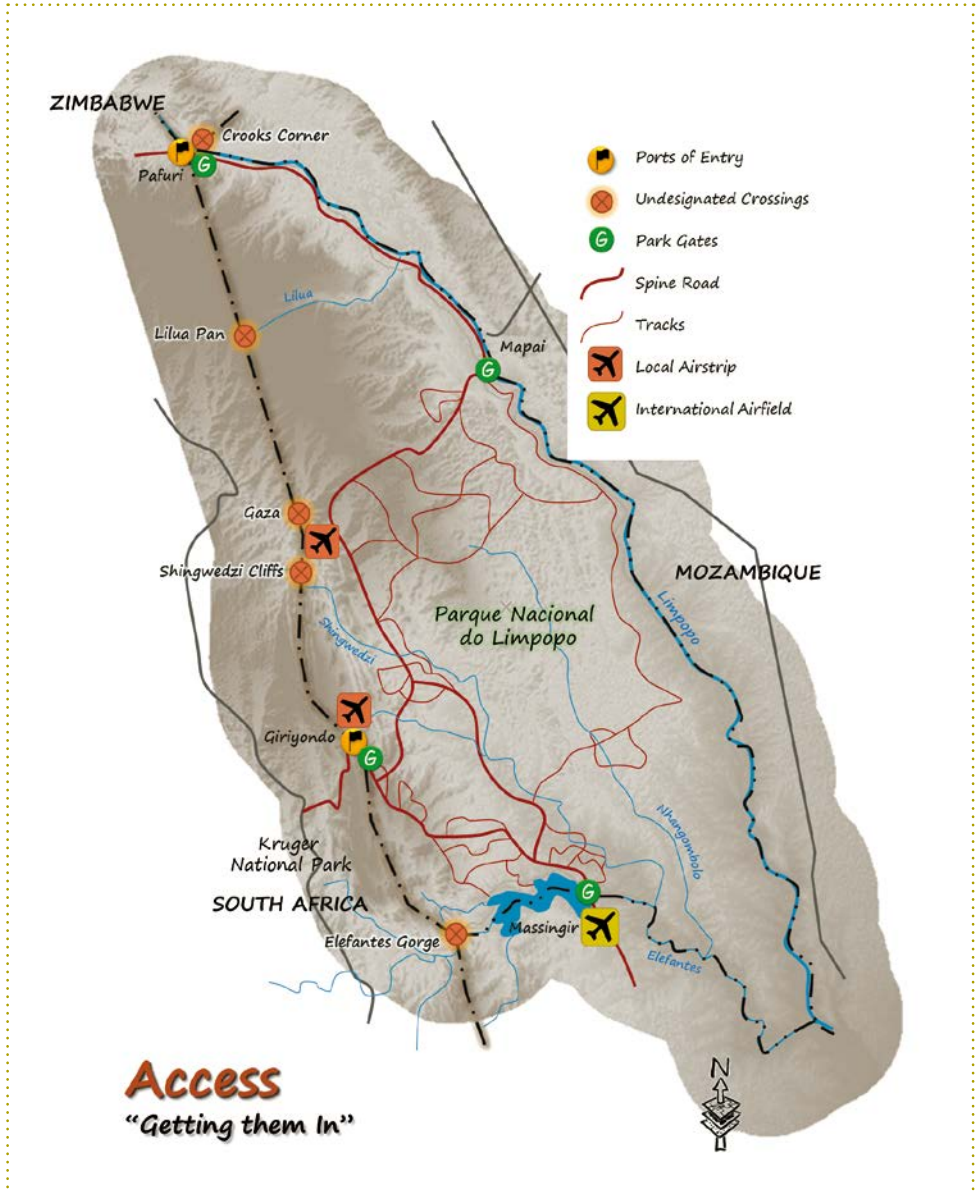
The road network proposed in the STDP follows the recommendations in the 2011 Roads Masterplan,⁷² which was considered by the commissioning agency to meet international standards. This plan had two objectives: (i) To identify roads that could be used for tourism, wildlife management, environmental management and the long-term social development of the LNP; and (ii) To develop strategies for affordable improvements to the road network that would provide the required levels of mobility and accessibility. It identified the two main road axes (from the entrance to the LNP in Giriyondo at the border with the KNP to the northeast of the LNP; and inside the SZ along the Limpopo River between Massingir and Pafuri) and the priority investments needed to develop four categories of road over a five-year and ten-year period.⁷³ The map in Annex 9. – Map of road network development in five years) taken from this master plan shows the five-year scenario.

71 Tourism development plan for Limpopo National Park as part of the GLTP, February 2004.

72 Dallas Consulting – VKE International. LNP roads masterplan, 2011.

73 Category 1 primary roads (Giriyondo-Massingir axis, and the intersection of this axis to Mapai); secondary and primary roads serving the tourist zones and concessions, also used for LNP management activities; and finally, roads inside the SZ running along the Limpopo River.

Map 4 – Ports of entry, border crossing points and potential airfields



Source: LNP 2012.

AFD funding was supposed to help finance some of the priority investments identified in this masterplan, namely:

- i) Improvements to the road in the SZ (see Section 4.3.7);
- ii) Maintenance of the primary road between the Giriyondo border post and the main entrance to the LNP in Massingir;
- iii) Clearing and remodelling the access road to the camp in Aguia Pesqueira;
- iv) Building bridges in Chimangue and Madonse in order to improve driving conditions in the northeast of the LNP, especially in the rainy season;
- v) Constructing a road to connect Giriyondo with Madonse and facilitate access to the north of the LNP from Giriyondo.

There were numerous problems and delays with the contract for these works. Table 3 below shows the initial plans for the road construction works and the works that were actually executed.

Table 3 – Road construction works planned and executed in the Core Zone of the LNP

Planned works in the Core Zone of the LNP	Works executed
Maintain the section of road in the LNP between Giriyondo and Massingir	Completed: this was straightforward maintenance regularly undertaken in the LNP
Clear and remodel the access road to Aguia Pesqueira	Completed
Construct a bridge in Chimangue	The bridge was built, but the approach was recently washed away after a storm and heavy rains. This bridge, which is on the main road from the south of the LNP to Mapai, is no longer in use, which could cause problems in the rainy season.
Construct a bridge in Madonse	Not done
Build a road to connect Giriyondo and Madonse	Not done

Source: Authors.

This contract was terminated before the works were completed because the company did not perform as required due to lack of cash flow, damaged and faulty equipment, lack of materials, poor organisation and internal disputes. The overall budget for the contract was reduced by forty-five percent (from the initial figure of €2.645 million to €1.480 million) to reflect the works that were not completed. The remaining funds were used to (i) Purchase road maintenance equipment (including a basic road grader); (ii) Cover the additional cost of supervising the construction works, which increased by thirty-six percent largely due to the long delays in execution; and (iii) Set up the IPZ unit, select, train and equip the thirty new rangers for the unit, and cover some of its operating costs.

None of the airfields have been developed yet. Apart from the section of road between Giriyondo and Massingir, which is in good condition, the road network inside the LNP is in very poor condition, especially the stretch between the south of the park and Mapai. Little can be done to develop tourism while the road remains in this state. Progress with tourism could also be limited by the low density of wildlife outside the northern section of the LNP and along the border with the KNP, which cannot be accessed for tourism activities at the moment.

The second component of the STDP was concerned with accommodation: developing community-based services with campsites in Salane and Chicumbane, the Olifants Rest Camp, setting up luxury campsites with chalets and tents (six in all), rest camps (ten in all) and accommodation concessions.⁷⁴ The map in Annex 10. – Planned accommodation facilities in the LNP, shows the different types of potential accommodation.

At the moment the LNP has two upmarket campsites (Albufeira, where AFD funded the construction of five chalets, and Aguia Pesqueira), four dry campsites and three campsites with water tanks, which were built with AFD funding. The five wooden chalets financed by AFD are in satisfactory condition, although they will need some maintenance, renovation and furnishings in the near future. Only four of the ten sites envisaged in the plan are operational at the moment.⁷⁵ AFD also funded the construction of a reception centre in Massingir, which is currently in good condition.

74 There are eight potential concessions, seven of which would be individually managed by a single operator, and one that could be managed by several operators.

75 One campsite was closed for security reasons due to the threat of poaching, and two others closed in 2014 after they were vandalised.

One of the main advances in developing tourism was the preparation and approval of guidelines for the creation of tourism concessions (standard procurement procedure, standard cost structure, etc.). The conflict with Twin City over the Gaza Safari concession has also been resolved, and the concession process is about to start with the first round of bids for the site in Machampane, which is currently managed by a private operator. However, it will take several years to award the other concessions and develop infrastructures, amenities and services.

The third component of this programme is tourism products. These are a crucial aspect of the STDP in terms of occupying tourists and ensuring that they stay in the LNP for several days. Some activities can be directly managed by the LNP (individual safaris, viewing areas, activities such as fishing or boat trips at the Massingir Dam); others could be assigned to operators, and some are cross-border activities with the KNP. At this stage, few tourism products have been proposed and the LNP is currently developing a boat ramp near the Massingir reservoir lake. A company used to organise canoe trips, walks and guided 4x4 safaris, but stopped doing so, largely due to the threat from poachers.⁷⁶

The LNP provides very little information about these tourist attractions. Most of its communication is institutional, through quarterly bulletins (since 2010), news flashes and a website with basic information about the LNP, its characteristics, tourist attractions, maps and a short description of the different LNP initiatives and work programmes. Marketing is very limited, as it has few communications tools to raise its profile with tourists or the general public. The actors we met during the evaluation ascribe the lack of marketing tools to the delays in resettling communities from the Core Zone and pressure from poaching, which limits their capacity and willingness to develop tourism at this stage. And as only one person works in the LNP public relations department, there is very little opportunity to develop and implement a proper communication and marketing strategy.

Cooperation with the KNP on tourism development is relatively limited. Apart from consultation meetings and some first steps towards developing joint tourism products with the LNP, it currently consists of information about tourist attractions on the website for South African national parks,⁷⁷ and a dedicated GLTP website.⁷⁸

76 Transfrontier Trails do Limpopo.

77 https://www.sanparks.org/conservation/transfrontier/great_limpopo.php, Last accessed 16 August 2016.

78 <http://www.greatlimpopo.org>, Last accessed 16 August 2016.

4.2.3. Statistics on tourism and revenues generated

The number of entrants into the LNP was generally stable in the period 2007–2011, standing at around 22,000 people per year. There was a slight increase to over 25,000 people in 2008,⁷⁹ and then a fall to around 15,000 people per year in 2012 and 2013, as shown in Graph 4. This decline was largely due to a policy introduced in 2012 making it compulsory for visitors entering through the Pafuri and Giriyaondo gates to spend a night in the LNP.

Graph 4 – Annual number of entrants to the LNP



Source: authors, data provided by the LNP.

⁷⁹ The drop in the number of total entrants in 2014, in the percentage of nights spent in the park, and in annual revenues can be explained by the political tensions surrounding the presidential elections which took place that year.

Although this policy increased the percentage of overnight stays in the LNP from around twenty-one percent in 2012 to sixty-three percent in 2013, this figure of sixty-three percent does not reflect the real number of tourists spending the night in the LNP. A number of people who used to cross the LNP on business trips or the 'bush to beach' route from South Africa to the Mozambican coast before the policy was introduced in 2012 now pay for one night's camping so that they can travel through the LNP, but don't actually spend the night there. This means that the real number of tourists who sleep in the LNP is much lower. This policy resulted in a slight increase in the LNP's total annual revenues, which went up by five percent between 2011 and 2012; and by twelve percent between 2011 and 2013.

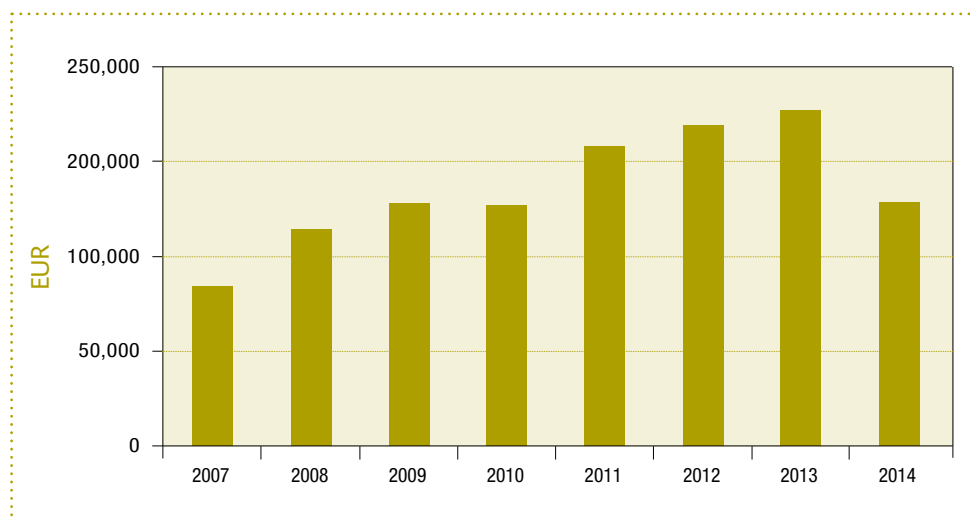
These figures are much lower than the projected number of entrants and revenues generated. In 2002, Stalmans⁸⁰ gave a projected potential figure of 315,000 tourists each year, and in 2004 a conceptual study on tourism estimated that the annual carrying capacity for tourists in the LNP was 486,000. These projections look very optimistic compared with the peak figure of 25,614 in 2008. A number of factors have contributed to the poor development of tourism:

- Significant delays in setting up the tourist concessions caused by delays in the preparation and approval of guidelines for concessions, and negotiations over the Gaza Safari concession;
- Delays in the voluntary resettlement of communities from the Core Zone, which had repercussions on all LNP development activities, including tourism infrastructures and roads;
- The LNP's lack of communication with the general public and few marketing activities, which have limited its visibility and failed to raise its profile;
- The LNP has limited tourist attractions, as it has a narrow range of tourism products, few infrastructures, and wildlife are concentrated in inaccessible areas or zones where people are not allowed to go;
- The increase in poaching has had repercussions on an already limited number of tourism products, which were further reduced when TTdL stopped organising nature trails and canoe trips.

80 Stalmans, *Conceptual Tourism Development Plan for the Limpopo National Park*, 2002, p. 17.

According to the LNP's 2004–2006 business plan, and based on the tourism development simulations in the 2004 tourism development plan, the projected revenues from the development of tourism and tourist concessions over six to ten years should have been in the order of €1 to €2 million per annum, which would cover the LNP's running costs.⁸¹ These projections look over-ambitious and ultimately unrealistic, given that the maximum revenues generated so far (in 2013) were only €221,000. Tourism has not developed sufficiently to generate enough income to cover the LNP's running costs: in reality it generates the equivalent of just twenty to twenty-five percent of the park's annual operating costs (see section below on the administrative capacities of the LNP).

Graph 5 – Annual revenues generated



Source: authors, data provided by the LNP.

81 It should be noted that these projections did not take account of the allocation rates of twenty percent to the State, sixty-four percent to the LNP and sixteen percent to communities. This would reduce the LNP's disposable income to €640,000, which would not cover its annual running costs (which average one million Euros, see section 4.4).

The development of all the infrastructures and tourist attractions presented in the 2012 STDP was divided into three phases over a ten-year period. The cost of developing these infrastructures was evaluated at around €2.9 million, and the potential annual revenues generated by the different types of accommodation, tourist attractions and concessions were estimated at €850,000 in Year 5 and €1.3 million in Year 10.⁸² These estimates now seem very ambitious for such a short timeframe.

The revenues generated so far have come from LNP entry fees and the accommodation provided by the LNP and Machampane infrastructures. The sums involved are much lower than originally anticipated (only twenty to twenty-five percent of the estimated values), and well below the LNP's annual management costs. The guidelines for putting concessions in place have been approved, but it will probably take several years to grant the other concessions and develop tourism infrastructures, amenities and services. There is little prospect of the LNP's revenues increasing substantially in the immediate future, and this will probably create financial challenges for the park.

4.3. Economic development of the Support Zone

4.3.1. Review of the objectives of this component

One of the specific objectives of the AFD project was to improve the living conditions of communities in the LNP. The total budget for the project was €11 million, with €8 million for this component to be distributed as follows: €3.5 million to improve road infrastructures,⁸³ €3.5 million for participatory planning and management of the Support Zone and implementation of its development priorities, and €1 million for technical assistance. According to the SZ development strategy presented in AFD's project document, the first year of the project was to be dedicated to participatory preparation of a development and management plan for the Support Zone, whose implementation would be covered by four main sources of funding:

82 At an exchange rate of 1 Euro for 52 MZN.

83 The road infrastructure development objectives were to: i) Establish a basic network of stabilised tracks that could be used by tourists and park rangers, and ii) Upgrade the track through the Support Zone that links villages on the west bank of the Limpopo from Massingir to Mapai. AFD project document.

- €2.5 million from AFD for income-generating activities (IGAs) compatible with the rules for managing ecosystem protection in a protected area;
- Dedicated district funds to implement their strategic development plans;
- Contributions from other technical and financial partners (such as the World Bank through its TFCA-TD project);
- Community contributions, particularly the share of LNP revenues legally assigned to communities in the park.⁸⁴

In order to support the implementation of this strategy, AFD funding was supposed to cover staff salaries for the LNP Community Support Programme (PAC), the programme's operating costs, and a technical assistant who was to be recruited for the duration of the project in order to support the PAC as it progressed.

4.3.2. The Community Support Programme

The community support programme (PAC) is the LNP programme that manages all relations with the park's resident communities. It aims to foster constructive relationships between the park's administration and inhabitants so that residents will support the biodiversity conservation objectives on which the LNP was founded. The main objectives of the PAC are to:

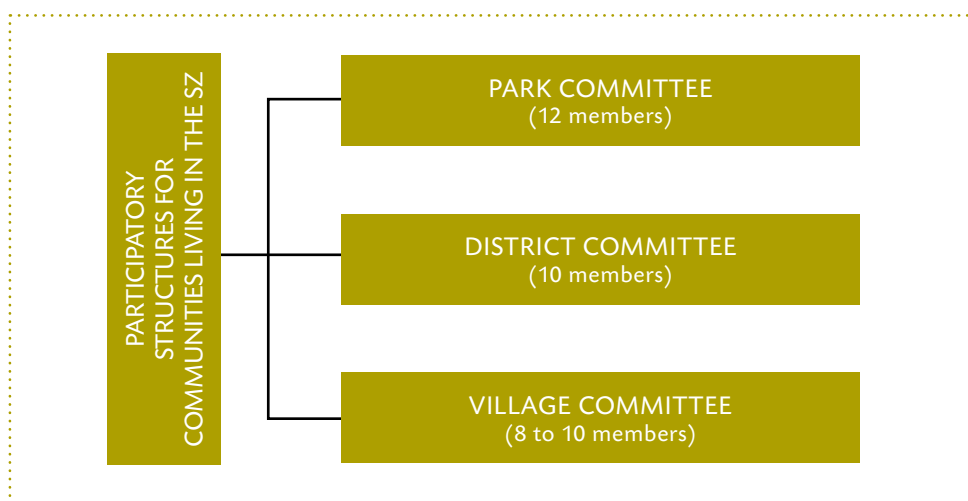
- Prepare and implement a voluntary resettlement programme for residents in the centre of the park, and a support programme for communities that choose to remain in enclaves inside the park;
- Define and implement a programme of sustainable natural resource use in the SZ;
- Set up structures that will foster community consultation and participation in governance of the LNP;
- Design and implement a plan for the sustainable development of the SZ.

⁸⁴ According to the law, twenty percent of the revenues generated by the LNP should go to local communities (Lei sobre florestas e fauna de 1999; diploma ministerial n° 93/2005 and diploma ministerial 66/2010). See Section 4.3.6. for further details.

In 2006, the resettlement programme, which had accounted for most of the resources and activities of the PAC, became a stand-alone programme rather than a sub-programme of the PAC. Other activities undertaken by the PAC before AFD funding included: (i) Setting up community representation structures to facilitate dialogue with the LNP (see Section 4.3.8); (ii) A study undertaken with local NGOs on residents' use of natural resources in the SZ, which was used to review the boundaries of the Support Zone.

The park's residents are represented by community committees that operate at three levels, with one village committee in each of the forty-four villages, one district committee in each of the three districts (Mabalane, Chicualacuala and Massingir) composed of representatives of the village committees, and a Park committee, composed of four representatives from each district committee. (See Diagram 7).

Diagram 7 – Participatory structures for residents of the Support Zone



Source: Authors.

These committees have the following functions:⁸⁵

- Represent communities in their dealings with the LNP administration;
- Foster dialogue between local communities and the LNP;
- Facilitate contact with the PAC and community involvement in PAC activities;
- Receive and manage twenty percent of the revenues from the LNP in accordance with current legislation;
- Make development proposals for the SZ.

4.3.3. Management plan for the Support Zone

The technical assistant responsible for helping the PAC design and implement a development strategy for the SZ was finally recruited in 2010, more than two years after the project started. The technical assistance contract, which was awarded to the company Ambero, included a permanent technical assistant for just under three years and a component of short, demand-led support missions.

Ambero was contractually obliged to present a draft management plan for the SZ within six months of starting the contract. However, the PAC did not have sufficient material and human resources to conduct a participatory process involving around 20,000 people scattered across approximately fifty villages in the SZ in such a short timeframe.⁸⁶ It was decided to hire an expert on a short-term consultancy in the second quarter of 2010 to help the technical assistant finalise a preliminary version of the SZ management plan within the agreed period. The expert prepared a proposal for a management plan based on existing documents and discussions with LNP staff, particularly members of the PIU and PAC. This proposal, which was ultimately called the 'Sustainable Development Plan for the Buffer Zone',

85 LNP: Plano de desenvolvimento sustentável da zona tampão. Junho de 2012. Versão atualizada pelo PAC em agosto de 2015, page 33. It is important to note that this layered structure is specific to the LNP, as it was put in place before the 2005 decree on the use of the twenty percent community allocation. The committees that were set up in the rest of the country are usually called 'Natural Resource Management Committees'. This NRM function is not mentioned in the statutes of the committees created by the LNP.

86 The PIU is responsible for providing the material resources needed to undertake PAC activities, not Ambero. The PIU decides how financial and material resources are used according to the overall priorities of the LNP rather than a particular programme. Even if funds had been available to purchase vehicles, these needs would have had to be anticipated to take account of the inherent delays in tendering procedures. In addition to this, the PAC's human resources were not strengthened until 2011.

was finalised in November 2010 and presented at 2-hour meetings attended by the village committees from each district (one to two meetings per district). Participants' comments were noted in the annexes to the management plan.⁸⁷

This validation procedure cannot be regarded as a proper participatory process involving representatives of residents of the SZ, which would have required much more time and resources. As a consequence, the proposals presented in the plan essentially represent the views of the experts mobilized for the exercise (technical assistants, PAC and PIU staff) rather than the concerns and objectives of the people who live in the Support Zone. The plan presents a general framework for the development of the SZ that mainly focuses on natural resource management and promoting IGAs.

Other meetings were held with the districts and NGOs in 2011. These are also summarised in the annexes to the plan, which was eventually finalised in June 2012 and submitted for approval by the Ministry of Tourism in early 2013. It was finally considered ready for approval by ANAC and submitted in February 2014, but was still awaiting approval in July 2015. The LNP then produced an updated version in August 2015, which has been resubmitted for approval by ANAC.

4.3.4. Natural resource management

▷ a. Review of the legal framework for natural resource use in protected areas

The 2014 Law on biodiversity conservation⁸⁸ is the most recent and relevant legal framework for natural resource management in the LNP, as it reviews and updates different elements of previous laws (Environment Law 20/1997, Wildlife and Forestry Law 10/1999). Article 16 (2) of this law defines activities that are permitted or forbidden in national parks, and states that hunting, forestry, agriculture, mining and livestock rearing activities are expressly forbidden in national parks except for scientific purposes or management needs. People are allowed in parks under certain conditions defined in the park management plan, provided this does not constitute a threat to the preservation of natural resources (Article 16, 3).

⁸⁷ LNP: *Plano de desenvolvimento sustentável da zona tampão*, Junho de 2012. Versão atualizada pelo PAC em agosto de 2015.

⁸⁸ Lei Nº16/2014, de 20 de junho de 2014.

The law allows some flexibility in the administration of conservation areas so that they can be managed in collaboration with local communities. Article 42 (5) permits the development of activities that are compatible with conservation objectives and that will improve the living conditions of local communities. The ad hoc instrument for this is the management plan, which sets standards for the use and management of natural resources (Article 43, 1). Management plans cover the conservation area and its buffer zone,⁸⁹ and include measures to integrate it into the economic and social life of local communities.

The situation in the LNP is complicated by the fact that communities live inside the park boundaries, not in a buffer zone or multiple use area outside the buffer zone. Because of this, the zone where residents can undertake their economic activities (referred to in documents as the 'buffer zone' or support zone') is subject to legal restrictions except where specific arrangements are defined in a management plan validated by the governing authority. This is why the management plan for the buffer zone is so important, and why it should be an integral element of the management plan for the LNP.

▷ **b. Rules for natural resource management in the LNP Support Zone**

The management plan states that natural resources in the SZ should primarily be used for the socio-economic development of its current residents and communities that might be resettled there in the future. The plan defines three possibilities for different types of natural resource use: unrestricted authorised use, prohibition, and conditional use defined by management plans or specific authorisation designed to ensure sustainable resource use. Only three activities are forbidden, in accordance with the legislation and according to their impact on ecosystems in the LNP. Small-scale activities and those undertaken to meet direct household needs are authorised, with the notable exception of hunting and fishing, which require authorisation (see Table 4 below).

89 The law defines a buffer zone as part of the territory around a conservation area that forms a transition between the conservation area and multiple use zone (Art. 40, 1). According to this definition, villages inside the LNP cannot be considered as being located in a buffer zone, hence the preferred use of the term 'support zone' in this document.

Table 4 – Rules governing the use of natural resources in the SZ (outside ecological corridors)

Rule	Activity
Forbidden	Charcoal production from native forests
	Uncontrolled forest fires
	Mining activities
Allowed	Collecting non-timber forest products (NTFP)
	Taking wood for household needs
	Small-scale livestock rearing
	Small-scale agriculture
Requires authorisation	Hunting
	Fishing
	Commercial use of forest products
	Large-scale livestock rearing and agriculture

Source: Adapted from LNP: plano de manejo e desenvolvimento da zona tampão, June 2012.

However, interviews with various actors in the SZ (including members of the village committees) show that the rules circulated by LNP do not match the rules defined in its management plan. For example, LNP officials regard hunting as a banned activity, despite the fact that the management plan clearly provides for the sustainable use of wildlife for subsistence purposes, and even though hunting is traditionally an important source of food and additional income for local people, especially in the dry season.⁹⁰ The difference between what is written and what local people are told about the rules mainly relates to activities that require authorisation: communities were not told that they have the opportunity to negotiate rules for natural resource use. The LNP's decision to impose a ban rather than negotiate the rules could have been dictated by the available resources and the need to decide between the different priorities for the LNP. But this same logic could also have led to tolerance of villagers hunting, if priority was given to income-generating activities rather than ecosystem conservation. Banning traditional hunting activities may also have repercussions on the objective of getting residents to support the LNP's conservation objectives.

⁹⁰ LNP, management and development plan, 2003, Section 5.5.2, page 45. The law on conservation also provides for this possibility in buffer zones, in order to satisfy local communities' food needs (Art. 29, 1).

4.3.5. Socio-economic development of the Support Zone

The management plan for the park views the LNP's success as largely dependent on its capacity to develop a constructive and fruitful relationship with resident communities. This would mainly be done by strengthening food security and developing economic activities in the zone.⁹¹ The management plan for the SZ proposed several options for developing IGAs in the zone, which are described below.

▷ a. Creation of irrigated parcels (€239,000, financed by AFD)

GIZ had tested and provided technical assistance for small-scale irrigation schemes in the SZ before the management plan was prepared. Between 2010 and 2012, AFD funded eighteen irrigated parcels with motor pumps along the Olifants and Limpopo rivers, with six in each district. The PAC bought the equipment, and after GIZ's departure technical assistance was provided by a Mozambican NGO called Lupo. The total cost of this activity was estimated at €239,000, which works out at an average of €13,300 per parcel.

The irrigated parcels measure between two and four hectares, and are managed by irrigators' associations composed of twenty to forty people. Each member has their own field, and one field is cultivated collectively so that its produce can be used to maintain the motor pump.

According to the data provided by the PAC, six of the eighteen irrigation systems were no longer functional in November 2015. One community had stopped irrigating due to human-wildlife conflicts, and five others (thirty percent of the eighteen schemes) no longer worked because of problems maintaining their motor pump. These figures probably underestimate the scale of the problem, as two of these communities told the evaluation team that their pumps had stopped working in 2012 and 2013, while a third association said the only reason its irrigation system was still working was because they borrowed a motor pump from another community.

Pump maintenance certainly seem to be one of the weak points in these irrigation systems. This is partly due to the fact that the LNP bought poor quality pumps whose spare parts were unobtainable in Mozambique and even South Africa. But the main issue is the economic and organisational capacity of the irrigators' associations to manage the maintenance and repairs of their pumps.⁹²

91 LNP, management & development plan, 2003, Section 8, pp.71–72.

92 Cf. Raphaëlle Ducrot, "Is small-scale irrigation an efficient pro-poor strategy in the upper Limpopo basin in Mozambique?" *Journal of Physics and Chemistry of the Earth* (under review), and Raphaëlle Ducrot, "When good practices by water committees are not relevant: sustainability of small water infrastructures in semi-arid Mozambique," *Journal of Physics and Chemistry of the Earth* (under review).

It is hard to analyse the economic results of irrigated crops because the data on output and production costs is limited and not very reliable. However, it seems that irrigators had chosen to shift from Lupa's proposal to produce cash crops in market garden systems, preferring less risky crops such as corn, beans, sweet potato and cassava – whose produce keeps for longer and can be consumed at home or sold, depending on household needs and market dynamics. Producing irrigated crops for domestic consumption in the dry season, when produce is scarce and prices are high, may be a highly appropriate strategy. But if most of the produce is consumed at home? How then, are production and maintenance costs covered? Other economic activities – apart from rain-fed or irrigated agriculture, which households rely on for food security – are severely limited by LNP regulations in the Support Zone, which restrict commercial activities based on the use of natural resources to agriculture and livestock rearing. This means that the poorest families with few animals have very limited opportunities to cover the costs of irrigated agriculture.

The organisational support that Lupa provided for the irrigators' associations (obtaining formal recognition, formalising land rights to irrigated parcels, management and organisational training) was necessary but insufficient to enable them to overcome the contradictions and conflicts that arose within the associations. This can be particularly problematic when economic differences between members make it hard to make collective decisions about contributions to running and maintenance costs.

▷ **b. Reforestation (€16,000, funded by AFD)**

This reforestation activity was supposed to meet the villagers' need for firewood, construction timber and fruit trees, and ultimately contribute to the development of commercial activities such as community-based charcoal production. The idea was to start with pilot projects and then extend them across the whole Support Zone.

In 2011, a tree nursery was set up in the village of Chibotane through a partnership with students from a French agricultural college.⁹³ There was no demand for reforestation activities from villages in the SZ, but the nursery provided the LNP with plants for families that had been moved out of the Core Zone – each displaced family received five saplings to compensate for the loss of access to community forest resources. While the functioning of the nursery was seriously affected by delays in the resettlement programme, there is no evidence that the reforestation programme is economically viable outside this institutional market, and there are no plans to develop the activity.

93 ISTOM – École supérieure d'agro-développement international.

▷ c. Eco-tourism

The LNP management plan regards tourism as a key instrument in economic development that will benefit local communities. These communities should not only receive a share of the revenues that the park generates through tourism, but also benefit from the jobs created by the concessions and IGAs associated with the development of tourism in the park.

The management plan for the SZ mentions the possibility of developing community-run campsites in the district of Chicualacuala, but does not provide any analysis that could be used to determine whether this is a viable proposition. In 2010–2011, a study on the potential of small-scale eco-tourism in the SZ revealed the lack of tourism infrastructures in the zone, apart from the LNP-managed campsite near the rangers' camp in Mapai.⁹⁴ It recommended the creation of five campsites in the SZ, including two between Pafuri and Mapai, but did not demonstrate the economic viability of the proposed actions.

The road between Pafuri and Mapai seems the most promising place for a pilot eco-tourism scheme, as it is often used by South African tourists heading to the coast of Mozambique. The proposed campsites further south have little chance of being viable as the road is in poor condition between Mapai and Hassane, and the fence further south means that tourists have limited opportunities to see wildlife. The proposed sites in Tchowe and Chipeluene could benefit from ecological corridors, but they are hard to access and are not on the roads used by South African tourists.

The only investment in eco-tourism was made in Chibotane, in Massingir district, with money that communities receive from the LNP (twenty percent of revenues)⁹⁵ and support from a local NGO. The project planned to construct a community lodge and a shop that would sell local crafts, but the lodge was never built and the shop is too isolated to function properly. Another community lodge, which is not identified in the documents cited above, is under construction in Pafuri, but the decision-making process seems to have bypassed the village committees even though they were supposed to help finance it through the community fund from the park's receipts. This indicates a lack of global vision for eco-tourism in the SZ, and shows that stakeholders are not sufficiently well organised to define consensual priorities for eco-tourism.

94 Rural Consult: *Estudo do potencial do uso de terra e capacidade de carga para a população da zona de apoio do Parque Nacional do Limpopo em Moçambique – 1.3. Potencial Ecoturismo de pequena escala no Parque Nacional do Limpopo – Zona de Apoio Relatório Final*; Maputo, 21 de Dezembro de 2012.

95 See Section 4.3.6.

▷ d. Developing chili production

A project in Zambia had shown that chili pepper production can benefit communities in two ways: by keeping elephants off the crops, and by generating incomes. This idea was retained in the development plan for the SZ but came to nothing despite several attempts to get it off the ground. This was partly because villagers were not convinced that this is an effective method of repelling elephants, but mainly because a suitable outlet was never found for the chilli peppers, which would have had to have been sold on international markets through agreements with international companies.

▷ e. Other alternatives to be identified through participatory processes

As with the rest of the plan, the IGAs that were supposed to promote economic development in the SZ were not identified through a rigorous technical assessment or a participatory diagnostic process. The plan makes no mention of rain-fed agriculture or live-stock-rearing, even though these activities are the main sources of income and food security for local people; it is a mixture of ongoing activities and proposals by the experts appointed to produce the plan or LNP teams. IGAs were not identified in a participatory manner due to a lack of human, material and financial resources.

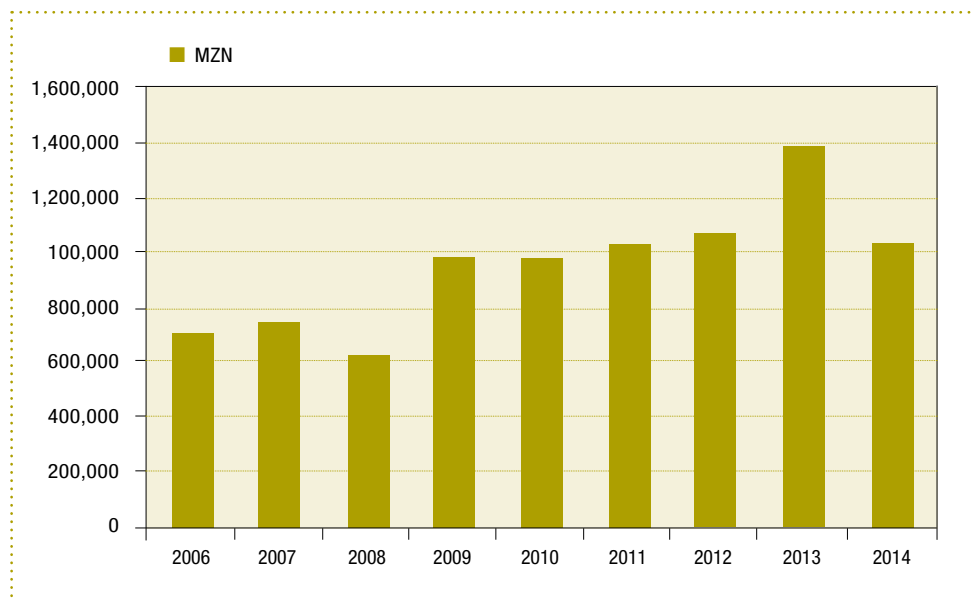
4.3.6. Use of the community share of LNP revenues

In accordance with the law, sixteen percent of LNP revenues (twenty percent of the eighty percent that the State returns to the LNP) have been distributed to the communities that live inside LNP boundaries since 2006. Graph 6 shows that communities have received a total of €220,000 since 2006, giving a yearly mean of €25,000.

Assuming that the money is shared between about 25,000 people in fifty villages, every village will receive around €500 per annum for community projects. This comes to about €1 per inhabitant,⁹⁶ meaning that the fund provides very limited investment opportunities.

⁹⁶ In 2015, the minimum monthly wage in Mozambique in the agriculture, livestock and hunting sectors was 3,186 Meticaís, or around 70 Euros a month.

Graph 6 – Share of LNP revenues paid to communities living in the park

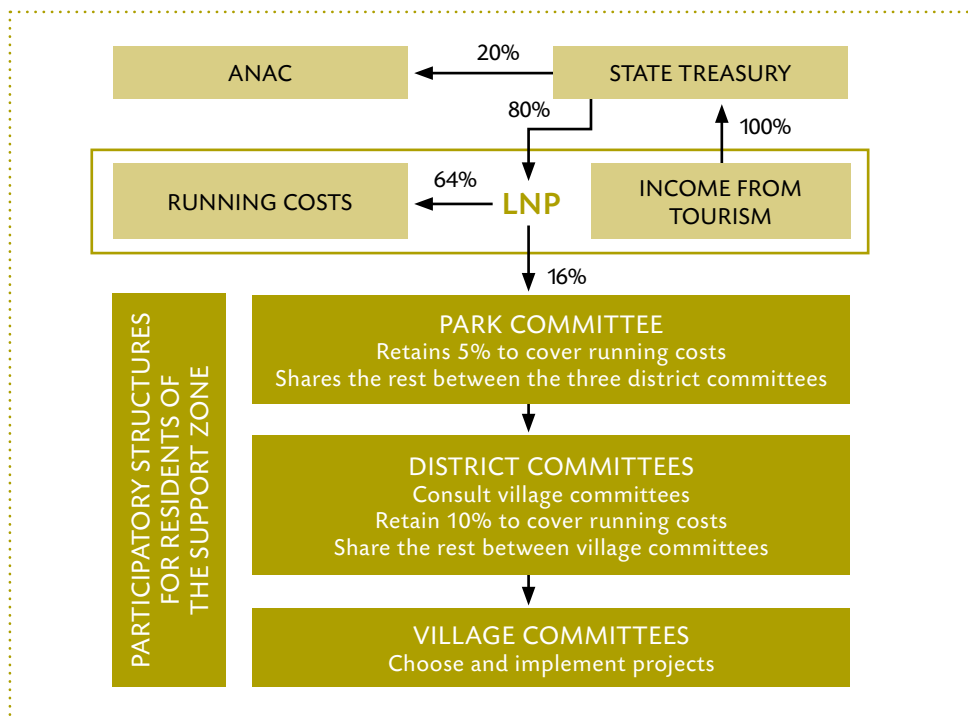


Source: LNP/CSP.

The ministerial order 93/2005 specifies that every community should receive an equal share of this money, and that management committees should be set up to represent each beneficiary community and receive and manage these funds.⁹⁷ The legislation does not specify how the money should be paid to communities, or how they should spend it. In Gaza province, the Provincial Directorate for Tourism proposed that the Provincial Governor should pay the twenty percent to the Park Committee, and that the District Committees should receive their share (one third) of the revenues at a ceremony conducted by the District Administrator. (See Diagram 8). Thus, the LNP transfers the money to the Park Committee, which retains about five percent to cover its running costs and divides the remainder equally between the three District Committees (DCs). The DCs then consult the Village Committees as to how the money should be used and transfer the amount assigned to each committee.

⁹⁷ *Ministérios da agricultura, do turismo e das finanças : diploma ministerial nº 93/2005 de 4 de Maio*, Articles 2 and 5. Each district, and each village within each district should receive the same amount of money, regardless of the size of their respective populations.

Diagram 8 – Financial flows generated by revenues from tourism in the LNP



Source: Authors.

In reality, the sums involved have been so small that the District Committees have not made the planned annual distributions. It seemed more appropriate to wait until they had amassed enough to fund small investments, or to pay each village in turn. In the period 2006–2010, the District Committees in Mabalane and Chicualacuala used the money to buy corrugated iron, which was given to village committees to cover community buildings (mainly schools). In 2011–2014, the total amount available for each district was around 1,425,000 MTN. Once the DCs’ running costs (60,000 MTN/year) were subtracted, this left a district such as Chicualacuala, which covers eighteen villages, with a maximum disposable income of 65,000 MTN/village (around €1,600).⁹⁸

⁹⁸ It is useful to compare this amount with the value of the irrigation schemes funded by AFD, which worked out at €13,000 per parcel, or €11,000 without the technical assistance from Lupa.

So far, very few projects have been implemented with this money, and there is no reliable monitoring system to allow for a detailed assessment of how it has been spent. The fact that some villages have not received anything while others have had several payments shows that the allocation system is not working. There is also a marked difference between the districts: in Chicualacuala, every village benefited from a project in the period between 2011 and 2014, unlike those in Mabalane and Massingir, where certain communities were given more than their fair share of the revenues from the park.

Table 5 – Projects validated in each district in the period 2011–2014

Project	Chicualacuala	Mabalane	Massingir	Total
Boat and livestock	2			2
Community campsite	2			2
Livestock rearing	14	3	6	23
Community lodge and shop			1	1
Mill	1	2		3
Pump	1		1	2
Water distribution system			2	2
Total	20	5	10	35

Source: CSP/LNP (November 2015)

The small number of initiatives can also be explained by the District Committees' inability to propose projects or define criteria to determine their relevance. Although they have managed the money they received to the best of their abilities without any clearly defined rules or structures to support and monitor them, the way that these committees function leaves a lot to be desired. The Village Committees only act when the District Committees ask them to, and the DCs do not hold general assemblies or board meetings, present their accounts or hold regular elections.⁹⁹

⁹⁹ Nícia Givá: *o processo de alocação, utilização e gestão dos 20% no Parque Nacional do Limpopo, Distrito de Massingir – Uma discussão com todos os atores chaves no processo*. Universidade Eduardo Mondlane, faculdade de agronomia e engenharia florestal, February 2014.

The only available data on the way that communities have used the money from the LNP came from the CSP/LNP. Although the data are incomplete and only cover the period 2011–2014, they do give some idea of the type of projects that were planned and implemented in this second phase of the project.¹⁰⁰ The accounts for November 2015 cover thirty-five projects, but some of them had yet to be implemented because the communities had still to receive the money allocated for them. Table 6 below shows that most projects were concerned with livestock rearing.

Table 6 – Projects validated by district committees for the period 2011–2014¹⁰¹

Project	Number	%	Amount (MTN)
Boat and livestock	2	6%	120 000
Community campsite	2	6%	-
Livestock rearing	23	66%	1,620 000
Community lodge and shop	1	3%	-
Mill	3	9%	690 000
Pump	2	6%	160 000
Water distribution system	2	6%	-
Total	35	100%	2,590,000

Source : PAC/LNP

The ideas for projects may come from the District Committees or the Village Committees. It is worth noting that the district and LNP services do not seem to have any influence on the choice of projects, and that some committees had already learned from setbacks with earlier community social projects where mills, pumps and water distribution systems were abandoned because of problems with their collective management. The rules for the money to be equally divided between each village do not seem to have been followed, as some of the projects that were implemented cost more than the villages' allocated share.

¹⁰⁰ Some of the information was corrected during the field mission with the help of the presidents of the committees, but work on the project allocations was still under way at the time of writing.

¹⁰¹ Some of the projects validated by the committees have not yet been implemented. Of note is that the data presented here are incomplete, particularly data on the amounts received by certain projects.

Box 2 – Livestock-rearing projects in different districts

The idea of investing in livestock first appeared in the district of Chicualacuala and then spread to the other districts after consultation meetings with the Park Committee – albeit with very different results. The project in Chicualacuala targeted the poorest farmers who are unable to raise cattle. A group of ten producers are given a ‘revolving’ herd that they look after for several years, benefiting from the offspring produced, and then pass on to another group. In Mabalane, project beneficiaries were experienced producers rather than those without cattle, which meant that there was a high likelihood that the project would target better-off families who already had a good herd; while in Massingir, members of the District Committee were prioritised.

The only source of support for these projects has been local NGOs, which started helping the District Committees and the Park Committee define their objectives and draw up their statutes in 2006. The LNP, the provincial authorities and the district authorities have taken no responsibility for helping the committees understand their role, identify appropriate projects or manage the money properly. The fact that no institution has taken responsibility for monitoring how the money is used has resulted in it being poorly managed (inequitable distribution between villages) or even misappropriated.¹⁰²

It is particularly surprising to find that the LNP takes this attitude, given that this money is one of the main direct benefits that communities receive from the park. AFD’s project document (page 4) not only emphasised the importance of “defining, in consultation with the communities concerned, how this portion of the revenues generated by the park is to be used, and any conditions attached to its use”, but also made this a precondition for implementing the actions defined in the management plan. The technical assistants to the LNP, including the TA responsible for supporting the PAC, did not regard this as an activity that the LNP should concern itself with – clearly failing to understand the importance of building the capacities of the park’s residents and their organisations.¹⁰³

102 Although there are relatively few cases of misappropriation, they show the need for tighter controls and greater transparency in the use of funds. One proven case of misappropriation was taken to the provincial governor and resulted in a judicial inquiry.

103 The feasibility study made provisions for community funds for social investments (€10,000/village); while the management plan for the Support Zone anticipated that a fund would be set up for local environmental initiatives, to finance collective projects costing around €2,500. Neither proposal makes the connection with community management of LNP revenues, even though the fund for local environmental initiatives explicitly targets capacity building. Neither proposal was implemented.

4.3.7. Improving roads in the Support Zone

The AFD project anticipated that road improvements would be preceded by a study on the possible options for roads in the SZ,¹⁰⁴ but was wisely decided to replace this study with a roads masterplan in order to get a picture of the development priorities in the park as a whole (cf. Section 4.2.2. p. 90).¹⁰⁵

A key element of the contract awarded in 2012 was improving the 350 km stretch of road between Pafuri and Macarengue, and from Massingir to the interior of the SZ (clearing, widening and compacting the road), in accordance with the priority investments identified in the 2012 road masterplan. The quality of this road varied considerably: it was satisfactory between Pafuri and Mapai, apart from stretches in the wetlands where the clay-based soils make it unnavigable in rainy conditions; and in poor condition south of Mapai, where it is little more than a track zigzagging between trees and is impassable in places, especially the first eighty kilometres.¹⁰⁶

As noted above, this contract was terminated because the company did not do the work properly (see Section 4.2.2.). It only upgraded 300 kilometres of road rather than the planned 350 km, leaving a fifty kilometre stretch between Mapai and Matafula untouched. This is now the worst part of the road. The standard of work on the road between Pafuri and Mapai is reasonably good, but varies considerably on the stretches between Matafula-Macarengue and from there to Massingir. Only twenty percent of the drainage structures were completed and nothing has been done to improve the clay soils, which make the road impassable in the rainy season. However, rainy-season travel times on the sections that have been upgraded are now half what they were before the work was done.

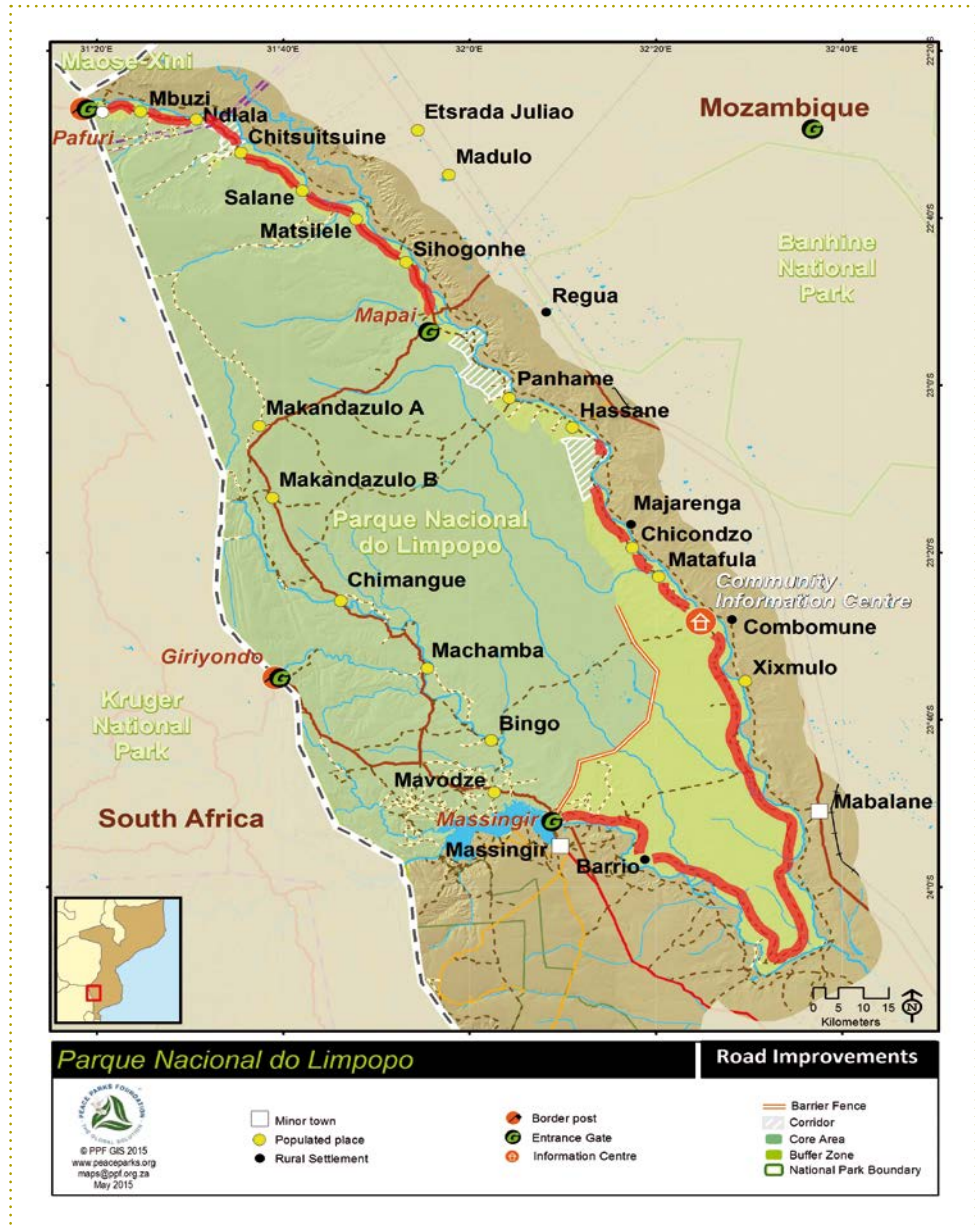
The Support Zone is cut off by the watercourses that delimit it. All the administrative, economic and social infrastructures – especially markets – are on the other side of the Limpopo (to the east) or the Olifants (to the south). Mapai is the only place where vehicles can cross the Limpopo (with difficulty in the rainy season), and they have to go down to the dam in Massingir to cross the Olifants (see Map 5).

104 The study was to analyse the financial, social, economic and environmental aspects of the two options envisaged for the road running north-south along the Support Zone, west of the Limpopo: i) Maintaining the current route through villages, or ii) Building a new road several kilometres further into the park that would mark the boundary of the SZ as part of the zoning of the park.

105 The road masterplan had the dual objective of: (i) Identifying roads that can be used for tourism, wildlife and environmental management, and the long-term social development of the LNP; and (ii) Developing affordable strategies to improve the road network while meeting the requirements for mobility and accessibility.

106 *Feasibility study for the development of the Limpopo National Park and its support zone*, BRL/ICS/Impacto, June 2006, p.148.

Map 5 – Roads inside and outside the SZ



Source: LNP.

The road between Pafuri and Mapai is used by villagers who want to go to South Africa, and vehicles heading for São Jorge do Limpopo. As this stretch of road is also used by tourists going from South Africa to the Mozambican coast, upgrading this part of the road was clearly the most important element of the improvements.

The communities that live in the SZ rarely use the road south of Mapai. They usually cross the river on foot or by boat in order to reach the nearest towns on the other side of the river (Mabalane or Chokwe, which is further). There is virtually no regular means of transport in this zone, and few people own vehicles. They usually use the road to visit neighbouring communities, and the LNP occasionally uses it for ranger patrols or to deal with human-wildlife conflicts. There does not seem to be a particularly urgent need for this investment: when asked, residents said they would have preferred help getting across the river.¹⁰⁷

There are also some concerns about the durability of these improvements. Heavy rains cause a lot of damage to roads, and with no drainage system they will need regular maintenance to ensure that they remain in good condition. At the national level, rural roads are maintained by the local administration (provincial and district authorities), but the status of the roads inside the LNP is unclear. The division of responsibility between the local authorities and the park administration is still ambiguous, as the LNP regards the local authorities as responsible for maintaining roads inside the SZ, even though it regularly maintains other roads inside the Core Zone. The evaluation team was unable to verify this directly with the local authorities, but given that they were not involved in the decision to improve the road, the lack of funding available for rural roads and the lack of traffic on most of the road that runs through the SZ, they are unlikely to see maintenance as a priority and carry it out as regularly as is required.

107 This need had already been noted in the feasibility study: "South of Chimangue, the road would turn in a south-westerly direction towards the Elefantes. Ideally, instead of going across the Massingir Dam, there would be drift or bridge across the Elefantes to join up with the Chokwe-Massingir tar road. So a ferry system is suggested." BRL *Feasibility Study*, op. cit., p.149. This proposal would have required further studies to see if it was feasible. Constructing a bridge would likely have been beyond AFD's budget, given the breadth of the river and changes in water levels during the rainy season. But improving access on either side of the river and providing a ferry system such as the one in Mapai could have been envisaged.

4.3.8. Coordination between the LNP and local authorities

All the activities associated with community development in the SZ were planned and executed by the PAC/LNP. The district authorities were invited to meetings and training sessions, but no joint activity was planned, and responsibility for implementing activities was not shared between the district authorities and the LNP.

The lack of coordination between the PAC/LNP and the district services (particularly the district service for economic affairs, the SDAE) is highlighted by the fact that each institution has its own plan to develop the territory under its jurisdiction – the SZ management and development plan for the PAC/LNP, and the district economic development plan for the SDAE – and each has its own community committees to encourage local participation. It is true that these committees are subject to different legal constraints, institutional logics and policies, and cover territories that have different territorial boundaries (apart from the villages). Nevertheless, it could have been possible to envisage common procedures and mechanisms to monitor the use of funds or exchange information.

The LNP Liaison Board is a consultative body that was set up in 2004 to improve coordination between the various actors in the territory.¹⁰⁸ It was to be consulted before the project steering committees in order to give its opinion on the agenda; and it was considered important to strengthen it in order to be able to proceed with the joint management plan for the SZ, as it would facilitate dialogue between the park, its residents, and the provincial and district authorities.¹⁰⁹ Building board members' capacities was one of the priorities listed in the 2004–2006 Management Plan for the park, as the Liaison Board was expected to take over from the steering committee and become the park's management committee. The report of the 38th meeting of the steering committee, held in May 2012, notes that the LNP Liaison Board had not met since 2006 but still applauds its usefulness in improving the park's image.¹¹⁰ This was hardly what was envisaged in the objective for the park to be managed jointly with local communities.¹¹¹

108 Composed of the Provincial Directors of Tourism and Agriculture, three district administrators, six elected community leaders, two representatives of NGOs and one donor representative.

109 Cf. AFD, *Evaluation mission to Mozambique 18–26th of September 2006*, page 8 and AFD project document, page 6. The reactivation of this Board was a specific obligation of the funding agreement (Article 4 of the agreement, page 5).

110 LNP 38th SC meeting. The lack of meetings and this comment are symptomatic of the lack of institutional collaboration on the development of the SZ. Conversely, the steering committees regularly mention coordination meetings to deal with issues raised by the resettlement component.

111 *LNP Management and Development Plan*, 2003, p.93.

4.4. Strengthening the administrative capacities of the Park

4.4.1. Review of the objectives for this component

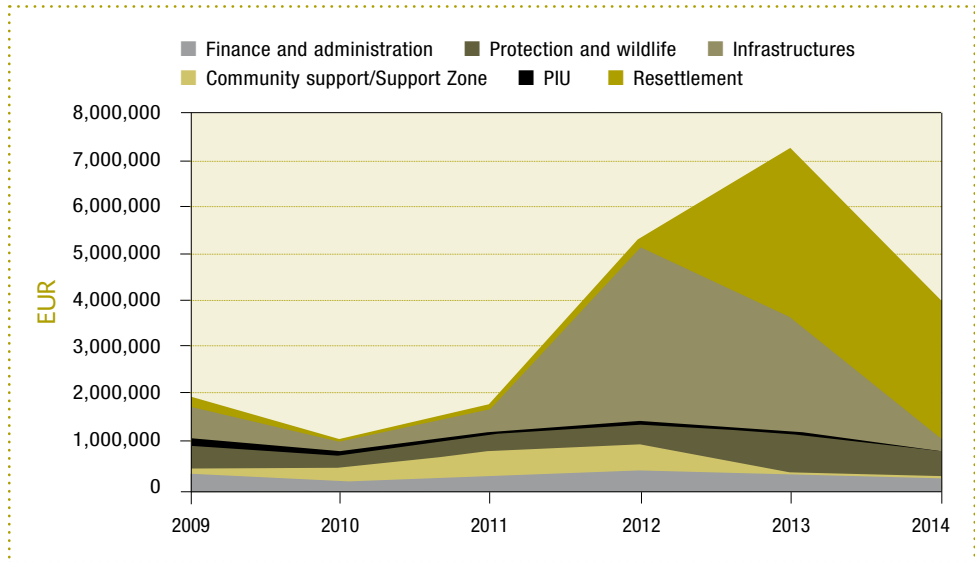
The third and final objective of AFD's funding was to strengthen the administrative capacities of the park by sharing responsibility for all the LNP's recurring costs in the first two years of the project (2007–2008) with KfW (See Graph 7). After this time, receipts from the park were supposed to progressively cover these recurring costs. Coordination between partners supporting the development of the LNP also needed to be strengthened.

4.4.2. Human, financial and material resources

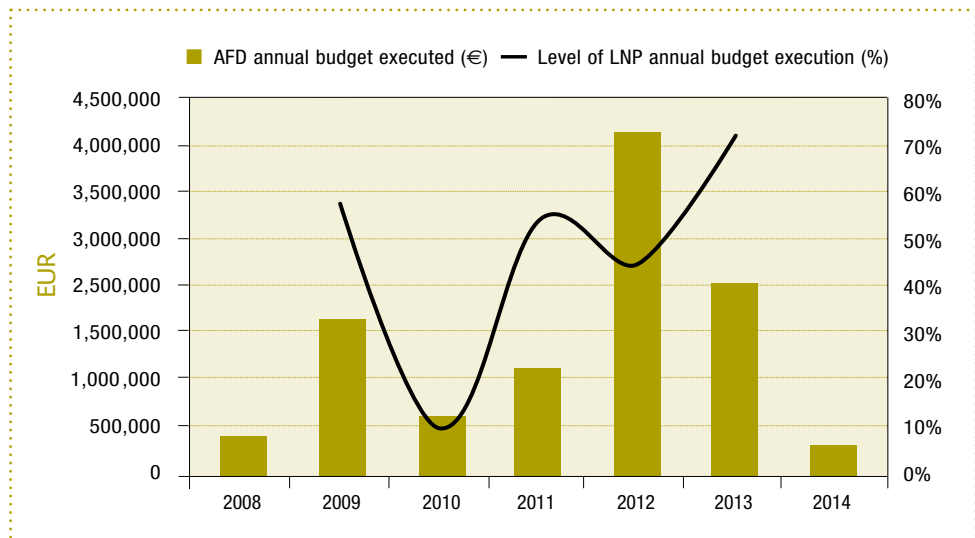
Graph 7 shows that the LNP made considerable progress in its annual budget execution for all funding sources between 2009 and 2014. This was closely linked with the progress on budget execution for the infrastructures programme between 2011 and 2013, and the population resettlement programme between 2012 and 2014. It was also due to the improvement in the LNP's global annual budget execution rate, and progress in the annual budget execution of AFD funds shown in Graph 8. With an executed budget of over €7 million in 2013, this was also the LNP's best annual budget execution rate¹¹² in the period 2009–2013 and evidence of more objective expenditure planning by the LNP, of the execution of bigger infrastructure works with higher disbursements (SZ fence, roads) and, even if this was not directly related, of a change in the financial management and contractual capacities of the LNP management team between 2009 and 2014.

112 Planned/executed budget.

Graph 7 – LNP annual budget execution for each programme



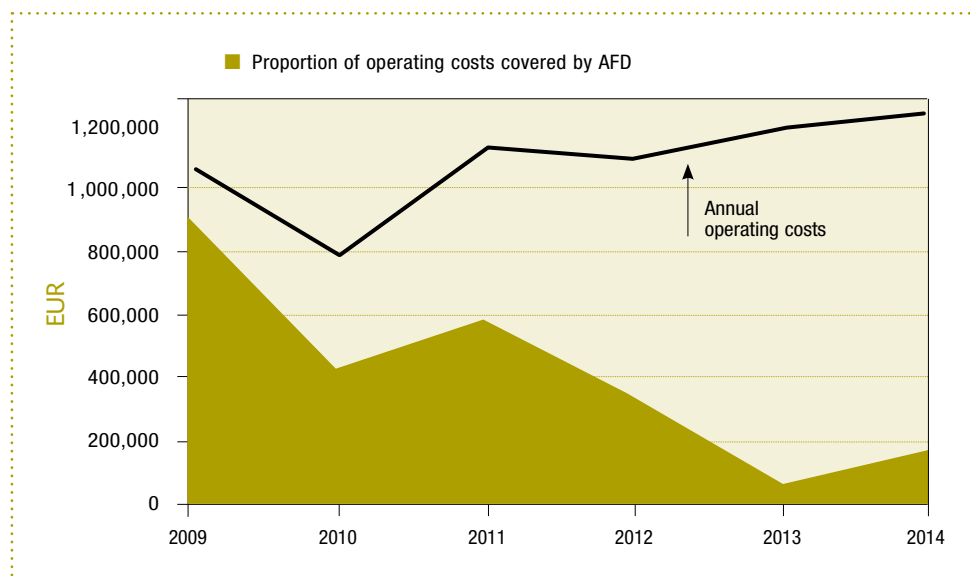
Graph 8 – LNP and AFD annual budget execution rates between 2009 and 2013



Sources of Graphs 7 and 8: authors, with data from LNP and AFD.

Graph 9 shows that funding from AFD played a key role in enabling the LNP to function from 2009 to 2012 (covering 86%, 55% and 52% of LNP’s running costs in each respective year).¹¹³ The Government of Mozambique has covered some of these running costs since 2013, including all the rangers’ salaries, which amounted to around €200,000 in 2014. This closer government involvement in management of the LNP represents significant progress, and was the result of sustained lobbying by the LNP, AFD and KfW in previous years.

Graph 9 – LNP annual running costs and share covered by AFD funding



Source: the authors, data supplied by the LNP.

¹¹³ According to the LNP’s budgetary charges from all revenue sources in its executed annual budgets.

The LNP's overall running costs (or operating costs) remained stable in the period 2009–2015, with an annual average of around €1.02 million.¹¹⁴ This included LNP staff and rangers' salaries, vehicle/equipment maintenance, fuel, travel expenses, water and electricity, insurance and the cost of organising various workshops and aerial censuses. Salaries accounted for about sixty percent of these costs in the period 2009–2014.¹¹⁵

The LNP had to deal with a number of staff management challenges between 2008 and 2015. As shown in Table 7 below, the number of staff fluctuated considerably in this period (with 203 people under contract in 2008, 161 in 2011, and 196 in 2015). In the period between 2009 and 2011, the LNP lost over forty employees due to resignations and dismissals, mainly within the protection department.¹¹⁶ A number of posts, including programme coordination posts, remained unfilled for several months, especially between 2010 and 2012.

114 Except in 2010 when these costs fell to around €740,000 due to the very low rate of financial budget execution (10%).

115 Salaries for protection staff represented between thirty-six percent and forty-six of the salary costs.

116 In December 2010, the Protection department went on strike for better working conditions, a pay increase and payment for 'the 13th month'. An agreement was reached with the Protection department, but the other LNP staff went on strike in January 2011. After this second strike, all employees received at least the official government salary from June 2011, plus fifteen percent for working in remote areas, and a twenty percent risk premium for protection staff. These strikes also led to a restructuring of Human resources (HR). As of January 2012, all LNP employee contracts were converted to long-term employment contracts with the Government of Mozambique and aligned with the official government salary scales, which was topped-up with external funds (AFD and KfW, among others) to make up for any differences between the old and new rates of pay.

Table 7 – Number of LNP staff in each programme / department between 2011 and 2015

	2011	2015
Natural resource management	4	3
Infrastructures	10	10
Population resettlement	2	7
Community development	4	8
Administration	11	10
Protection	118	144
Human resources	2	2
Tourism	10	12
Total	161	196

Source: LNP.

The LNP organisational flowchart from July 2015 is presented in Annex 11. Without going into a detailed analysis of the LNP’s current organisational capacities, which would require a full organisational assessment, a summary analysis of each department/programme’s human capacities to undertake the missions assigned in the management and development plan (which has not been updated since 2004) is presented below:

- Although they are lower than international standards (see Section 4.1.2), human resources for protection are comparable to other parks in sub-Saharan Africa and sufficient for missions to protect the park and make some progress in tackling poaching (reduce the number of poaching incidents in the LNP and intrusions into the KNP from Mozambique, and increase the number of arrests and confiscated arms). The programme has a coordinator who is supported by an experienced technical assistant from PPF, and the IPZ unit is headed by a former member of the Portuguese Special Forces.

- The human and financial resources currently available for HWC management, which is part of the protection programme, are too limited to be effective.

- Research and monitoring do not have sufficient human resources to function properly: the organisational flowchart includes a coordinator for these activities, but no one has specific responsibility for these aspects of the programme, and the veterinarian's post also remains unfilled, so no one is responsible for animal health.
- The post of coordinator for the infrastructures programme is also currently empty (the assistant coordinator is filling in on a temporary basis), but there is provision for other posts.
- The community development programme has limited capacity to meet its stated objectives, especially given the size of the SZ. At the moment there are only eight people to cover the tasks at the head office and in the field. The LNP had problems recruiting competent staff in 2011 because of the low salaries offered, and staff training has not succeeded in filling all the knowledge / skill gaps – particularly in terms of capacity to mediate with local communities, use participatory approaches or build the capacities of local people and their organisations.
- The tourism and communication / marketing programmes are essentially staffed by people who are responsible for managing and maintaining the accommodation infrastructures. One person is responsible for public relations, but there are no dedicated human resources personnel to develop alternative tourism products, for communications or to market the tourist attractions in the LNP to the general public.
- The park does have finance and accounts officers to manage the administrative and financial aspects of the LNP, staff responsible for asset management and a procurement officer based with ANAC in Maputo. This mechanism could be supplemented by a procurement officer in the LNP offices, which would speed up procurement procedures and establish a link with ANAC in Maputo, although it would increase the HR management workload and add another administrative level to decision-making processes.
- Finally, the technical assistant from PPF will soon be supplemented by a new TA dedicated to population displacement, funded by KfW. There is certainly a need for another TA, and given the challenges faced by this programme it is surprising that this was not identified before.

The LNP's estimated operating costs are approximately €1 per hectare, which is the average for parks in sub-Saharan Africa. It does have an organisational structure in place, which has been strengthened over time, and relations within the PIU and with the different LNP programmes have improved. Despite the tensions within the PIU and with LNP staff observed between 2009 and 2012, the evaluation team found that there is now a better balance in decision making and day-to-day management of the park.

Things have improved, but the park still faces a number of problems. Its running costs are in the middle of the range for parks in sub-Saharan Africa, but some of its programmes lack the human capacities needed to fulfil their missions, and certain programme managers still complain about the lack of transparency and delegation of responsibilities for annual financial management and planning. They are closely involved in defining the LNP's annual work plan and manage their own work plans, but are not involved in or informed about budgetary matters. This means that programme / departmental coordinators have to manage their annual and monthly work plans with little idea of their available budget. Finally, the capacities of programme / departmental coordinators and other LNP staff remain limited. Most of the stakeholders and actors that the evaluation team met feel that capacity-building and training activities are needed to strengthen and ultimately sustain the park's HR structure.

4.4.3. Strategic planning capacities

The LNP Management and Development Plan drafted in 2003 has never been updated. At the moment, the LNP produces its annual work plans in an Excel sheet and its strategic vision is limited to two- or three-year budgetary previsions. The LNP would benefit from a broader approach to its strategic planning.

5. Evaluation Analysis

5.1. The project is relevant, but based on some unrealistic assumptions

5.1.1. The objective of preserving and restoring biodiversity is relevant to the national and regional context and priorities for the Limpopo National Park

The project's first objective of restoring and preserving biodiversity in the LNP is relevant to the 1999 Law 10/99 on forests and wildlife, which aims to protect, conserve, develop and make sustainable use of forest and wildlife resources for the economic, social and ecological benefit of present and future generations of Mozambicans.¹¹⁷ This law defines national parks as demarcated areas with fully protected status, which strictly forbids the following activities: (i) Hunting within park boundaries; (ii) Forestry, agricultural, mining and livestock-rearing activities; (iii) Reconnaissance, prospecting, drilling or damming; (iv) Any activity likely to alter the character of the soils or vegetation, pollute the water or disturb the flora and fauna; (v) The introduction of any exotic, endemic, wild or domestic animal or plant species.

This first objective is generally in line with the regional cross-border framework for the zone and the desire for greater cooperation on biodiversity conservation between South Africa, Mozambique and Zimbabwe, which led to the creation of the Great Limpopo Transfrontier Park (GLTP) in 2002. It aims to respond to the complementary issues of biodiversity conservation and economic development in these countries. Part of the logic behind the creation of this integrated park was to help better regulate animal migrations within the KNP by re-establishing their natural migration between the different parks, particularly the KNP and the LNP, and to enable the LNP to become financially autonomous by attracting some of the KNP's many visitors.

117 Government of Mozambique, Law 10/99, 1999.

Photo 3 – Hippos in the Gaza safari zone



Photo courtesy of Gaétan Quesne (BAASTEL).

Through its first component, the programme aimed to provide a “financial contribution to the different programmes in the LNP management plan, namely: tourism development, protection, biodiversity research and monitoring, and environmental education.”¹¹⁸ In this respect, this first objective was also in line with the development needs, priorities and objectives defined in the 2003 LNP Management and Development Plan, and its 2004–2006 and 2006–2010 business plans.

5.1.2. The second objective of improving the living conditions of the park’s residents is in line with the priorities and needs of local communities

The second objective, to improve the livelihoods and living conditions of the LNP’s inhabitants, was also relevant to the development priorities of the park’s Support Zone and the socio-economic development needs of communities living in this zone. The LNP management plan states that “the long-term success of the LNP will be closely associated with constructive

118 AFD Project Document, 2006.

and mutually beneficial relations between the park and its residents.”¹¹⁹ Through this objective, AFD was supposed to support the development of communities living in the SZ in conjunction with KfW, which would provide assistance with the voluntary resettlement of people living inside the park along Shingwedzi River. This joint approach was coherent, as AFD brought added value and local development expertise to KfW’s resettlement intervention.

Photo 4 – Shingwedzi River



Photo courtesy of Gaétan Quesne (BAASTEL).

This objective also included the improvement and development of road infrastructures: i) Creating a basic network of consolidated tracks inside the LNP that can be used by tourists and park security staff; ii) Running the length of the SZ from Massingir to Mapai. Developing road infrastructures inside the LNP was relevant to the tourism development objectives and helped meet LNP staff needs, especially those responsible for biodiversity protection. With regards to upgrading the road in the south of the SZ, it is important to note that the links with Massingir and Mapai will only benefit neighbouring villages, and are of little relevance to people

¹¹⁹ LNP Management and Development Plan, 2003, p.71.

in the southeastern section of this zone, who use the economic and social infrastructures on the other side of the Olifants and Limpopo rivers. It would have been more relevant to look into the possibility of river crossings rather than investing large sums of money in sections of road that are of little to benefit to residents.¹²⁰

Finally, it is a shame that AFD did not regard improving the socio-community structures in this zone (schools, health centres) as a priority, even though it has far fewer amenities than other districts.¹²¹ This shows a lack of vision regarding the need to work with local authorities in order to develop a holistic and sustainable approach to the socio-economic development of the area.

5.1.3. Human and institutional capacity building is relevant for the LNP and its supervisory body

The third objective, of building the LNP's administrative capacities, was appropriate to the human resources and institutional situation in both the LNP and its supervisory body, the DNAC. AFD was supposed to cover some of the LNP's recurrent costs (others would be covered by receipts from the park) in the first two years of the project (2007–2008). The project document did not propose any other capacity-building strategy apart from this temporary support.

5.1.4. The project reflected French priorities and AFD's position on sustainable natural resource management

This project was appropriate to and in compliance with the Partnership Framework Document (PFD) signed by France and Mozambique in July 2006, which included a focus on the environment and productive use of natural resources.

120 The feasibility study emphasised the importance of enabling residents to cross the rivers that surround the SZ, but this idea was not developed in the AFD project document. The roads masterplan also focused solely on roads inside the LNP.

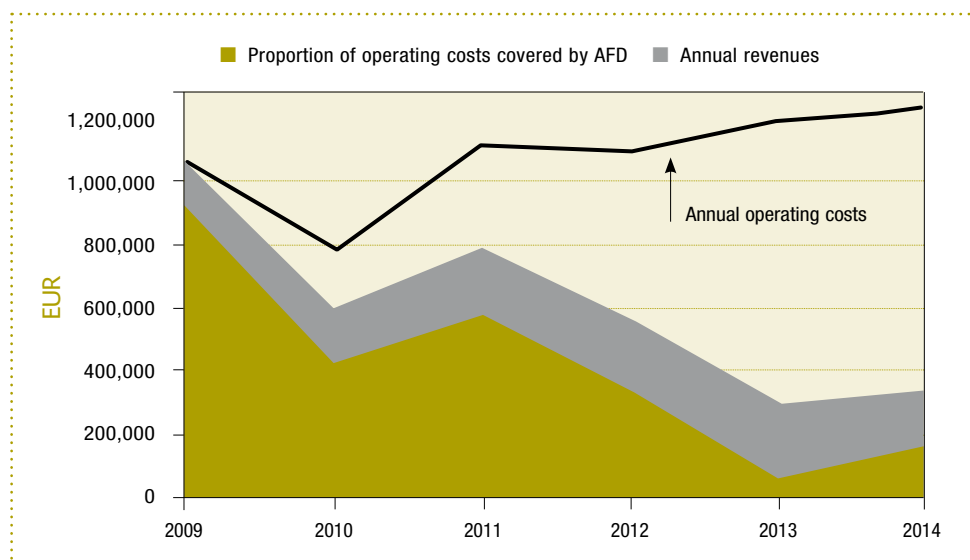
121 The justification for not developing this proposal in the project document was because it was the local authorities' responsibility. However, this is not a valid argument as the same could be said for economic development.

During the evaluation respondents also confirmed that the project was in line with AFD’s desire at the time to (i) develop its portfolio of projects supporting biodiversity conservation and socio-economic development initiatives, and (ii) gain legitimacy in this sector. This was part of its overall vision to foster local socio-economic development through conservation and sustainable natural resource management. This project also helped strengthen AFD’s position in the ‘protected areas’ sector in Mozambique, where it was already involved in a project to develop the Quirimbas National Park.

5.1.5. Some of the project’s underlying assumptions were unrealistic

Although the project objectives and approach were relevant, some of its underlying assumptions were unrealistic and over-ambitious. Firstly, as discussed in Sections 4.2 and 4.4, the projected revenues from tourism development and tourist concessions were supposed (in ideal conditions) to cover the LNP’s operating costs. These projected revenues were based on a vision of cross-border tourism that would develop as tourists migrated from the KNP to the LNP, which would quickly set up tourist attractions and infrastructures and build the capacities of Mozambican institutions.

Graph 10 – LNP operating costs 2009–2014



Source: the authors, data supplied by the LNP.

Graph 10 below shows the LNP's annual operating costs between 2009 and 2014, the share of these costs covered by AFD, and the annual income generated by the park. The LNP's operating costs were €1.164 million in 2014. As it generated €150,000 in receipts that year, it had €95,000 available to cover these costs after revenues from the park had been distributed according to the agreed formula (twenty percent to the DNAC/ANAC, sixteen percent to local communities, and sixty-four percent for the LNP).

This meant that the LNP's income only covered ten percent of its operating costs in 2014. The LNP had been created in 2002, and was just starting to become operational when the AFD project was designed in 2006. The evaluation team thinks that it was extremely optimistic to expect the park to generate sufficient income to cover all its operating costs in the space of just two years. This was particularly ambitious given the limited institutional capacities of the Mozambican authorities at the time, and the different stages involved in: (i) establishing a more mature institutional and management structure; (ii) developing a range of revenue-generating tourism products and concessions; (iii) ensuring that resettlement operations in the centre of the park were sufficiently advanced for wildlife to have returned, providing a tourist attraction and corresponding source of income. The absorption capacities of the Mozambican administration (the DNAC, and then the ANAC and LNP) were overestimated when this project was designed, and the management team in the PIU focused most of its efforts on the resettlement operations, which were severely delayed. Greater technical assistance from the PPF on this resettlement component would have been very useful.

Another assumption, underlying the first one, was that the increase in wildlife would boost the development of tourism in the LNP. It was envisaged that wild animals would naturally migrate from the KNP to the LNP when part of the fence separating the two parks was removed. Although the KNP and LNP have been under increasing pressure from poaching in recent years, wild animals are now moving naturally between the two parks, especially towards Shingwedzi River and along the border with the KNP. This natural migration will probably increase in the coming years, especially as the KNP implements its policy of closing a number of artificial water points that were created in the 1980s and are now causing ecological problems (such as animals exceeding the carrying capacity around water points, degradation of natural resources, and imbalances between different species of animals, to name a few).

The final underlying assumption concerned the expected development of the institutional and regulatory framework for protected and conservation areas in Mozambique. It was anticipated that a new law on the management of protected areas would be adopted, and that the LNP would ultimately be managed by an administratively and financially autonomous management committee with its own legal identity.¹²² This structure would also be empowered to collect the revenues from tourism and reinvest them in the park, and its autonomy was regarded as essential for the sustainability of the project's physical investments and human resources. This assumption was partially realised with the adoption in 2014 of a new law on the protection, conservation and sustainable use of biological diversity inside conservation areas, which provided a more solid regulatory and legal basis for the project. ANAC was created in 2011 as a public agency with autonomous management powers. Although it now has satisfactory administrative and management autonomy, it does not have full decision-making and financial autonomy. This means that decisions about LNP activities and its Support Zone are still made by the LNP steering committee, which was created in 2001 just as the first phase of KfW funding started. And finally, while the LNP's sixty-four percent share of the revenues from tourism is reinvested in LNP activities, this money is managed by the Provincial Directorate for Tourism in Xai-Xai, through the State financial management system (SISTAFE), not by ANAC – meaning that LNP staff must go to Xai-Xai to get any expenditure financed through LNP revenues authorised and expedited.

5.2. The intervention strategy was coherent, but the logical framework was too general to be very useful

5.2.1. The project was in line with the overall development strategy for the LNP but lacked detail on certain activities

AFD's dissatisfaction with the proposals made in the feasibility study and the very short timeframe allowed to present its project document resulted in a lack of detail on all the project components, especially activities relating to biodiversity conservation and restoration, tourism development and building the administrative capacities of the park.

122 AFD, NCS, 2006.

The logical framework for the project is so lacking in detail that it is unclear whether the activities for the second focus of the intervention (development of the SZ) proposed in the feasibility study were retained. The intervention strategy – planning and implementation of priority actions in the plan – was clear, although the timetable for investments starting in the first year was unrealistic. As a result, the activities that were implemented were extremely limited, with most investments related to the community irrigation project (see Table 8 below).¹²³

Table 8 – Main actions implemented in the SZ with AFD funding

Community development activities	€288,784
Setting up irrigation scheme	€238,327
Water programme	€10,551
Conservation agriculture (tree nursery, etc.)	€16,086
Environmental education	€23,115

Source: LNP financial data.

While developing irrigation schemes seemed relevant in view of the regional climate, it is unclear why the project did not try to improve existing production systems in the SZ, especially the two predominant systems, rain-fed agriculture and livestock rearing (see Box 3). This was proposed in the feasibility study, and would have been a relevant step to take.¹²⁴ A likely explanation is that developing agricultural alternatives would have required more time and skills, and taken longer to produce visible effects than irrigation.

A natural resource management plan was supposed to be produced in order to promote sustainable production methods, but was never drafted. Here too, the availability of skilled staff and the time involved would have limited a programme that had already been delayed by the late arrival of the technical assistant in April 2010.

¹²³ The expenses in the ‘SZ development’ budget line also included about €20,000 for HWC mitigation activities. However, in the context of this report this activity has been dealt with in the Protection component, in accordance with its place in LNP activities.

¹²⁴ The feasibility study proposed work on animal health and conservation agriculture.

Box 3 – Livelihoods in the Support Zone before the creation of the LNP

The three main sources of local livelihoods are: (i) Agriculture (corn, beans, groundnuts); (ii) Livestock rearing (cattle and goats) and natural resources, particularly timber (for construction or firewood) and non-timber forest products (roots and tubers, honey and wild fruits from trees and plants, mopane worms, marula nuts, grasses for thatching); and (iii) Hunting.

Agriculture is mainly rain-fed, although rain is unpredictable in this semi-arid climate. Producers usually cultivate small parcels in the dry season, which they water manually, and which are an important adjunct to rainy season production. Surpluses are rare with this type of subsistence agriculture, and hard to sell because the Support Zone is cut off from other areas.

Livestock rearing is the main source of income. The poorest members of the community have few if any livestock, and mainly depend on hunting and whatever timber and non-timber forest products they can find to supplement their diet or make a bit of money. In times of drought, these resources are crucial for people who have no livestock to sell.

Source: BRL, Feasibility study.

The lack of clarity in the initial logical framework meant that it was of little practical use; however, it did leave the people responsible for implementing activities with plenty of room to manoeuvre. The activities – and, in certain domains, strategies – to be implemented should have been specified from the outset and adapted as the project was implemented. Despite the lack of detail regarding the activities, the project funded by AFD was in line with the overall development strategy for the LNP defined in 2003. The intervention logic developed over time in response to various levers and factors (delays in implementation, budget execution rates, stress factors such as pressure from poaching). While the logical framework should have contained more detail on the activities, the general nature of the framework did enable AFD funds to be used flexibly as additional needs emerged over the course of the project. Nevertheless, it should be noted that the lack of clarity in the logical framework is also indicative of a weakness in the LNP's strategic planning and use of its financial resources. AFD funds were systematically incorporated into the LNP's annual budget plans, which were validated by the LNP steering committee. Sliding multi-annual plans would have improved the structuring of activities upstream and the capacity to steer operations as they were implemented.

5.2.2. Donor coordination was satisfactory at the institutional level but relatively weak on the ground

The success of this project depended on close coordination and complementarity between the donors that supported the development of the LNP, particularly KfW, AFD and, to a lesser extent, the World Bank through the TFCA-TD project, which included limited support for the LNP. The support from KfW targeted the resettlement process, and the intervention funded by AFD was supposed to complement this process by financing socio-development activities for communities living in the Support Zone of the LNP. These two interventions were complementary in that some of the people in the Core Zone had to be resettled in the Support Zone.

The coordination between donors was good, particularly between AFD and KfW in the LNP steering committee. This made it possible to successfully lobby the Government of Mozambique, which contributed – with support from the World Bank-funded TFCA-TD project – to the creation and autonomous management of ANAC, the transfer of LNP resources, the payment of rangers' salaries by the Government, and the payment of VAT on contract-related expenses.

At the operational and strategic level, coordination between AFD and KfW funds was managed by the LPN Project Implementation Unit. This ensured that funding was consistent with the priority needs of the park, which were identified each year and financed in accordance with the opportunities offered by each donor. The World Bank, AFD and KfW conducted several joint supervisory missions in the first two years of implementation, but did not continue them over the lifetime of the project.

On the ground, there was little coordination between the resettlement component funded by KfW and the community development component funded by AFD. There are several reasons for this. Firstly, the LNP team responsible for these components was divided into two teams in 2007 when the resettlement component became a stand-alone programme. In addition to this, the first villages were resettled outside the SZ, which contributed to resettlement and development of the SZ being regarded as separate issues. The resettlement programme ultimately adopted a compensation strategy that was very different from the original idea of socio-economic development that was being implemented in the SZ. The studies on the carrying capacity of the SZ were delayed, and were not used to analyse the viability of rearing livestock in the villages that would accommodate displaced families from the Core Zone. The PAC/LNP did not look at the options for reducing the pressure on natural

resources, even though this was a major condition for moving more people into the area; nor did it learn from the partnership approach taken by the resettlement programme. The only example of innovative exchanges between the two programmes is the irrigation project in the SZ.

Cooperation with the TFCA-TD project funded by the World Bank was also limited. This project mainly focused on institutional aspects and only provided very limited support to the development of the LNP, and the World Bank does not participate in the LNP steering committee. As a result, complementarities with initiatives funded by AFD and KfW mainly relate to the creation of ANAC, strengthening the legal framework in Mozambique, and certain aspects of cross-border cooperation between the governments of Mozambique and South Africa.

5.2.3. An intervention based on the principles of cross-border cooperation that underpin the GLTP, which were revitalised during the project

One of the guiding principles of this project was regional integration and the development of the GLTP. The project was conceived as part of the regional dynamic between South Africa (KNP), Mozambique (LNP) and Zimbabwe (Gonarezhou National Park), and designed to help strengthen the basis and content of this dynamic. This regional cooperation weakened between 2006 and 2010, but subsequently regained momentum, particularly between the KNP and the LNP as they had to better coordinate their strategies in response to the increased pressure from poaching. The KNP and LNP have been working on joint and coordinated protection activities since 2011, and joint activities to develop tourism, but there is less cooperation with Gonarezhou National Park.

5.2.4. An institutional setup that reflects the needs of the Mozambican authorities regarding the management of protected areas (PA)

As shown in Diagram 1 on page 42, AFD funding was disbursed to the Government of Mozambique and transferred to the LNP through the DNAC in the Ministry of Tourism (MITUR). In May 2011 the DNAC became the ANAC. AFD funds were made available to the LNP through a mechanism for quarterly payments in advance. In 2008, in the context of this project, PPF signed an agreement with MITUR to provide technical assistance on administrative and financial management of the grant funding from AFD, and subsequently acted as technical assistant to the DNAC. This setup was different from the arrangement for funding from KfW, which went through the Southern African Development Community (SADC) and was then paid to the Government of Mozambique, with PPF acting as the project manager.

This institutional setup was consistent with the desire to strengthen the competences, capacities and autonomy of the Mozambican authorities in managing PAs. It helped build the institutional capacities of ANAC and the LNP, mainly by giving greater responsibility to the Mozambican administration assigned to the LNP, strengthening its institutional mechanisms and building its human capacities. This support from AFD was also part of more overall support from the World Bank-funded TFCA-TD project. An evaluation of this project in 2014 concluded that although ANAC still had relatively little capacity due to its recent creation, it was already showing signs of improvement as it had appointed a national director and was promoting a culture of objectives-based management.¹²⁵

This setup helped balance the relationship between ANAC staff and the technical assistance provided by PPF. The distribution of roles and responsibilities between the LNP administration, the LNP administrator and technical assistance from PPF were clarified as the project was implemented. The mid-term evaluation conducted in 2011 identified tensions between the LNP manager and the technical assistant from PPF over their respective roles and level of authority and influence.¹²⁶ The situation has since changed, and the roles and responsibilities of the different actors have been clarified: the park administrator is responsible for managing LNP administration and policies, while PPF provides technical assistance, particularly with financial and administrative management.

125 World Bank. *Final Evaluation of the Transfrontier Conservation Areas and Tourism Development Project*, 22 December 2014. p.25.

126 International Conservation Services, *Mid-Term Evaluation of the LNP Development Project*, 2011.

However, delays in the progress of the project, which were partly due to difficulties in implementing the procurement procedures and awarding contracts, show that the strategy for technical assistance with project implementation was not sufficiently developed. The technical assistance provided by PPF was spread too thinly (one TA acted as LNP manager by supporting the administrator, and one TA provided support on certain aspects of protection; in 2014 an additional TA provided assistance in managing operations), as it was to manage the different sources of funding for the park (and their procedures) while providing technical support for different components of the LNP development plan. Although the management of AFD funds was delegated to PPF, no additional personnel (responsible for management and administration) were made available to deliver the technical assistance.

Looking specifically at the component of support for development of the SZ, the technical assistance funded by AFD was not integrated into the PIU as originally intended. As a result, the technical assistant was in charge of supporting a project component but had to ask the PIU to release the resources required to implement the corresponding activities (see Diagram 1 page 42). This setup was inefficient and caused delays, especially because the staff responsible for making decisions did not know very much about community development issues.

One of the consequences of this setup was that AFD became much more closely involved in the day-to-day management of this project than is usual. A breakdown of the use of its time shows that the agency spent 457 days monitoring this project between 2008 and 2015, and that nearly half of this monitoring took place between 2008 and 2009.¹²⁷

The funding from AFD had been formalised in the framework of a finance agreement signed with the Government of Mozambique on the 23rd of April 2007. This agreement specified the purpose of the funding, the commitments made by the two parties, the conditions and modes of disbursement, and procurement procedures. It also specified the suspensive conditions for the first payment and the specific undertakings made by the beneficiary. The suspensive conditions are summarised below:

127 By way of comparison, a breakdown of the time spent on the project execution phase, based on projects in the CICIP ENVI sector, which started since the end of 2003 and which are now closed, showed an average of ninety-six days (twenty-five projects) and an average corrected time of eighty days (twenty-one projects). The median time is forty-five days, and the maximum is 377 days.

- The Beneficiary should send a letter to the Agency confirming:
 - The guidelines for the future legal framework on protected areas, giving national parks autonomous management powers,
 - That the LNP is to be authorised to use some of its revenues from tourism to progressively cover its running costs while waiting for the promulgation of the law.
- The Agency should validate the Procedures Manual;
- The Agency should be sent a document stating that the LNP steering committee has been extended to include the Provincial Director of Tourism as a member, and the Agency as an observer; and
- The Agency should validate the terms of reference for the external expert assistance for the Support Zone.

These suspensive conditions for the first disbursement were lifted in December 2007, apart from the final condition regarding the terms of reference for the external expertise for the SZ.¹²⁸ They were realistic and consistent with the institutional context for the management of PAs in Mozambique at this time, and were not onerous for the Government. However, the LNP only received its share of the revenues at a much later stage of project implementation, and although the text on the extension of the steering committee was produced, the Provincial Directorate of Tourism never really participated in these committee meetings. This was indicative of the different parties' lack of willingness to collaborate.

Few of the specific commitments set out in this funding agreement were fulfilled. Among other things, the Beneficiary had agreed to:

- Deal with the fees and taxes related to the project, and cover some of the running costs identified in the financial plan that were not covered by external funding – this commitment was partly the result of intense lobbying by LNP staff and donors, especially regarding the VAT on contracts for infrastructure works.

128 The suspensive conditions were lifted in December “apart from planned activities under the title ‘Community development projects in the Support Zone’, for which a specific non-objection had to be requested at a later date (after AFD’s ANO on the ToR for the TA).

- Adopt, before the end of 2009, a legal text confirming the LNP's status as an autonomously managed legal entity. This was never done, and the LNP has yet to be confirmed as a legal entity. It does have a certain level of management autonomy, but decisions are still made by the LNP steering committee.
- Adopt, before the end of 2007, a legal text authorising the LNP to use the money received from tourism to cover its running costs – the LNP has used some of its income from tourism since 2003, but this money is managed by the Provincial Directorate of Tourism in Xai-Xai, which makes the system for using it very complicated.
- Transfer grant funding to the autonomous structure that would be created to manage the LNP – this structure was never established.
- Reactivate the LNP Liaison Board. It was never reactivated, and has not held a meeting since 2006.
- Organise a mid-term evaluation and act on its recommendations – this evaluation was undertaken in 2011, but its recommendations have only been selectively applied.
- Obtain the Agency's prior 'non-objection' to the development programme for the SZ. The management plan for the SZ does not seem to have been submitted to AFD to ensure that there were no objections to it, perhaps because it would have had to be formally approved by the Mozambican authorities beforehand and this was not done. Indeed, it turned out that there was no more AFD funding for this plan as the money had already been reallocated for infrastructure.

5.3. Effectiveness and efficiency

The evaluation findings presented below are based on the facts and observations regarding each component provided in Section 4.

5.3.1. Partial success in achieving the project objectives and expected outcomes

▷ a. **The ecological integrity of the LNP has been preserved, but the ecological and biodiversity monitoring system is very weak**

The first expected outcome was to protect the ecological integrity of the LNP from illicit activities and manage wildlife in the park. The ecological integrity of the LNP has been preserved, wildlife now circulates freely between the KNP and the LNP, and animal populations have noticeably increased. However, wildlife is concentrated along the border with the KNP and in the north of the LNP, and is still under intense pressure, particularly from the unprecedented escalation of poaching.

Photo 5 – Zebra in the LNP



Photo courtesy of Gaétan Quesne (BAASTEL).

The expected outcome in terms of biodiversity monitoring, research and data management was to facilitate and encourage the implementation of an appropriate system of ecological and socio-economic research and monitoring. Activities were limited over the course of the AFD project, and the LNP does not currently have an appropriate and effective ecological monitoring system, or the human resources to help establish one. The large area covered by the park is one of the constraints it faces in creating such a system.

In terms of environmental education, information and communication, the expected outcome was good communication with communities in the SZ and other stakeholders associated with the LNP. AFD funding for this aspect of the project was relatively limited, and at the moment communication with local communities goes through the different committees put in place by the LNP, which do not facilitate genuine dialogue. In addition to this, the use restrictions put in place by the park, conflicts with rangers and the weakness of their response to HWCs has not facilitated the work of the Community Support Project. Some agents also lack the skills required to work with rural communities and encourage local people to participate in initiatives. Therefore, this objective was not achieved.

▷ **b. Limited progress in developing the potential for tourism, but good progress in legal and strategic terms**

It was expected that efforts to develop tourism would result in the development of sustainable nature tourism and recreational opportunities in the park, private sector involvement and the promotion of community-based tourism initiatives in and around the LNP. The development of tourism potential during the project was limited. This was due to a number of factors: delays in setting up the tourism concessions, delays in the voluntary resettlement of communities in the Core Zone of the LNP, the LNP's low profile and limited visibility, weak marketing, limited tourist attractions (lack of infrastructures, wildlife concentrated in inaccessible areas, limited tourism products), and greater security problems due to the rise in poaching. AFD funding to develop tourism potential focused on improving accommodation (five chalets and four 4x4 campsites) and reception areas. There are also few recreational opportunities and little private sector involvement in the park (this is currently limited to a camp in Machampane).

However, the guidelines for setting up tourist concessions were approved in 2015, and the LNP has a strategic vision for the development of tourism (STDP prepared in 2012). This vision is based on close collaboration with the KNP aimed at facilitating tourist access to different zones in the LNP. It will probably take several years to grant the concessions and develop the infrastructures, amenities and services, which means that LNP revenues will not increase substantially in the near future. This will probably create short-term financial problems for the LNP.

▷ c. Little real progress in improving the living conditions of LNP residents

Socio-economic development in the Support Zone is well below expectations

This sub-component was regarded as AFD's most important contribution to the development of the LNP, and was accordingly given a budget of €4.5 million, of which €1 million was for technical assistance and €2.5 million to finance IGAs in the Support Zone.

Table 9 below compares the projected and actual expenditure for each budget line, and shows that just over a third of the available budget was actually spent. Detailed analysis reveals that expenditure specifically intended to fund community development projects in the SZ (IGAs) was among the lowest, at €290,000 of the €2.5 million available (barely twelve percent). These figures reflect the lack of effectiveness of this component.¹²⁹

There were many problems getting this component up and running. Its start was delayed by difficulties in recruiting the technical assistant. Budget execution rates were low prior to the arrival of the TA and increased when he was in post. The PAC started to function properly in 2011 when PAC staffs were recruited, but there was insufficient capacity building and technical assistance stopped at the end of 2012. The development plan produced by the PAC with support from the technical assistant provides guidelines but is not operational. It is unlikely that substantial investment projects can be made in the short term, as there is no dynamic to identify local people's needs and staff lack the necessary skills to make technical proposals. Reallocating the budget to the Infrastructures component in April 2012 (see Section 3.3.5) effectively shut down the possibility of investing in the SZ.

Table 9 also shows that the budget lines for work expenses for this component (salaries, operating costs, revolving funds and materials, training) were hardly used, unlike the general budget for the park's administration and the PIU. This doubtless explains some of the practical problems that limited work by the PAC teams. It could also be seen as symptomatic of a lack of strategic planning by the park's management team for a zone that is legally inside the park but does not correspond with its conservation priorities.

¹²⁹ As shown in Section 4.3, other sources of funding (LNP revenues, district funds) contributed little to implementation of the development plan for the SZ or its economic development.

Most of the expenditure was on long-term technical assistance (thirty-three months) and the different missions and studies conducted in the SZ: support preparing the SZ management plan, environmental education, study on the carrying capacity of the buffer zone, etc. These studies did not contribute to concrete results for the economic and social development of communities in the SZ: the SZ management plan was neither approved nor implemented, and the study on the carrying capacity of the SZ never seems to have been used – in fact, several members of LNP staff did not know what it was for.

Table 9 – Comparison of planned and actual expenditure for the component ‘Development of the Support Zone’

	Budget (2007-2010)	Expenditure (2008-2015)	Difference	Actual/planned (%)
1. Development of the Support zone				
Salaries	206,000	207,635	1,635	101
Operating costs excluding salaries	260,000	136,769	-123,231	53
Training	208,000	29,080	-178,920	14
External management planning expertise	1,000,000	626,013	-373,987	63
Community development projects	2,500,000	288,784	-2,211,216	12
Vehicles and motorbikes	195,000	0	-195,000	0
Equipment and furniture	13,000	37,556	24,556	289
Community information centres	75,000	30,574	-44,426	41
Villa for external experts	80,000	309,005	229,005	386
Sub-total 1	4,537,000	1,665,415	-2,871,585	37

Source: LNP and AFD.

This component did not generate results in terms of developing local people’s capacity to manage their resources and engage in dialogue with the different authorities (LNP, District). There was no support for the functioning of the committees set up by the LNP, on the use of community funds, or in facilitating dialogue with the park. These committees served as a

channel for conveying information for the LNP rather than as consultative bodies. Nothing was done in terms of participatory planning to enable local people to better understand the issues and define their priorities accordingly. This is particularly regrettable in terms of natural resource management – which is subject to various restrictions imposed by the LNP – as the initial objectives for the project included developing community-based natural resource management.

The component was not efficient in terms of value for money, as the input/output ratio is barely 0.24 rather than the anticipated level of 1.31.¹³⁰

Mixed results in road infrastructure development in the SZ

This sub-component is hard to evaluate. Firstly, improving the road infrastructures had multiple objectives: improving the flow of tourists, facilitating rangers' movements, and opening up the Support Zone. As we saw with the section of road between Pafuri and Mapai (see Section 4.3.7.), it is not always easy to distinguish between these objectives, even for stretches of road inside the SZ. Secondly, the results vary considerably between different sections of road, depending on the quality of the rehabilitation work. And thirdly, there is no baseline situation that can be used to analyse the results. The stretch of road between Pafuri and Mapai, which is relatively good, was already one of the best stretches of road before the works started¹³¹ and was not on the initial list of roads to be improved.¹³² With hindsight, the decision to renovate a section of road that was already serviceable, but not upgrade the unusable road between Chimangue in the south and the Mapai intersection in the north seems questionable.

This component cannot be regarded as effective. The company responsible for the construction work did not have the capacity to undertake such a large task, did not complete all the planned works, and the quality of the final results is very variable and generally sub-standard.

The delays in the work significantly increased the supervision contract. The overall efficiency of this component is also poor.

130 Community investments (development projects and information centres) are regarded as outputs, while other expenditure (TA, salaries, running costs, training, vehicles, furnishings, and the like) are regarded as inputs.

131 BRL, *Feasibility Study*, p.148.

132 AFD *Project Document*, p.4.

▷ **d. Closer government involvement in management of the LNP, which has a more stable organisational structure but still has limited capacity to fulfil its strategic missions**

The expected outcomes of efforts to strengthen the administrative capacities of the LNP were related to the provision of support for staff, finance, procurement, and maintenance of infrastructures and equipment for the different LNP management programmes.

Although staffing levels in the LNP are not far short of what was planned, some of its programmes still lack the human capacities they need to fulfil their missions effectively (especially HWC management and ecological monitoring). The capacities of individual members of staff are still limited and need to be strengthened according to their specific needs.

The LNP's annual budget execution improved considerably between 2009 and 2014, particularly from 2012 onwards, when it more than doubled in comparison with 2011. This budget execution is closely linked with the AFD project and the execution of two major infrastructure contracts. The LNP's financial management and procurement capacities have improved considerably, but there is still room for improvement, particularly in certain aspects of planning.

The LNP's administrative capacities and resources also increased significantly during implementation of this project. The support from AFD played an important role in this improvement (providing specific equipment, building a workshop, constructing two houses for LNP staff). The LNP now has satisfactory management infrastructures and logistical resources.

5.3.2. The project was not very efficient but it supported the LNP over the long term

The project was not very efficient. This is partly because of the mixed results of certain components, accumulated delays in implementation and the increase in running costs as a proportion of the total budget.¹³³ However, these delays did have a positive effect in that they extended the duration of support for the LNP. Supporting the development of a national park such as the LNP, which is still relatively new (it had only been going for six years when the funding agreement with AFD was signed), needs a fairly long timeframe to put in place the basic mechanisms, structures and capacities required for such an initiative.

¹³³ The planned operation/investment ratio for the budget was fifteen percent, and the actual rate was thirty percent—although this figure is not unusual for this type of project.

5.4. Impacts and sustainability

5.4.1. Satisfactory impacts in terms of conservation despite a lack of documentation and challenges in the medium term

There has been a perceptible increase in the density of wildlife since the creation of the LNP in 2001, but it is still under intense pressure from poachers, particularly the elephant and rhino populations. The measures that the LNP and KNP have taken to tackle this pressure are satisfactory and are starting to produce results. However, if they are to be sustainable, this protection and surveillance structure will have to be maintained in the long term, with ongoing government support in covering certain costs. Continued efforts are still needed to build the logistical, material, strategic and human capacities the LNP needs for its protection work. The new support that AFD plans to provide through the first component of the 'Protected areas and elephant conservation project – Mozambique' (APAM), which aims to build rangers' capacities, improve infrastructures and amenities, and strengthen collaboration between the LNP management team and other stakeholders (police, customs, the judiciary, community leaders) should help meet these needs.¹³⁴

In the short and medium term, the LNP should also continue its efforts to tackle corruption (which can be an issue with protection staff), gather intelligence and collaborate with the KNP. The 2014 law on biodiversity conservation is intended to strengthen and enforce the legal framework, mainly by criminalising poaching, and ongoing support from the MozBio programme (a government support programme financed by the World Bank and the GEF^{135 136}) will also help reinforce this judicial system.¹³⁷ These factors should help sustain the progress that has already been made in tackling poaching.

134 AFD, Identification Sheet for the 'Protected areas and elephant conservation project – Mozambique' project.

135 Mozambique Conservation Areas for Biodiversity and Development Project, *Project Information Document, Appraisal Stage*.

136 The aims of the MozBio programme include strengthening the political and legal framework for conservation area management in Mozambique, strengthening human resources and institutional mechanisms for conservation through support for MITUR, ANAC and Biofund, improving the financial sustainability of conservation areas through innovative finance mechanisms (such as the Biofund endowment fund), and managing conservation areas more effectively.

137 Idem.

5.4.2. Limited impacts on tourism development

The annual number of tourists visiting the LNP is still limited and revenues generated by tourism are still modest. At the moment they only cover a small percentage of the park's operating costs, and tourism development still generates relatively little direct/indirect revenues for communities in the park.

Although the projected revenues in the tourism development strategy are probably achievable in the long term, revenues from the LNP will not increase much in the short term. It will probably take several years for tourism to develop sufficiently to generate enough money to cover the LNP's operating costs or support larger-scale socio-economic development activities.

5.4.3. Little impact on the socio-economic development of the SZ

As a direct consequence of the modest results of this component, the impacts of AFD funding on the economic development of the SZ have been extremely limited.

▷ a. The income-generating activities that were tested have low potential for dissemination

Irrigation

Although the lack of data makes it hard to determine what impact the irrigated parcels have had on household economies, we can assume that they had a positive impact on household food security as produce is generally harvested in the dry season when cereals are scarce and expensive. It is more difficult to gauge the income generated by irrigation because producers can only sell small quantities of their produce locally due to the difficulty in accessing large markets.

The irrigation schemes had a limited impact in terms of the number of beneficiaries reached. They are now running in eighteen villages, so assuming that each association has thirty members there will be just over 500 beneficiaries in the SZ, most of whom are women. However, it should be noted that some of the irrigation systems no longer work due to pump maintenance issues and/or organisational problems in the irrigators' associations.

The large number of schemes that have stopped also shows that there is no guarantee that these systems are sustainable, even though the LNP has invested a lot of effort in helping maintain the irrigation systems. Organisational problems are often more of a hindrance to this type of collective investment than technical problems, but this is not peculiar to the LNP irrigation projects. Ultimately, it is likely that the number of functional systems will decline, further reducing the impact of this project on household agricultural production.

Tree nursery

This pilot project does not seem to be economically viable without support from the LNP, as there is no demand for the trees. Many families that received trees have not even planted them. As a result, its impact is essentially limited to providing an income for the families that work in the nursery. Given that it has had so little impact, it is very unlikely to be sustainable, and as there is no market for the trees the opportunities to scale up this pilot action seem very limited.

There are two reasons why AFD-funded activities have had such a negligible impact on household incomes in the SZ: firstly, the very limited scope of the activities and doubtful sustainability of the pilot projects; secondly, there seems to be very little scope to disseminate these pilot projects.

It is also unlikely that the PAC/LNP will be able to implement the other planned IGAs, or even develop the participatory work on community-based natural resource management. Without AFD funding, the PAC now has no means of financing new actions in the SZ and very little to cover the costs of consultative work with a large number of communities.¹³⁸

The economic development activities implemented in the SZ also had a limited impact in terms of reducing the pressure on biodiversity from production systems. The irrigated systems that were put in place complement the existing rain-fed cropping systems and have not modified or replaced them.¹³⁹

138 The PAC's fuel budget was €2,000 in 2015, which is seven times less than it was in 2012.

139 It could even be said that the irrigation projects have had a negative impact on the environment, as the riverbanks were cleared to make way for irrigated parcels.

▷ **b. Restricted access to natural resources has not affected most economic activities, but weakens vulnerable populations**

The boundaries of the SZ were changed to maintain residents' access to areas they normally use to rear livestock and grow crops, so no resources have been lost in this sense. The main changes arising from the creation of the LNP relate to natural resources, particularly forest and wildlife resources. Although forest resources are still generally available because the SZ includes large sections of forest,¹⁴⁰ their use is currently restricted by the LNP. It is hard to quantify the importance of these products in terms of local people's incomes and food security, but there is no doubt that they are crucial to the survival of the poorest families, and to others in times of drought when there are no crops to be harvested.¹⁴¹ Therefore, these restrictions increase the vulnerability of families that are already inadequately compensated by the revenues from the LNP or from tourism.

▷ **c. Fewer human-wildlife conflicts, but only among communities that are protected by the fence**

Local producers have been affected by the resurgence in wildlife, particularly elephants, which often destroy small irrigation schemes as they go to the river to drink. This is the case for villages at the northern end of the fence, such as Panhane, Hassane and Matafula, and those in the far north of the LNP towards Pafuri. At the moment herders have not been affected by wildlife, as there are few carnivores and herd mortality rates have stayed at their normal levels. In the southeastern section of the SZ, the fence is providing effective protection and has greatly reduced the incidence of human-wildlife conflicts.

▷ **d. Infrastructures: the fence has had positive impacts, but those of the roads are more mixed**

It is hard to quantify the impact that the fence that was built to protect communities in the southeast of the Support Zone has had on HWCs, as there are no available data at the village level. However, respondents agree that there are fewer HWCs, particularly with elephants. According to the LNP, the area protected by the fence covers seventy percent of cultivated land in the SZ and fifty-five percent of its residents.

140 There are no detailed data on the residents' use of these resources, so it is hard to determine whether some of the forest resources used by communities in the SZ are currently located outside this zone.

141 BRL, p.45 and 46.

By including all the territory in the southeast of the LNP in the SZ, the fence has increased the amount of available grazing in this zone, which supports sixty percent of the livestock in the SZ according to the LNP. It may also have affected the transmission of diseases between livestock and wild animals, but this is difficult to demonstrate in the absence of any epidemiological data.

However, the fence severely limits the possibilities of developing community-based wildlife tourism, which was one of the main strategies for local economic development.

The road works seem to have had very little impact on socio-economic development in the SZ. The only villages in the SZ that are less cut off due to the road are those near Mapai and Massingir. People from other villages still have to cross the Limpopo or Olifants on foot or by boat in order to access social and economic infrastructures, so this road has made virtually no difference to their lives.

There are also concerns about the durability of the roadworks. Some sections have been upgraded, but most of the problem areas were left untouched (drainage in wetlands, stabilising clayey soils), and driving conditions on these sections will gradually deteriorate unless they are regularly maintained. As no maintenance mechanism was envisaged before the work was done, it is unclear how long the effects of this investment will last.

▷ e. No account was taken of the need to strengthen community organisations

The lack of a capacity-building strategy for local people in the SZ meant that PAC/LNP activities, which were implemented with a classic top-down approach, did not improve the organisational capacities of local communities, their environmental awareness or their capacity to negotiate with the different authorities. For example, the approach adopted for natural resource management would not have enabled local people to negotiate the rules with the park authorities, and consequently would not have helped them preserve local ecosystems or manage resources more sustainably.

Communities do receive some of the revenues generated by the LNP, in accordance with the law in Mozambique. Although the LNP's involvement was limited to giving funds to committees that represent local populations, communities are organising themselves in order to choose social or productive projects and manage this money, which is an important learning process. At the moment they receive relatively little money, and even if it was better managed it would still have a minimal impact on the socio-economic development of the Support Zone. However, they may receive more as tourism activities develop. Assuming that the total revenue from the LNP in the medium term is €1 million (see Section 4.2.2.) this would represent €160,000 per annum for

communities in the SZ or, once the committees' operating costs have been deducted, around €2,500 per village per year. These are still very small sums in relation to the families' resources and the impacts of HWCs or restrictions on the use of forest and wildlife resources, but they could be used for socio-community projects.¹⁴² Therefore, it is more important than ever to prioritise efforts to build the capacities of these committees and strengthen monitoring mechanisms to ensure that the money they do receive is properly managed.

5.4.4. Institutional, technical and financial capacities have been strengthened, but in the short term there are no guarantees of financial sustainability

Some aspects of the LNP's institutional, technical and human capacities have been strengthened over the past years, and although capacity building will still be needed for some time to come, the LNP now has an institutional and organisational structure that allows it to start managing the park in a sustainable manner.

However, it should be noted that the structures that have been put in place to facilitate dialogue and consultation between the park and local communities (village committees, district committees and the park committee) are barely functional. Due to a long-term lack of support, they are barely able to fulfil their role in managing either natural resources or the 20% of receipts from the park. And the LNP Liaison Board, which was supposed to be reactivated as part of the AFD project, last met in 2006. These are certainly not organisations that are capable of enabling local people to participate effectively in managing the park.

The distribution of roles and responsibilities between LNP staff and PPF's technical assistant have been clarified, and the technical assistant has started transferring skills to LNP staff by involving them more closely in preparing annual technical plans and managing departmental work plans. However, the delegation of responsibilities, particularly for finance, remains relatively limited, and the technical assistant still oversees most of the day-to-day management tasks. This raises questions about the sustainability of this type of setup, and how long funding for this technical assistance can continue. Delegating more responsibilities to the programme coordinators would help increase their involvement and their motivation.

142 There are no data on family incomes in the feasibility study or the documents prepared for the resettlement project. An annual income of €160,000 for the SZ amounts to €25 to €30 per family per year, which limits the opportunities for individual investment and suggests that collective investments would be more useful.

It is difficult to assess the financial sustainability of the LNP as there are no budgetary plans available for 2016 and the following years. That said, unless the revenues from tourism increase significantly in the coming years, the LNP is likely to face financial gaps and have difficulty covering its running costs. Therefore, it is imperative that the Government takes long-term responsibility for covering the rangers' salaries. Another possible source of support could be the Mozambican foundation for the conservation of biodiversity (Biofund), which was created in 2011 and which AFD should support.

Finally, AFD and other donors that support biodiversity have played an important role in developing the institutional framework in Mozambique – supporting the 2014 law on protected areas, and helping clarify the mechanisms that ANAC put in place for disbursing the income from tourism in the park. Looking back, it is interesting to note that certain advances that were initially regarded as conditions for the smooth running of the programme now look more like its outcomes.

5.5. The added value brought by AFD

This AFD-funded project has been able to adapt to the needs of the LNP and to changes in the project context. For example, it adapted to the fact that the park did not generate sufficient revenues to progressively cover its running costs, as was originally assumed, and covered a large proportion of the LNP's running costs between 2009 and 2011. The budget for the project component that dealt with the administration of the LNP ended up being about 3.5 times more than the initial figure (€1.98 million rather than the planned €581,000). The project also adapted to the sharp increase in poaching by deciding to use the money left over from the road contract to create the IPZ rangers' unit. This decision to reallocate the budget to facilitate an organisational response to the poaching crisis and ease diplomatic relations with the KNP and South Africa was an appropriate and relevant response to the situation.

All the actors who met the evaluation team were positive about this flexibility, especially the park rangers, as it helped manage a complex situation. This adaptability meant that AFD staff had to be closely involved in field- and office-based project management, and entailed several budgetary revisions and five amendments to the funding agreement. Everyone we met applauded this close involvement by AFD staff in managing the project.

This AFD-funded project has been able to adapt to the needs of the LNP and to changes in the project context. For example, it adapted to the fact that the park did not generate sufficient revenues to progressively cover its running costs, as was originally assumed, and covered a large proportion of the LNP's running costs between 2009 and 2011. The budget for the project component that dealt with the administration of the LNP ended up being about 3.5 times more than the initial figure (€1.98 million rather than the planned €581,000). The project also adapted to the sharp increase in poaching by deciding to use the money left over from the road contract to create the IPZ rangers' unit. This decision to reallocate the budget to facilitate an organisational response to the poaching crisis and ease diplomatic relations with the KNP and South Africa was an appropriate and relevant response to the situation.

All the actors who met the evaluation team were positive about this flexibility, especially the park rangers, as it helped manage a complex situation. This adaptability meant that AFD staff had to be closely involved in field- and office-based project management, and entailed several budgetary revisions and five amendments to the funding agreement. Everyone we met applauded this close involvement by AFD staff in managing the project.

However, the opportunistic use of AFD funds could also be seen as symptomatic of a lack of vision and strategic planning by both the LNP and AFD, which ultimately led to disappointing results (in the development of the Support Zone, for example). One would have hoped that the funding from AFD would have encouraged the LNP to invest more in matters that were not directly related to conservation – but in the end, AFD's intervention did not lead to greater account being taken of the development aspects of a biodiversity project, or to the development of an innovative approach that can be replicated elsewhere.

The funding from AFD did add value in terms of an institutional setup that put the Mozambican authorities in the position of project manager. As noted above, this led to them becoming more closely involved in conservation issues (mainly by covering the rangers' salaries), strengthened the capacities of Mozambican officials (particularly those working in conjunction with the TFCA-TD project), and helped rebalance the management of the LNP.

6. Conclusions and Recommendations

This section summarises the main conclusions of the evaluation and the resulting recommendations, which are divided into two parts. The first set of recommendations, which relate to the LNP administration and the development of the park, is organised thematically (biodiversity, tourism, community development, and the like); while the second, which relates to AFD, considers the design and implementation of future projects to support the development of protected areas.

6.1. Conclusions and recommendations for the LNP

6.1.1. Regarding biodiversity preservation

The ecological integrity of the LNP has been conserved, but there are medium-term challenges that need to be addressed, and a certain amount of monitoring of its effects on conservation.

The mission recommends the following actions in this respect:

R1. Maintain the structure and mechanisms for protection and surveillance of the LNP in the long term, and continue government contributions to the costs of protection. Efforts to build logistical, material, strategic and human capacities to tackle poaching should continue, along with work to improve intelligence gathering, the enforcement of penalties and the collection of fines in order to prevent illegal activities and poaching as much as possible.

R2. Strengthen the LNP's ecological monitoring systems and resources in order to improve the guidelines and planning for LNP interventions and ensure the sustainable development of infrastructures and activities, especially tourism activities and potential. The monitoring system must be strengthened by recruiting an expert, setting up a dedicated database, defining the different roles and responsibilities, deciding how often monitoring data are to be collected, identifying key indicator species, and the like.

R3. Review and strengthen the system for managing HWCs, which is only partially functional at the moment. This could be done through complementary training, the provision of materials and equipment for extension agents and community leaders, and by strengthening the LNP's HWC unit.

R4. Inform local communities about the objectives, benefits and potential effects of the ecological corridors between the LNP and Banhine National Park, and identify compensatory measures to help generate local support for these corridors.

6.1.2. Regarding the development of tourism

The LNP has the potential to attract visitors from South Africa, and more specifically from the KNP. However, little has been done to develop this potential. In the short term, progressive efforts to grant and develop tourist concessions and attractions will not generate sufficient revenues to successfully manage the LNP's finances. In order to develop its potential for tourism, the evaluation team recommends that the LNP:

R5. Secure access to the west of the LNP along the border with the KNP and in the north of the LNP where wild animals are concentrated, and **develop its road infrastructures** so that tourists can travel easily around these zones.

Similar efforts should be made **in the short and medium terms to improve marketing and communication with the general public**, to increase the LNP's visibility, raise its profile, publicise its natural features and infrastructures, and thereby attract a great many more tourists.

6.1.3. Regarding the development of the Support Zone

Local acceptance of the creation of the LNP and the restrictions that it imposes on resident communities depends upon the economic development of the Support Zone. The strategy proposed in the development plan for the SZ is unconvincing and ineffective. The proposed IGAs were not based on a detailed assessment of the diverse existing production systems and strategies in the zone, or on discussions with local people. In terms of natural resource management, the plan provided a framework that should have helped develop rules for resource use, but made no attempt to establish any rules which could serve as examples.

This plan should have been implemented by the PAC/LNP with funding from AFD. This money is no longer available, and as the PAC/LNP team now has very limited capacity to act it will be necessary to think about what role the LNP can play in the development of the SZ. The LNP's job is not to promote socio-economic development – this falls under the jurisdiction of the districts – but it should ensure that development options do not damage the integrity of the ecosystems within the park. This provides a good opportunity to start managing the SZ in a participatory manner that includes the local administrations, in accordance with the principles laid down by the law.¹⁴³

The mission thus makes the following recommendations:

R6. A change of approach is called for. The district and provincial technical services and local populations should be regarded as leading actors in the socio-economic development of the SZ. In order to do this, frameworks for the joint development of the SZ that include these actors should be set up – as with the resettlement programme – with a roadmap of consensually agreed activities for these bodies based on district development plans, the development plan for the SZ and consultations with local communities.

Each institution's responsibility for the activities identified within the roadmap should be clearly defined. The deconcentrated State services should be made responsible for IGAs and social services, while the PAC/LNP could help facilitate dialogue, seek funding to develop priority actions, and ensure that the ecological objectives of the SZ are fulfilled. The PAC/LNP should retain overall responsibility for all matters relating to natural resource management.

▷ a. Implementation of pilot IGA projects

Build local actors' capacity to develop community tourism

The LNP sees tourism as a key vector for local development in the SZ. But local actors are currently unable to benefit from tourism, even if it does develop in accordance with the tourism development plan.¹⁴⁴ Their lack of training, poor grasp of English or Portuguese, limited capital and lack of entrepreneurial support make it very difficult to do the jobs or seize the business opportunities that tourism is expected to create. It is highly likely that, as is the case with existing tourist structures, the new concessions will be managed by South African entrepreneurs who have the necessary experience and capital to satisfy a mainly international

143 Article 7 of Law N°16/2014, of 20 June 2014.

144 As we saw in Section 6.1.2, the benefits generated by tourism are likely to take some time to appear.

(and partly South African) clientele. These factors may also be a constraint to the development of eco-tourism, which could also suffer from the fact that much of the SZ is hard to get to and offers limited opportunities to see wildlife.

The mission therefore recommends that:

R7. The LNP prioritize capacity building in its development plan for the SZ—particularly the strengthening of local actors’ capacity to engage in tourism. Actions in this priority area could include: assessing local job opportunities and local people’s priority needs for capacity building; assessing the business opportunities associated with the development of tourism, and the financial and non-financial services and training that will be needed to enable local people to seize these opportunities; conducting a feasibility study on the opportunities for eco-tourism that have already been identified, with business plans for the options whose potential is the greatest.

It will also be important to pursue strategies other than tourism for the economic and social development of the SZ, particularly by strengthening existing local activities in the zone (agriculture, livestock rearing, natural resource management). In this respect, the evaluation team makes the following recommendations:

R8. As resources for IGAs will be limited and new activities will need to be tested and/ or innovations developed within existing activities, it would be realistic to continue with the pilot-project approach that was developed for the irrigation schemes. In these conditions, it will be particularly important to establish a system for monitoring and disseminating the results of the pilot projects.

These pilot projects could make it a priority to target villages whose natural resources have been affected by the creation of the LNP – such as villages that have agreed to accommodate a resettled community on their territory,¹⁴⁵ or that will have ecological corridors running through their territory.¹⁴⁶

Promoting sustainable agriculture

The extension of the pilot irrigation projects was hampered by several factors: technical constraints caused by the difficulty of finding suitable sites for irrigation along the Limpopo; economic constraints associated with the high cost of irrigation, which makes this type

145 Loss of forest reserves (converted into fields for displaced villages) and sharing grazing resources

146 Unfortunately, these can no longer be used for domestic grazing due to their potentially nefarious effects on animal health.

of investment unaffordable for the majority of producers or even village committees; and organisational constraints, which proved to be one of the main weaknesses of the current projects.

Recommendations for irrigation:

R9. Conduct a detailed assessment of the difficulties with existing systems, with feasible recommendations to improve their functioning and for new irrigation schemes. This should also analyse: (i) the organisational weaknesses of existing pilot projects, and their links with the heterogeneity of project beneficiaries; (ii) maintenance problems with the irrigation system, in order to set up a functional system that can operate independently of the LNP; (iii) economic constraints, particularly possible outlets and markets; (iv) the possibilities of extending irrigation schemes in different zones (Limpopo/Olifants) and in different ways (improving the current system, improving traditional irrigation schemes, and the like).

R10. Identify the kinds of support that existing groups of irrigators need in order to overcome their difficulties. The LNP should sub-contract this work to the district services if they have the necessary skills and resources, or to specialist NGOs such as Lupa.

Irrigation cannot be the only means of intensifying local agricultural systems, given the constraints that have limited the development of existing schemes. Therefore, work should be done to improve rain-fed systems so that they contribute to food security whilst limiting any potential negative impacts on biodiversity.

The mission therefore recommends the following actions:

R11. Conduct action-research on rain-fed systems in order to analyse their possible effects on ecosystems, and investigate ways of improving their productivity without increasing risks for producers. Pilot projects on conservation agriculture techniques, more integrated agriculture/livestock systems (such as animal traction, and manure to improve soil fertility, to name just two) are interesting avenues to explore and test. Research bodies and NGOs working on agro-ecology could be partners in implementing these pilot projects.

Strengthening the place of livestock rearing in production systems

Livestock rearing is an essential element of production systems. It serves as a way of using parts of the ecosystem that are unsuitable for agriculture, as an income-generating activity, and as a vehicle for investment or responding to climatic variability. Therefore, developing livestock systems is a priority for poverty reduction and for enhancing the resilience of pro-

duction systems in general. The sustainable management of pastoral resources in a context of population growth—whether it be due to natural increase or to resettlement—and an increase in herbivorous wildlife should be an extremely important issue in the medium term.¹⁴⁷

The mission therefore recommends that:

R12. The priorities in the development plan for the SZ include the sustainable development of livestock rearing. Action-research pilot projects could be set up using the same model as agricultural pilot projects. Possible avenues for exploration could include animal health issues, as advocated in the feasibility study, or ways of enabling the poorest families to access cattle, as has been proposed in the district of Chicualacuala.¹⁴⁸

▷ b. Negotiated rules for natural resource management

The situation regarding the rules for natural resource management must change, for several reasons. Firstly, there is a contradiction between the general rules in the SZ development plan and what communities are told about the rules by the LNP. The current rules are also unclear and constitute an obstacle to the economic development and preservation of ecosystems in the SZ.¹⁴⁹ Thirdly, the least well-off families with the fewest livestock are heavily dependent on forest and wildlife resources for their livelihoods, especially in times of drought.

It is therefore essential that the PAC/LNP help establish agreed rules for natural resource management and ensure that ecosystems can both function properly and provide incomes for local people. Legal instruments exist for this very purpose, with management plans based on the general objectives of conservation areas that allow norms for natural resource use to be established.¹⁵⁰

147 The report on the carrying capacity of the SZ indicates that it can support the current population of domestic animals, but that it has already nearly reached its limit (*Ruralconsult: Estudo do potencial de uso de terra e capacidade de carga para a população da zona de apoio do PNL – 1.1 Relatório da análise integrada da capacidade de carga da zona de apoio do PNL e baseline da capacidade de carga – relatório final, Maputo, 21/12/12, page 60*.) At the moment there are few wild herbivores in the SZ, and they do not yet compete with domestic animals.

148 The report on the carrying capacity in the SZ cited above also contained several proposals for the sustainable development of agriculture and livestock rearing. Unfortunately it was completed in late 2012 when the PAC/LNP no longer had the funds to integrate these proposals into their development priorities.

149 For example, is the development of artisanal activities, which is desirable if tourism flourishes, compatible with the rule that only allows natural resources to be used for non-commercial purposes?

150 The models for natural resource management that would be put in place in the SZ could be used for the GLTFCA, where sustainable use of natural resources outside conservation areas is a major challenge.

The mission thus recommends:

R13. A participatory assessment of the ways that residents in the park use wildlife resources and non-timber forest products, in order to (i) determine their role in local people's food security, income generation and level of resilience; (ii) understand the community rules for accessing and managing these resources. This assessment should be accompanied by an analysis of the state of these resources within the SZ, the risks of over-exploitation and measures likely to encourage sustainable management.

R14. These assessments should be used to set up mechanisms for negotiations between the LNP and local populations, represented by their committees, in order to establish management rules for the resources that are most important to residents of the SZ. Ideally, this process will be supported by NGOs that specialised in community-based natural resource management, in order to assist the consultative structures that have not been trained to play this role.

R15. Finally, the LNP should put in place a system to monitor all the resources for which management rules have been established, so that the sustainability of their use can be evaluated.

▷ c. Community involvement in resolving human-wildlife conflicts

Wild animals pose a serious threat to crops, and especially hungry season crops grown by communities that are not protected by fences. This increases their vulnerability to food insecurity. If wildlife re-populate the LNP as planned, HWCs north of the fence will increase in the coming years. The political pressures that led to the erection of the fence in the southeast of the park show that resolving these conflicts is an important issue for local people, and one of the keys to their acceptance of the park. LNP's plans to extend the fence up to the northern boundary of the park do not seem very realistic, given the costs involved.

The mission therefore recommends that:

R16. The rangers' capacity to intervene should be strengthened so that they can be on the scene within twenty-four hours of an HWC being reported (cf. R3);

R17. Communities should be better informed about, and equipped to repel, animals that approach their villages or crops.¹⁵¹

¹⁵¹ AFD funds were used to train local people in HWC management, but the LNP abandoned this initiative in favour of purely ranger-based HWC management.

▷ d. Build residents' capacity to participate in the development of the park

One of the objectives of the LNP management and development plan¹⁵² and AFD's funding¹⁵³ was for local people to participate in the management of the park. But there was no parallel strategy for building local people's capacities, and the technical assistant was unable to give the teams the training that they needed to work effectively on participatory approaches and community organisation. However, there are still opportunities to build community capacities to use the twenty percent of revenues they receive from the LNP, identify IGAs and define rules for natural resource management.

The mission therefore recommends that:

R18. PAC/LNP teams are trained in participatory approaches and in capacity building.

R19. All planned activities should include interventions by an NGO that provides capacity building for local communities and their organisations. This means that the PAC/LNP will need to focus on planning and facilitating processes rather than the direct implementation of activities.

This strategy applies to all the foregoing recommendations; local people's participation in consultative frameworks, the functioning of community committees set up to manage wildlife or the twenty percent share of LNP revenues, and the like.

R20. Establish a strategy to ensure that lessons can be learned from the pilot projects that have been put in place.

6.1.4. Strengthening the capacities of the administration

The 2003 management and development plan for the LNP expired in 2008, and no longer reflects the local or national context or the pressures and challenges facing the LNP. The evaluation team accordingly makes the following recommendations:

152 LNP Management and Development Plan, "To develop a framework and implementation programme for effective community empowerment and participation in the planning, management and development of the LNP," 2003.

153 AFD funding had several goals: 1) For the population to appropriate the benefits of maintaining a park and its biodiversity; 2) For the communities concerned to make effective use of their rightful share of the revenues generated by the park; and 3) Ultimately, for local people to participate in management of the park through a management council that will be set up when the park is established as a legal entity.

R21. Strengthen the strategic vision for the LNP by updating the management and development plan more regularly. This should be done using a more participatory approach that involves local communities and leads to the production of regular bi- or tri-annual business plans.

Some aspects of the LNP's institutional, technical and human capacities have been strengthened in recent years, but its organisational structure still lacks some of the skills needed to fulfil its missions. In order to remedy this, the evaluation team makes the following recommendations:

R22. Build the capacities of staff responsible for ecological monitoring and managing HWCs, and design and implement a capacity-building programme to improve staff motivation and involvement in management of the LNP.

The following recommendations relate to the financial sustainability of the LNP:

R23. Identify the most sustainable, stable and predictable sources of funding, mainly through trust funds, in order to cover:

- i) Recurrent running costs that are not yet covered by the revenues generated by the park;
- ii) Day-to-day monitoring activities;
- iii) Long-term community commitments, awareness-raising processes and conflict resolution procedures;
- iv) Continuous staff training to meet specific needs;
- v) Political advocacy, networking and coordination of long-term processes;
- vi) Long-term ecological monitoring and research activities, which have previously been sidelined and could better inform and measure the effectiveness of the impacts of conservation efforts.

6.1.5. Regarding the direction of the LNP

The LNP's limited strategic vision makes it hard to direct its interventions and manage its different sources of funding. The evaluation team therefore recommends the following course of action for the LNP steering committee:

R1. In the short term, validate a more strategic vision for the LNP, setting out the strategic pillars and objectives for the park, the expected outcomes for the next five years, the relevant activities and the resources required for their implementation.

Although some of the LNP's income from tourism is now reinvested in LNP activities, this money is not managed by the ANAC. Instead, it is managed by the Provincial Directorate for Tourism in Xai-Xai, through the State's financial management system for (SISTAFE). In this respect, we make the following recommendations:

R2. Lobby for the LNP to be able to channel the revenues from tourism through the ANAC, and thus use SISTAFE.

The Support Zone development and resettlement programmes entail working with different State services, and therefore require inter-ministerial cooperation.

R3. Include key ministries in the steering committee (Mitader, and Ministry of Agriculture, among others).

6.2. Conclusions and recommendations for AFD

During the evaluation of this project to support the development of the Limpopo National Park, the team identified a number of operational and strategic recommendations regarding future support that AFD may provide for the creation and/or development of national parks.

6.2.1. Project definition and appraisal

AFD's initial design procedure did not result in a completely coherent project design detailing the activities to be undertaken. This is partly due to an apparent mismatch between the feasibility study and stakeholder expectations regarding funding for the Limpopo National Park development plan, which meant that many of its proposals were not followed up on. The team's recommendations, which are presented below, tie in with AFD's current project design cycle:¹⁵⁴

154 This consists of: 1) An identification phase that includes an identification checklist and preliminary version of the project identification sheet (PIS); and 2) A design phase that includes feasibility studies, such as an external feasibility report, a feasibility checklist, a project presentation sheet [PPS] and ex-ante evaluations (environmental and social sheet – ESS, evaluation checklist, sustainable development analysis and review [SDAR] and a more detailed PPS).

R1. External experts should conduct strategic, institutional, operational and technical appraisals before the external feasibility study is undertaken, and before or after the PIS has been validated by the Identification Committee. These appraisals are to be validated by all stakeholders in order to provide a sound basis for the terms of reference and the external feasibility study.

R2. The terms of reference for the feasibility study should prioritise partners' objectives and expectations, for example, by specifying which elements of the project must be defined at a given stage and which ones can be defined as the project begins and then progresses.

R3. The external feasibility study should include:

- An institutional and organisational assessment of the structure of the park concerned, in order to identify its priorities, needs and absorption capacities, in addition to the definition of an appropriate organisational and institutional development plan. The institutional assessment should also cover all key institutions in order to plan support that will enable each entity to fulfil its role in the project.
- An analysis of the underlying assumptions of the park's management and development plan, and realistic scenarios for its development and funding.
- Detailed ToR for the recruitment of TAs so that the recruitment process can start before suspensive conditions are satisfied or waived. This should help avoid delays in project implementation.

The institutional setup based on the existing PIU was relevant, but the lack of additional on-site technical assistance resulted in poor financial management and procurement procedures in the early years of the project.

AFD was very closely involved in the day-to-day management of this project: the agency spent 457 days monitoring it between 2008 and 2015, and nearly half of these occurred between 2008 and 2009. In comparison, a breakdown of time spent on the project execution phase in a sample of twenty-five projects showed an average of ninety-six days and an average corrected time of eighty days (in twenty-one projects).

R4. Thorough assessment of the technical and administrative support that will be needed to build financial management and procurement capacities should be undertaken, and the necessary funding and technical assistance provided.

The fact that the technical assistance for the SZ was not supplied to the PIU created operational problems, and resulted in a lack of influence in the reasoning process of the conservation actors, who ultimately defined the strategic and operational priorities for the park's development.

R5. Ensure that the institutional and financial setup gives technical assistants the resources and mandate to execute their activities and influence the strategic and operational guidelines for the development of the park.

The assumptions on which the financial support for the LNP was based did not reflect its needs, and proved wildly optimistic about the park's capacity to generate its own revenues through tourism.

R6. The justification for the project's viability and funding should not be solely based on unrealistic self-funding objectives, but on sound analysis of the economic and social benefits generated by the park, which should merit a budgetary transfer from the State. This analysis should facilitate better interaction between different types of funding, including in-house resources, external budgets and transfers from the State budget.

The project focused on the LNP, and took little account of the administrative authorities that are mandated to intervene in the development of the territories where the SZ is located. This strategy was not effective, as the LNP saw development of the SZ as secondary to managing biodiversity in the Core Zone, while the local authorities regarded this as the LNP's responsibility.

R7. Projects should include specific support to enable the administrations and local authorities concerned to fulfil their roles. These stakeholders should also be included in the steering committee in order to facilitate inter-sectoral and inter-institutional dialogue.

The complexity of the legal and institutional changes involved was underestimated. It takes time to approve the legislative texts and decrees that enable changes to the institutional framework for biodiversity management, especially when a programme is focused on actions in the park and has few resources to make progress on these issues at the central level.

R8. Determine whether the changes envisaged at the national level (legal and institutional changes, and the like) will be driven by members of AFD staff (agency and head office) and AFD involvement in lobbying and institutional dialogue, or whether they should be covered by specific technical assistance at the ministerial level (TA for ministerial advisors, intermittent TA, support for the contracting authority, among others).

The success of the project depended on several assumptions that had a significant time component, such as wildlife repopulation, the benefits generated by ecosystem conservation, the development of new models of resource use and the adoption of a new legal framework.

R9. AFD should follow the example of other donors (GIZ, KfW) and finance ten- to fifteen-year programmes with mid-term evaluations, which are better suited to biodiversity objectives, rather than five-year projects with a possible (and often problematic) second phase. Phased multi-tranche financial tools should be used for these programmes.

6.2.2. Project implementation

AFD has considerable experience with local development approaches but was unable to reproduce them in the context of this biodiversity project. One reason for this may be that the technical divisions responsible for rural development had little involvement in the project. The department for rural development did not spend any time on this project until the division for Agriculture, Rural Development and Biodiversity (ARB) was created in 2012.

R10. AFD should incorporate internal incentives to encourage interdisciplinary initiatives, and mobilize the different types of in-house expertise available by working across sectoral teams.

R11. Mandatory procedures and resources should be put in place to update park development / management plans when they become obsolete and no longer provide strategic guidelines for the project.

7. Lessons Learned

7.1. Challenges associated with setting up a national park

A national park (NP) is a protected area that the State creates to safeguard exceptional natural and cultural heritage sites, with a system of organisation to preserve and manage these national assets.

7.1.1. Constructing a territory

The first challenge in setting up a national park is establishing a specific territory within the setting that is managed according to different rules from neighbouring territories. As national parks remain in the same administrative jurisdiction as the one in which they were created, there must be space for dialogue and consultation to ensure that the park's rules do not conflict with those of the existing administrative institutions.

Many national parks also cover areas where established human communities have already made their mark on the landscape and the biological diversity of the territory (particularly through pastoralism and forest management), and who have long since developed innovative ways of meeting their own needs while respecting the environment.

Addressing the needs of the communities that live inside the park (such as economic development, social infrastructures, and the opening up of isolated areas) may clash with the objectives of preserving the natural environment. This is usually the justification for dividing parks into different areas, with central zones dedicated to preserving biodiversity where human activities are generally limited (called the "core" of the park). The rest of the park is often used to develop a sustainable economy based on the preservation and economic exploitation of the natural, cultural and topographical heritage.

Required for the creation of a national park is a long-term *territorial project*, which should be based on a shared vision on behalf of the various stakeholders (such as the institutional actors and the inhabitants that live and make their livelihoods in the park). The territorial project is particularly important for inhabited zones, where compromises must be made between diverse actors in order to achieve different and often contradictory objectives.

In the case of the LNP, the 2003 management and development plan served as a territorial project document, inasmuch as it proposed an integrated vision of development for the park based on zoning of the territory within its boundaries. However, the lack of willingness to involve other actors in the territory – and the way this was done – meant that it was essentially an internal document for the LNP, which did not engage with any other institution. Many of its aims were not fulfilled, especially those relating to community involvement in the park's management mechanisms. As a result, the LNP has tended to limit its actions to the centre of the park, to the detriment of the Support Zone, and has either focused on biodiversity or on making the park economically viable, to the detriment of community development and local economic activities in the Support Zone.

As for the other actors, they have carried on with their activities without taking account of this management and development plan. This is particularly true of the local authorities, whose vision was more centred on development opportunities than on the conservation aims of the LNP. Currently, they continue to intervene in the portion of their territory where the LNP is located as if it didn't exist, and without reference to the park's management and development plan or its management plan for the Support Zone. Worse still, some mistakenly believe that they are not obliged to invest in socio-economic infrastructures in the SZ because it is part of the LNP. This is largely due to the lack of clarity about the division of responsibilities between the local authorities and the LNP authority.

The above issue is also true for the village communities. Apart from the realignment of the SZ and construction of the fence in the southwest of the SZ, the plans that have been drawn up take very little account of their needs and projects – especially the SZ management plan. These communities do not support the creation of the park. In their experience, its drawbacks outweigh its advantages, and they see it as an incomprehensible State imposition. Many residents in the southeast of the SZ regard the fence that was erected to protect them from wildlife as the park boundary, and they believe that as they are outside the park its rules do not apply to them. Conversations with certain members of LNP staff revealed that they thought likewise, as the area they referred to as 'the park' was in fact its Core Zone.

A territorial project will only be supported by all the actors in the territory if they have an equal say in its implementation. Nearly fifteen years after its creation, the governance of the LNP – the PIU and steering committee – is still in the hands of the public institutions responsible for managing protected areas and the donors that support them.¹⁵⁵ The body

¹⁵⁵ The Provincial Directorate for Tourism was invited to join the LNP steering committees (this was one of the suspensive conditions for AFD funding), but never participated in them.

responsible for consultations with local communities and local authorities (the LNP Liaison Board) does not function, and the 'Management Committee' that was set to replace it was never created.

7.1.2. Building an institution

Conservation Finance Alliance (2013) identified four main stages in the development of a national park. The figure in Annex 13 ("Different stages and funding requirements in the development of a protected area") is a diagram of these four development phases, showing the financial needs of each phase, which change over time, along with the priorities and activities to be implemented. The standard priorities and activities associated with each phase are presented in Annex 14 ("Evolution of standard activities and priorities in the four phases of the development of a PA"). The evolution and structuring of the LNP from its inception to the present day is shown in relation to these four phases in Table 10 below.

Creating a national park is a long-term initiative that requires investments in different domains (including but not limited to community development, biodiversity conservation, environmental education, and research). The case of the LNP has shown that the different programmes and investments must be coherent and consistent in order to progress from one phase to the next, and that this is particularly important for the park to become financially autonomous.

In order to function, national parks need a competent administration and an appropriate legal framework. When the LNP was created in 2001, Mozambique had to put in place an administration from scratch, and was only able to do so with technical assistance from PPF and funding from KfW. One of the main challenges it faced was – and still is, despite the progress that has been made – developing national competences in conservation and community development. At the time the legal framework was not adapted to the reality of national parks in Mozambique (for example, it made no provision for the presence of human populations, even though they live in nearly every national park in Mozambique) and was not conducive to management models based on the development of tourism activities. Creating and strengthening human capacities, and changing legal and institutional frameworks are fundamental aspects of establishing national parks that require time and very targeted development strategies.

Table 10 – Situation in the LNP in relation to different phases in the development of a park

Phase	Description of the stages associated with each phase of development	Situation in the LNP
Identification and establishment phase	<p>The PA is legally established, but at this stage its management is not very structured or active. The institutional and operational bases for the protected area are established but not stabilised and require significant strengthening.</p>	<p>The LNP went through this phase from 2001 to 2004, before the AFD project was formulated. This phase included establishing the LNP Steering Committee and the PIU, setting up temporary LNP offices in Massingir, creating a rangers' unit, constructing an enclosed zone for the reintroduction of wildlife, producing a procedures manual, setting the guidelines for the management and development plan, developing guidelines for the voluntary resettlement programme, and producing the first plan for the development of management and tourism infrastructures.</p>
Early operational phase	<p>The first management plan is produced and capacities of the management team are strengthened. The institutional and operational foundations for the PA are structured and strengthened, but most of the funding comes from external sources. Systematic additional capacity building is needed at the individual and institutional levels.</p>	<p>It could be said that the LNP entered this phase in 2003–2004 with the formulation of its management and development plan. Therefore, it was in this phase when the AFD project was formulated. Between 2004 and 2006 there were several campaigns to reintroduce animals into enclosures within the PA, which opened in 2006. The border between the LNP and the KNP was opened in 2005, and about fifty kilometres of fencing between the KNP and the LNP was removed in 2006 to allow animals to move naturally into the LNP. However, support was needed to build the individual, organisational and institutional capacities of the LNP. There was minimal government involvement, and the LNP's running costs had to be covered by external funding as the park was not generating any money at that point. The LNP remained in that phase until the end of the AFD project, with (i) the replacement of equipment and means of transport, mainly in 2009; (ii) the construction of certain key LNP infrastructures such as roads, the fence and the workshop; (iii) community socio-economic development activities; (iv) the promotion of tourism with the drafting of the tourism development strategy in 2012.</p>

...

...

Phase	Description of the stages associated with each phase of development	Situation in the LNP
Consolidation phase	<p>Management capacities and clear, structured operational and institutional frameworks are in place. The great majority of key activities and services in the protected area have been undertaken. The PA is starting to generate its own financial resources and government involvement is increasing. However, a financial gap remains, internal capacities are still lacking and need to be strengthened, and various pressures and threats to biodiversity are not fully mitigated.</p>	<p>The LNP can be said to have just entered this phase of development. Its institutional and operational structures have stabilised and there is a better balance in the distribution of roles and responsibilities between LNP staff and the technical assistance from PPF. The LNP has restructured its HR and refined its institutional flow chart. The government is much more engaged: it covers protection staff salaries, has funded the creation of ANAC, refunds VAT on works contracts and is much more involved in the institutional and financial aspects of the resettlement programme. The park's protection structure is much stronger, with the creation of the IPZ unit and better protection infrastructures and equipment (Mapai rangers' base, vehicles and equipment for rangers). Its reception infrastructures have also improved (with reception centres in Massingir and Giriyyondo, campsites, chalets, road infrastructures between Giriyyondo and Massingir), and its administrative infrastructures have been consolidated (LNP offices, accommodations and workshop areas). AFD has helped the LNP progress from the development to the consolidation phase.</p>
Mature phase	<p>This is the phase when development stabilises. The PA is able to secure sustainable and predictable financial resources, and minimise any financial shortfalls. It has strong internal capabilities and the main threats to conservation and biodiversity are largely contained.</p>	<p>The consolidation phase is not yet over. More individual capacity-building work is needed, and the 2004 management and development plan still needs to be updated. The LNP's strategic vision is limited to the short and medium terms, and it still needs substantial financial investment (such as tourism and road infrastructure). Although the LNP generates some revenues, most of its running costs are still provided for by external funding. It does not have stable, sustainable and predictable financial resources. Although concessions have begun to be allocated, it will take several years to develop the potential for tourism. Finally, the LNP still faces several challenges and threats, including intense pressure from poaching and considerable delays in the voluntary resettlement programme. The road infrastructures outside the Giriyyondo-Massingir axis are in very poor condition, wildlife are concentrated in inaccessible areas, and the socio-economic development of resident populations is weak. It will be several years until the LNP moves into this mature phase of development.</p>

Source: authors

7.2. How can national parks reconcile biodiversity protection with human development?

It is often hard to reconcile biodiversity protection with human development in national parks, because the relevant institutions and competences operate in separate spheres that rarely communicate with each other.

‘Conservationists’ continue to pursue the myth of nature in climax equilibrium that is inexorably damaged by the presence of humans. This belief leads them to think of parks as places where nature must be ‘kept under glass,’ with spaces that are incompatible with human presence and activity.

‘Developers’ often refuse to take account of the impacts that human activities have on ecosystems and particularly on wildlife, whose development is affected by domestic animals. They repeat the mantra of ‘sustainable development’ in order to avoid having to review their technical and economic models.

In reality, the peripheral areas of national parks are often inhabited, and in developing countries people sometimes live in the Core Zones of parks. Frequently, these communities have developed ways of exploiting nature that do not threaten the sustainability or functionality of ecosystems.

Inhabited parks only became an option in Mozambique with the introduction of the Biodiversity and Conservation Law in 2014. This has opened the way for efforts to strike a balance between developing tranquil and stable spaces where ecosystems rich in flora and fauna can flourish, and spaces where a certain level of disruption is even desirable and necessary for community development as a whole.

However, a change in the law does not necessarily translate into a change in mentality or practice. The difficulty here is that it is often local actors who are called upon to strike this spatial development balance and to set the relevant rules of management. The power play between actors is poorly regulated and often highly unbalanced: if environmentalists have the upper hand they ban the exploitation of natural resources, while if market forces hold sway they have no scruples about destroying ecosystems.

The case of the LNP shows that despite their stated intentions, conservation officers tend to regard resident populations as obstacles rather than allies in achieving their goals. If their presence in the park is tolerated, it is not seen as an asset in terms of environmental protection or tourism development. It must be said that the unprecedented increase in poaching big game (rhino and elephant) has deepened the LNP's mistrust of local people who, while they may not be directly responsible for trafficking (which requires considerable resources), may turn a blind eye to it or even provide logistical support for its occurrence.

This conundrum partly explains the lack of political will to act on the stated intention to include local people in the bodies responsible for steering the park, or even in planning the development of the SZ, where over 20,000 people live and work. The objectives of community participation in park management (which is framed as joint management in the LNP management and development plan) have gradually been abandoned. Even for the SZ, the management objectives mainly take account of the park's vision, not that of local people.

There are also questions about some of the assumptions behind the objective to entice local people to support the park's preservation objectives. The first concerns the benefits that communities would derive from wildlife tourism, which were wildly over-estimated;¹⁵⁶ and the second concerns the potential effects of ecosystem preservation on local livelihoods, which seem barely perceptible (at least in the short term).

The LNP is not only unwilling to consider local needs and aspirations, but also has no strategy or proposals for enabling communities in the SZ to participate in planning the development of their territory or, in the medium term, in managing the LNP. This is particularly evident in the complete absence of a strategy for training the committees that the LNP itself may have put in place, which would have been designed to defend villagers' interests against the LNP. From 2006 onwards these committees would have managed the twenty percent share of the revenues generated by the park. Local representation in the structure responsible for overseeing the park nonetheless requires a strategy for progressive and continuous capacity building for these committees.

156 The TFCA's vision is that "the possibility of changing land use practices from subsistence farming on marginal land to community participation in ecotourism based enterprises may have sustainable economic and ecological benefit for all." *LNP Feasibility study*, op. cit., page 50.

So how this can be done? It may seem simpler to define and try to enforce rules than to negotiate points of common agreement between what are often conflicting visions and interests, especially when people have not been trained to do this. Participatory work with human communities is never easy; it requires particular skills and knowledge that are not always readily available, especially in authoritarian societies. The PAC did not – and still does not – have sufficient or sufficiently well-trained human resources to undertake this kind of exercise. Given the substantial budget that AFD devoted to this component, it is ironic that it lacked the resources needed for participatory work in an area as extensive as the SZ in the Limpopo National Park.

Promoting socio-economic development – and preserving biodiversity – in a given territory requires a particular set of skills. Unfortunately, relevant expertise on behalf of the management team of the park was lacking, and as the dedicated technical assistance was unwilling or unable to generate a strong dynamic supporting the development of the SZ, the opportunity to influence the priorities defined by the PIU (by participating in the process, for example) was missed.

Rather than being managed by the PIU, it might have been more relevant for the socio-economic programme in the SZ to have been managed by a specific organisation responsible for designing the strategy and implementing the programme (as with AFD's programme in the Quirimbas National Park). This type of setup can be based on partnerships with organisations that specialise in local development and have the specific expertise needed for socio-community development. It is important however, not to underestimate the technical assistance, resources and above all the time needed to implement participatory processes and to launch socio-economic development initiatives, especially when one of the aims is to change local systems of production.

As noted in the previous section, another key element that was missing from the planning and implementation of socio-economic development in the SZ was the close involvement of the local authorities. This was a missed opportunity in many ways, not least because the tensions between the LNP's and local governments' vision for the development of the SZ could ultimately lead to a universally acceptable compromise, and help clarify each institution's role in providing and maintaining investments, or delivering technical support for the residents of the Support Zone.

7.3. National park support projects must take account of the threat from international wildlife trafficking

The sharp rise in international poaching over the last ten years significantly affected the development of the LNP and led to the reprioritisation of AFD's financial support for the park. This international phenomenon has serious repercussions at various levels: as an ecological threat to the very existence of two emblematic species, the rhinoceros and the elephant; as a source of insecurity that deters tourists from visiting affected areas; as a source of diplomatic tensions between South Africa and Mozambique; and as a drain on institutional and financial resources that have to be diverted away from development projects in order to combat increasingly sophisticated poaching operations.

The international trade in protected species affects national parks and other biodiversity conservation mechanisms in a number of ways. Traffickers are not only interested in ivory, elephants and rhinos – they also target other species of wild animals and flora, such as turtles, amphibians, reptiles and rare timbers, medicinal plants, and the like. Every country that contains areas of high biodiversity is affected by this illegal trade.

It takes a significant amount of resources to tackle this organised illicit international trade, with measures ranging from prevention and awareness-raising to surveillance, intelligence and ultimately legal and penal sanctions. Development approaches, strategies and support for national parks should take systematic account of the external pressures from large-scale international poaching, and of the considerable resources required to tackle the problem. These issues must be factored in from the project feasibility phase, when poaching should be analysed as an external phenomenon with the potential to pose a mid-term risk to the development of the park.

List of Acronyms and Abbreviations

AFD	Agence Française de Développement
AHEAD	Animal Health for Environment and Development
ANAC	National Administration of Conservation Areas
APEM	Protected Areas and Elephant Preservation in Mozambique
CSP	Community Support Programme (also referred to as PAC)
CZ	Core Zone
DLVF	Funding Payment Deadline
DNAC	National Directorate for Conservation Areas
EU	European Union
GEF	Global Environment Facility
GLTFCA	Great Limpopo Transfrontier Conservation Area
GLTP	Great Limpopo Transfrontier Park
HWC-MT	Human-Wildlife Conflict Mitigation Toolkit
IGA	Income-Generating Activities
INGC	National Disasters Management Institute
IPZ	Intensive Protection Zone
JMB	Joint Management Board
JPMC	Joint Park Management Committees
KfW	Kreditanstalt für Wiederaufbau
KNP	Kruger National Park
LNP	Limpopo National Park
MA	Massingir Agroindustrial
NCS	<i>Note au conseil de surveillance</i> – AFD Project Document

PAC	Community Support Programme (also referred to as CSP)
PFD	Partnership Framework Document
PIU	Project Implementation Unit
PPF	Peace Parks Foundation
RAP	Resettlement Action Plan
SADC	Southern African Development Community
SDAE	District Service for Economic Affairs
SISTAFE	State Financial Management System in Mozambique
SMART	Spatial Monitoring and Reporting Tool
SZ	Support Zone
TA	Technical Assistant
TFCA	Transfrontier Conservation Area
TFCA-TD	Transfrontier Conservation Areas and Tourist Development Project
TFP	Technical and Financial Partners
TTdL	Transfrontier Trails do Limpopo
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

List of Annexes

- Annex 1.** Main steps of the evaluation
- Annex 2.** People met and villages visited
- Annex 3.** LNP zoning in 2003
- Annex 4.** Chronology of the LNP development project
- Annex 5.** Logical framework of AFD intervention according to the project document
- Annex 6.** Budget of the LNP development project financed by AFD
- Annex 7.** Maps showing the location of elephants, buffalos and giraffes in LNP in 2014
- Annex 8.** Statistics available on fauna in the KNP
- Annex 9.** Map of road network development in 5 years
- Annex 10.** Accommodation facilities in LNP
- Annex 11.** Organizational structure of the LNP – July 2015
- Annex 12.** Comparison between initial budget and actual project expenditure
- Annex 13.** Steps in the development of a protected area and financing requirements
- Annex 14.** Evolution of standard activities and priorities associated with the development of a PA
- Annex 15.** List of figures (maps, boxes, photos, tables, graphs, and diagrams)

The Annexes which are not included in the print version may be downloaded from AFD's website:
<http://www.afd.fr/lang/en/home/recherche/evaluation-capitalisation/autres-produits-de-capitalisation>

Annex 1.

Main phases of the evaluation

Inception meeting (France, 1 day)

- Establish what the reference group expects from the evaluation
- Present the consultants' proposed methodology
- Gather documentation and information available in France

Phase 1 : structuration

- First mission to Mozambique (7 days)
 - Gather additional information on the project and intervention context
 - Clarify the project intervention logic and evaluation objectives
 - Gather information on sectoral policies and the project (documents, M & E system)
- Refine the methodological framework for the evaluation and prepare evaluation questions
- Submit a framework paper and documentary synopsis for validation by the reference group and monitoring committee

Phase 2: Initial analysis

- Second mission to Mozambique (11 days/written evaluation, 18 days/filmed evaluation)
 - Complete data collection through semi-structured interviews
 - Film shots and interviews
 - Test key evaluation hypotheses and develop rationale for the evaluation questions
- Prepare a mission checklist

Phase 3: Detailed analysis

- Structure the evaluation analysis
- Prepare a draft report framing answers to the evaluation questions
- Prepare script and rough cuts of the film
- Submit the draft report and first cut of the film for comment and validation by the reference group and monitoring committee

Phase 4: Finalise deliverables

- Prepare the final report, incorporating feedback from the reference group and monitoring committee and including recommendations, lessons learned from the evaluation, a synthesis and a summary
- Finalise the audio-visual products (full version of the evaluation film, interview clips, photos of the project and key actors, rushes)
- Develop an interactive Web platform

Phase 5: Presentation

- Present and discuss the film and final report at AFD head office

Source : Authors

Annex 3. LNP zoning in 2003

The 2003 development plan for the LNP shows how the park will be divided into six zones according to different types of landscape, ecosystems and socio-economic situations, in order to plan possible land uses and different levels of natural resource conservation (see Map 6 below). A brief description of each zone is given below.

1. A wilderness zone (shown in green, below) in the southwestern corner of the LNP along the border with the KNP (covering 7.5% of the LNP). This zone ensures complementarity with the zoning in the KNP, in accordance with the guidelines for joint management of the GLTP. Its main objective is to protect the rich diversity in this area. Construction is banned to minimise the impact of human activities.

2. A medium to high density tourism zone (shown in orange) north of the Massingir dam (covering 3.2% of the LNP). This zone includes part of the road from Giriyondo to Massingir, which is used by South African tourists crossing or visiting the LNP. The presence of the lake at Massingir dam makes it a prime site for tourism. The development of tourist activities and construction of administrative buildings for the park will be permitted in this zone while taking care to minimise their impact on the environment.

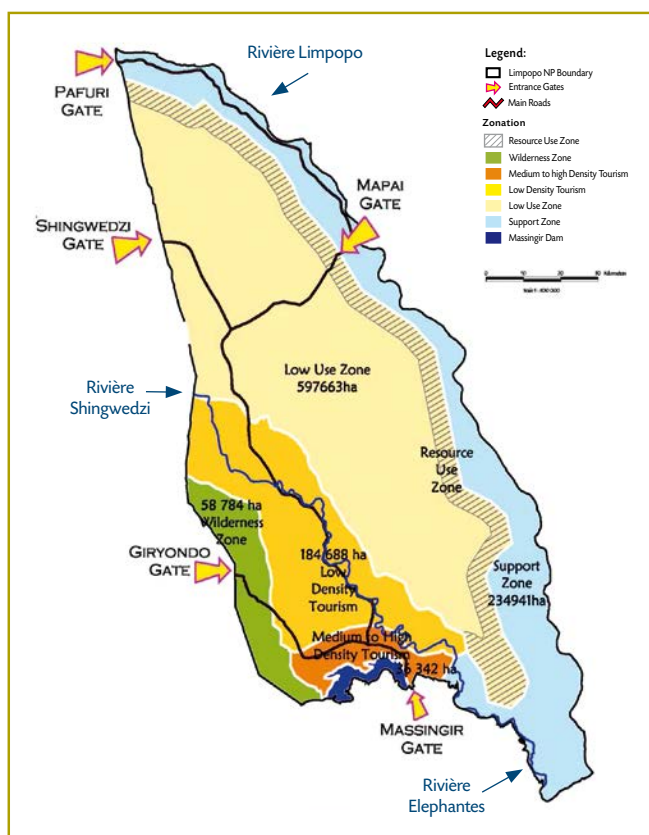
3. A low density tourism zone (shown in yellow), located north of the previous zone and extending northwest along the Shingwedzi River to the border with the KNP (covering 14.2% of the LNP). This zone has been identified as suitable for the development of tourism concessions, which attract a smaller number of tourists interested in wildlife and wilderness experiences.

4. A low use zone (shown in beige), which includes the sandy plateau. This is the largest zone in the park (covering 53% of the LNP). This zone has poor soils and no water, and is virtually unused at the moment. It contains no villages and has little potential for tourism as the landscape is monotonous and unable to support large animal populations. Its main objective is to preserve ecosystems.

5. A support zone (light blue), a strip of land about 5 km wide between the Limpopo River and the Olifants River, that runs from Massingir in the south to Pafuri in the north (covering 20.9% of the LNP). Mainly composed of alluvial plains, this is the most densely populated zone in the park. It will continue to support local livelihoods (agriculture, livestock, hunting, gathering forest products) and should also provide opportunities for community-based tourism.

6. A resource use zone (shown as a striped beige band) running along the western edge of the support zone (surface area not known). This is a transition zone between the support and central zones, where there should be as little human activity as possible. Communities in the support zone may use certain resources in this zone, particularly forest resources, provided this is done sustainably in accordance with the primary objectives of biodiversity conservation.

Map 6 – Zoning of the LNP



Source: LNP, 2003.

Annex 6.

Budget for the LNP development project financed by AFD

LIMPOPO NATIONAL PARK DEVELOPMENT PROGRAMME

FINANCE PLAN 2007-2010 (in thousands of euros)

AFD PROJECT

	2007	2008	2009	2010	Total
1. Development of the Support Zone					
Salaries	48	50	53	55	206
Other operating costs	63	63	66	68	260
Training	52	52	52	52	208
External expertise for management plans	150	350	300	200	1,000
Community development projects	400	750	750	600	2,500
Community tourism development projects	0	0	0	0	0
Vehicles and motorbikes	195	0	0	0	195
Equipment and furniture	13	0	0	0	13
Community information centres	50	25	0	0	75
Villa for external experts	80	0	0	0	80
Sub-total 1	1,051	1,290	1,221	975	4,537
2. Village resettlements					
Salaries	0	0	0	0	0
Other operating costs	0	0	0	0	0
Investments in village resettlements	0	0	0	0	0
Vehicles and motorbikes	0	0	0	0	0
On-site technical assistance	0	0	0	0	0
Specialist external support	0	0	0	0	0
Sub-total 2	0	0	0	0	0
3. Roads					
Salaries	0	0	0	0	0
Works	400	1,200	1,200	700	3,500
Sub-total 3	400	1,200	1,200	700	3,500
4. Protection					
Salaries	0	0	0	0	0
Other operating costs	0	0	0	0	0
Protective fence south of the support zone	200	300	0	0	500
HWC actions	50	100	200	150	500
Animal transfers (PPF)	0	0	0	0	0
Rangers' buildings/equipment	0	0	0	0	0
Sub-total 4	250	400	200	150	1,000

...

AFD PROJECT

	2007	2008	2009	2010	Total
5. Tourism					
Salaries	25	25	0	0	50
Other operating costs	65	35	0	0	100
Tourist information centre	125	0	0	0	125
Other investments	36	0	0	0	36
Sub-total 5	251	60	0	0	311
6. Research/monitoring/evaluation					
Salaries	25	26	0	0	51
Other operating costs	5	6	0	0	11
Equipment	9	8	0	0	17
Vehicles	28	0	0	0	28
Biodiversity monitoring contracts	70	50	40	33	193
Veterinary monitoring and support (BM)	0	0	0	0	0
Sub-total 6	137	90	40	33	300
7. Environmental education					
Salaries	22	23	0	0	45
Other operating costs	14	14	0	0	28
Vehicle	25	0	0	0	25
Sub-total 7	61	37	0	0	98
8. Park administration					
Salaries	0	0	0	0	0
Other operating costs	161	96	0	0	257
Investments	67	57	0	0	124
PPF technical advisor	0	0	0	0	0
PPF indirect management costs	0	0	0	0	0
PPF finance management costs – KFW funds	0	0	0	0	0
PPF finance management costs – AFD funds	50	50	50	50	200
Sub-total 8	278	203	50	50	581
9. Mid-term evaluation	0	20	60	0	80
10. Miscellaneous and unforeseen expenses	125	238	136	94	593
OVERALL TOTAL	2,553	3,538	2,907	2,002	11,000

Source: AFD, 2005.

Annex 12.

Comparison between initial budget and actual project expenditure, in euros

	Budget (2007-2010)	Expenditure (2008-2015)	Difference	Planned/actual expenditure
1. Development of the Support Zone				
Salaries	206,000	207,635	1,635	101%
Other operating costs	260,000	136,769	-123,231	53%
Training	208,000	29,080	-178,920	14%
External expertise for management plans	1,000,000	626,013	-373,987	63%
Community development projects	2,500,000	288,784	-2,211,216	12%
Vehicles and motorbikes	195,000	0	-195,000	0%
Equipment and furniture	13,000	37,556	24,556	289%
Community information centres	75,000	30,574	-44,426	41%
Villa for external experts	80,000	309,005	229,005	386%
Sub-total 1	4,537,000	1,665,415	-2,871,585	37%
2. Village resettlements				
Salaries	0	0	0	-
Other operating costs	0	0	0	-
Investments in village resettlements	0	45,085	45,085	-
Vehicles and motorbikes	0	0	0	-
On-site technical assistance	0	0	0	-
Specialist external support	0	0	0	-
Sub-total 2	0	45,085	45,085	-

...

...

	Budget (2007-2010)	Expenditure (2008-2015)	Difference	Planned/actual expenditure
3. Roads				
Salaries	0	127,106	127,106	-
Other operating costs	0	103,522	103,522	-
Studies	0	295,140	295,140	-
Works	3,500,000	2,382,898	-1,117,102	68%
Road maintenance equipment	0	17,850	17,850	-
Sub-total 3	3,500,000	2,926,516	-573,484	84%
4. Protection				
Salaries	0	357,903	357,903	-
Other operating costs	0	267,537	267,537	-
Protective fence south of the support zone	500,000	3,027,847	2,527,847	606%
HWC actions	500,000	35,293	-464,707	7%
Rangers' buildings/equipment	0	144,324	144,324	-
Vehicles/motorbikes	0	178,284	178,284	-
Sub-total 4	1,000,000	4,011,188	3,011,188	401%

...

...

	Budget (2007-2010)	Expenditure (2008-2015)	Difference	Planned/actual expenditure
5. Tourism				
Salaries	50,000	0	-50,000	0%
Other operating costs	100,000	37,735	-62,265	38%
Tourist information centre	125,000	10,524	-114,476	8%
Other investments	36,000	142,096	106,096	395%
Sub-total 5	311,000	190,355	-120,645	61%
6. Research/monitoring/evaluation				
Salaries	51,000	0	-51,000	0%
Other operating costs	11,000	0	-11,000	0%
Equipment	17,000	0	-17,000	0%
Vehicles	28,000	116 215	88,215	415%
Biodiversity monitoring contracts	193,000	77 484	-115,516	40%
Veterinary monitoring and support (BM)	0	0	0	-
Sub-total 6	300,000	193,699	-106,301	65%
7. Environmental education				
Salaries	45,000	0	-45,000	0%
Other operating costs	28,000	6,471	-21,529	23%
Vehicle	25,000	0	-25,000	0%
Sub-total 7	98,000	6,471	-91,529	7%

...

...

	Budget (2007-2010)	Expenditure (2008-2015)	Difference	Planned/actual expenditure
8. Park administration				
Salaries	0	693,508	693,508	-
Other operating costs	257,000	529,402	272,402	206%
Investments	124,000	704,625	580,625	568%
PPF finance management costs – AFD funds	200,000	50,000	-150,000	25%
Sub-total 8	581,000	1,977,535	1,396,535	340%
9. Mid-term evaluation	80,000	41,724	-38,276	52%
10. Miscellaneous and unforeseen expenses	593,000	-	-	-
OVERALL TOTAL	11,000,000	11,057,989	57,989	101%

Sources: AFD and LNP

NB: This table was reconstituted by the evaluation team using data provided by the LNP and AFD. The project accounts were not fully closed when the evaluation was conducted, so a number of questions still had to be resolved – hence the slight overspend on the budget. It was not always clear how certain expenses should be allocated across the budget lines and some of the allocations could be questioned, but this does not affect the budget lines’ overall order of magnitude.

Changes in the allocation of AFD funds are shown in orange and green: components with a large underspend (SZ Development and Environmental education) are highlighted in orange, and those with a large overspend are highlighted in green (Protection and LNP Administration).

The breakdown of each line shows which aspects of the programme were allocated the most money. For example, in the Protection component, the fence cost six times the available budget, while only seven percent of the money allocated for HWC was spent.

Annex 15.

List of figures (maps, boxes, photos, tables, graphs, and diagrams)

MAPS

Map 1.	Boundaries of the Support Zone (2015)	44
Map 2.	Planned population displacements in the central zone of the LNP	55
Map 3.	LNP Intensive Protection Zone	79
Map 4.	Ports of entry, border crossing points and potential airfields	91
Map 5.	Roads inside and outside the SZ	115
Map 6.	Zoning of the LNP	185

BOXES

Box 1.	Transfrontier parks and conservation areas	35
Box 2.	Livestock-rearing projects in different districts	113
Box 3.	Livelihoods in the Support Zone before the creation of the LNP	133

PHOTOS

Photo 1.	Fence erected in the south of the SZ	84
Photo 2.	Current situation of the community resources centre, financed by AFD, recently vandalized	88
Photo 3.	Hippos in the Gaza safari zone	126
Photo 4.	Shingwedzi River	127
Photo 5.	Zebra in the LNP	140

TABLES

Table 1.	Budgetary changes in the project funded by AFD	73
Table 2.	Fines issued and paid between 2011 and 2015	82
Table 3.	Road construction works planned and executed in the Core Zone of the LNP	92
Table 4.	Rules governing the use of natural resources in the SZ (outside ecological corridors)	104
Table 5.	Projects validated in each district in the period 2011-2014	111
Table 6.	Projects validated by district committees for the period 2011-2014	112
Table 7.	Number of LNP staff in each programme/department between 2011 and 2015	122
Table 8.	Main actions implemented in the SZ with AFD funding	132
Table 9.	Comparison of planned and actual expenditure for the component 'Development of the Support Zone'	143
Table 10.	Situation in the LNP in relation to different phases in the development of a park	172

GRAPHS

Graph 1.	Number of rhinos poached in South Africa	64
Graph 2.	Population levels of several key species in the LNP	77
Graph 3.	Number of HWC incidents between 2011 and 2014	83
Graph 4.	Annual number of entrants to the LNP	95
Graph 5.	Annual revenues generated	97
Graph 6.	Share of LNP revenues paid to communities living in the park	109
Graph 7.	LNP annual budget execution for each programme	119
Graph 8.	LNP and AFD annual budget execution rates between 2009 and 2013	119
Graph 9.	LNP annual running costs and share covered by AFD funding	120
Graph 10.	LNP operating costs 2009-2014	129

DIAGRAMS

Diagram 1.	LNP institutional setup, management and financial circuits followed by AFD and KfW	42
Diagram 2.	Reconstituted logical framework for the project	49
Diagram 3.	Interrelationships between components, and critical assumptions regarding the LNP Development Project	52
Diagram 4.	Critical path between population displacement and tourism development	60
Diagram 5.	Critical path between the upsurge in poaching and development of tourism	66
Diagram 6.	Critical path between delays in recruiting the technical assistant and the community development component	70
Diagram 7.	Participatory structures for residents of the Support Zone	100
Diagram 8.	Financial flows generated by revenues from tourism in the LNP	110

Bibliography and References

AFD (2016), Fiche d'identification du projet « Aires protégées et préservation des éléphants au Mozambique ».

AFD (2014), Programme d'appui d'urgence à la lutte contre le braconnage au Mozambique, fiche d'identification de projet.

AFD (2012), Mission de supervision et d'instruction des projets AFD-FFEM, Secteur de la biodiversité et des aires protégées.

AFD (2011 a), Mission d'instruction et de supervision du 28 mars au 6 avril 2011.

AFD (2011 b), Mission d'instruction et de supervision du 21 au 27 novembre 2011.

AFD (2010a), Cartographie de portefeuille des projets biodiversité, Analyse sur la période 1996-2008, Évaluation et capitalisation, n° 30, Paris.

AFD (2010b), Note à l'attention du directeur de département AFR ayant pour objet la révision du plan de financement du Projet de développement du Parc national du Limpopo – CMZ 6007 01L 14/09/2010.

AFD (2009), Aide-mémoire de mission de supervision PNL.

AFD (2007), Demande de levée de conditions suspensives.

AFD (2006), Mission d'évaluation au Mozambique du 18 au 26 septembre 2006.

AFD (2005), Note au Conseil de surveillance. Projet de développement du Parc national du Limpopo (PNL).

AFD, GTZ (2006), *Possibilities of cooperation between AFD and GTZ in the field of TFCA in the region of the Limpopo National Park, Mozambique.*

AFD, RÉPUBLIQUE DU MOZAMBIQUE (2016), Avenant N° 5 à la convention de financement N° CMZ 6007.01L.

AFD, RÉPUBLIQUE DU MOZAMBIQUE (2015), Avenant N° 4 à la convention de financement N° CMZ 6007.01L.

AFD, RÉPUBLIQUE DU MOZAMBIQUE (2012), Avenant N° 2 à la convention de financement N° CMZ 6007.01L.

AFD, RÉPUBLIQUE DU MOZAMBIQUE (2013), Avenant N° 3 à la convention de financement N° CMZ 6007.01L.

AFD, RÉPUBLIQUE DU MOZAMBIQUE (2010), Avenant N° 1 à la convention de financement N° CMZ 6007.01L.

AFD, RÉPUBLIQUE DU MOZAMBIQUE (2007), convention de financement N° CMZ 6007.01L.

AMBERO (2013), *Technical Assistance to Community Support Programme (PAC)*, Final Report.

BANQUE MONDIALE (2014a), Les zones de conservation de la biodiversité et de projet de développement. Project Appraisal.

BANQUE MONDIALE (2014b), Évaluation finale du Projet des aires de conservation transfrontières et dedéveloppement du tourisme.

BIOFUND (2014), *Relatório de Apreciação da Lei da Conservação – aspectos práticos para a sua aplicação.*

BRL, ICS, IMPACTO (2006), *Feasibility study for the development of the Limpopo National Park and its support zone.*

CONSERVATION FINANCE ALLIANCE (2013), Avantage comparatif des Fonds Fiduciaires pour la Conservation et de l'approche projet pour appuyer les systèmes d'aires protégées, Rapport de synthèse final.

DALLAS CONSULTING – VKE INTERNATIONAL (2011), Plan directeur des routes du PNL.

DIALLO, R. (2011), *Exame da montagem institucional do projecto de desenvolvimento do Parque Nacional do Limpopo.*

DUCROS, R. (2016), *“Is Small-scale Irrigation an Efficient Pro-poor Strategy in the upper Limpopo Basin in Mozambique?”*, *Journal of Physics and Chemistry of the Earth.*

DUCROS, R. (2016), *“When Good Practices by Water Committees are not Relevant: Sustainability of Small Water Infrastructures in S-arid Mozambique”*, *Journal of Physics and Chemistry of the Earth.*

GIVÁ, N. (2014), *o processo de alocação, utilização e gestão dos 20% no Parque Nacional do Limpopo, Distrito de Massingir – Uma discussão com todos os atores chaves no processo*, Universidade Eduardo Mondlane, faculdade de agronomia e engenharia florestal, Maputo.

GOVERNEMENT DU MOZAMBIQUE (2014), *Lei N° 16/2014, de 20 de junho de 2014.*

GOVERNEMENT DU MOZAMBIQUE (2010), diploma ministerial 66/2010.

GOUVERNEMENT DU MOZAMBIQUE (2005), Ministères de l'agriculture, du tourisme et des finances : diploma ministerial n° 93/2005 de 4 de Maio.

GOUVERNEMENT DU MOZAMBIQUE (1999), *Lei de Floresta e Fauna bravia* n° 10/1999.

GOUVERNEMENT DU MOZAMBIQUE (1997), *Lei do Ambiente* n° 20/97.

GOUVERNEMENT DU MOZAMBIQUE, WCS, USAID (2015), *Great Elephant Census*.

GREAT LIMPOPO TRANSFRONTIER PARK, *About GLTP*, <http://www.greatlimpopo.org/about-gltp/>

GREAT LIMPOPO TRANSFRONTIER PARK (2016), *Proposed Re-engineering of the Current Institutional Structures in Order to Facilitate the Effective Implementation and Further Development of the GLTFCA*.

GUYOT S. (2006), « Les parcs naturels d'Afrique australe : d'autres territoires de conflits », *Géoconfluences*, <http://geoconfluences.ens-lyon.fr/doc/etpays/Afsubsah/AfsubsahScient2.htm>.

INTERNATIONAL CONSERVATION SERVICES (2011), *Évaluation à mi-parcours projet de développement du PNL*.

IUCN PROGRAM ON AFRICAN PROTECTED AREAS AND CONSERVATION (PAPACO) (2015), *PAPACO Study 20, State Governance of Protected Areas in Africa: Case Studies, Lessons Learnt and Conditions of Success*.

JORI MASSANAS F., A. CARON, P. THOMPSON, DWARKA RAHANA, C. FOGGIN, M. GARINE-WICHATITSKY (de), M. HOFMEYR, J. VAN HEERDEN et L. HEATH (2014), *Characteristics of Foot-and-Mouth Disease Viral Strains Circulating at the Wildlife/livestock Interface of the Great Limpopo Transfrontier Conservation Area*.

LNP (2008-2015), *SC Meetings Reports*.

LNP (2014), *Aerial Survey of Elephant, Other Wildlife and Human Activity in Limpopo National Park and the Southern Extension*.

LNP (2013a), *Aerial Wildlife Census*.

LNP (2013b), *Resettlement of People Living in the Shingwedzi River Valley – Resettlement Action Plan for Massingir Velho Village*.

LNP (2012a), *Strategic Plan for Tourism Development*.

LNP (2012b), *Plano de manejo e desenvolvimento da zona tampão*, June 2012.

LNP (2010a), *Helicopter Census 12th to 19th of November 2010*.

LNP (2010b), *Aerial Wildlife Census*.

LNP (2008), *Resettlement of People Living in the Shingwedzi River Valley – Resettlement Action Plan for Macavene Village*.

LNP (2006a), *An Aerial Census of the Shingwedzi Basin Area of the LNP in Mozambique*.

LNP (2006b), **LNP (2004)**, *LNP Business Plan 2006-2010*.

LNP (2004a), *LNP Business Plan 2004-06, Second Draft*.

LNP (2004b), *Tourism Development Plan for Parque Nacional do Limpopo as Part of the GLTP*.

LNP (2003), *Management & Development Plan*.

MOZAMBIQUE CONSERVATION AREAS FOR BIODIVERSITY AND DEVELOPMENT PROJECT (2014), *Project Information Document, Appraisal Stage*.

PNL (2015a), *Cadastro do Infractor Junho 2015*.

PNL (2015b), *Organigramme du PNL*.

PNL (2015c), *Stratégie lutte-anti-braconnage 2015-2018*.

PNL (2012a), *Plano de desenvolvimento sustentável da zona tampao. Versão atualizada pelo PAC em agosto de 2015*.

PNL (2012b), *Rapport d'activités de février 2012*.

PNL (2011a), *Organigramme du PNL*.

PNL (2011b), *Rapport d'activités de juin 2011*.

PNL (2011c), *Rapport d'activités de septembre 2011*.

PNL (2003), *Plan de gestion et de développement*.

REPUBLIC OF MOZAMBIQUE (2014), *An Update on the Population Status and Trends of Elephants in Mozambique*.

RURAL CONSULT (2012), *Estudo do potencial do uso de terra e capacidade de carga para a população da zona de apoio do Parque Nacional do Limpopo em Moçambique – 1.1 Relatório da análise integrada da capacidade de carga da zona de apoio do PNL e baseline da capacidade de carga – relatório final », 1.3. Potencial Ecoturismo de pequena escala no Parque Nacional do Limpopo – Zona de Apoio Relatório Final, Maputo*.

STALMANS (2002), *Conceptual Tourism Development Plan for the Limpopo National Park*.

THE GOVERNMENT OF THE REPUBLIC OF MOZAMBIQUE, THE GOVERNMENT OF THE REPUBLIC OF SOUTH AFRICA (2014), *Memorandum of Understanding on Cooperation in the Field of Biodiversity Conservation and Management*.

THOMPSON G. (2011), *Mozambique Transfrontier Conservation Area and Tourism Development Project: Resettlement Activities in the Limpopo National Park, Evaluation of Implementation of RAP 1 & RAP 2A, Draft Final Report*.

WORLD BANK (2009), *Transfrontier Conservation Areas and Tourism Development Project Mid Term Review*, mission aide mémoire.

WORLD BANK (2014), *Implementation Completion and Results Report, Transfrontier Conservation Areas and Tourism Development Project*.

WWF / DALBERG (2012), *Lutte contre le trafic illégal d'espèces sauvages : consultation avec les gouvernements*, WWF International, Gland, Switzerland.

Ex Post Written and Audiovisual Evaluation of the Limpopo National Park Development Project

Agence Française de Développement / IRAM / BAASTEL

AFD has become increasingly involved in managing protected areas since the mid-2000s. Its two main aims in doing so are to reconcile conservation and economic development initiatives, and to create a development dynamic based on the joint protection and sustainable management of ecosystems.

The Limpopo National Park (LNP), which was created in 2001, is a prime example of the new approach to developing protected areas. AFD became the principal donor of the Limpopo National Park Development Project in 2006, working alongside KfW, the World Bank and the Peace Parks Foundation to address the numerous challenges facing a young park.

AFD felt that an *Ex Post* evaluation of this initiative would be valuable because of the emblematic nature of the LNP and the key issues addressed by the project. In order to reach a wider audience a dual evaluation was commissioned, with two teams working in tandem on complementary written and filmed analyses that considered the intervention from different angles.

The project and the institutional setup suggested by AFD are both regarded as relevant. Positioning the Mozambican authorities as the contracting authority had the desired effect of strengthening their competences, capacities and management autonomy. AFD's flexibility and the project's capacity to adapt to changes in the intervention context were also commended. However, the evaluation noted that visitor numbers have been disappointing and that local communities have received little direct or indirect revenues from tourism development. This is partly due to the upsurge in poaching, which had a serious impact on the project intervention context and diverted attention away from the longer-term issues that were intended to drive local economic and social development activities. Progress has been made, but developing national competences in conservation and community development remains a significant challenge.

Among the key lessons learned from this intervention, the evaluators highlighted the importance of not underestimating the technical assistance, resources, and – above all – the time required to implement participatory processes in addition to launching socio-economic development initiatives. In equal measure, they addressed the need to closely involve local authorities in planning and implementing socio-economic actions inside the park, with the precondition that projects take into account the potential risks of poaching from the feasibility phase onwards, so as to reduce its ultimate impact on the intervention and the broader setting.

Authors:

Frédéric BAZIN, IRAM

Gaétan QUESNE, BAASTEL

Coordination:

Emilie ABERLEN, AFD



iram

