

**A THEORY OF CHANGE**

**FOR THE BIODIVERSITY AND LAND USE PROJECT**



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Karen Kotschy, Ian Bredin and Matthew Dickey October 2019

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by

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Karen Kotschy, Ian Bredin and Matthew Dickey

Institute of Natural Resources NPC

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**LIST OF ACRONYMS**

|  |  |
| --- | --- |
| BENs | Biodiversity Economic Nodes |
| BLU | Biodiversity and Land Use Project |
| CPAs | Communal Property Associations |
| DAFF | Department of Agriculture, Forestry and Fisheries |
| DEA | Department of Environmental Affairs |
| DEAET | Department of Economic Affairs, Environment and Tourism |
| EC | Eastern Cape |
| EMF | Environmental Management Framework |
| GEF | Global Environment Facility |
| INR | Institute of Natural Resources |
| LRBSI | Land Reform Biodiversity Stewardship Initiative |
| MTR | Mid-Term Review |
| NBSAPs | National Biodiversity Strategy and Action Plans |
| NBF | National Biodiversity Framework |
| NPAES | The National Protected Areas Expansion Strategy |
| NSBA | The National Spatial Biodiversity Assessment |
| NGOs | Non-Governmental Organizations |
| PMU | Project Management Unit |
| PRODOC | Project Document |
| PSC | Project Steering Committee |
| QPM | Quarterly Planning Meetings |
| SANBI | South African National Biodiversity Institute |
| SDF | Spatial Development Framework |
| SPLUMA | Spatial Planning and Land Use Management Act |
| STEP | Subtropical Thicket Ecosystem Programme |
| ToC | Theory of Change |
| UNDP | United Nations Development Programme |
| WC | Western Cape |
| WfW | Working for Water |

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# EXECUTIVE SUMMARY

The Biodiversity and Land Use (BLU) project aims to enhance the sustainable and effective conservation of globally significant biodiversity in South Africa, through exploring, piloting and implementing innovative mechanisms and approaches to mainstreaming biodiversity and ecosystem services into the regulation and management of land and resource use at the municipal scale. The project mid-term review recommended the development of a Theory of Change (ToC) to stimulate and guide further fine-tuning in order to achieve some of the higher-order goals and to reassert the link to sustainable development and poverty reduction. A ToC was also identified as a mechanism to help navigate the challenging and dynamic context in which the project is being rolled out.

A Theory of Change (ToC) provides a mechanism to design and align activities and evaluate and reflect on their effectiveness. It is a conceptual map that describes how interventions are expected to lead to a desired change and maps pathways that link actions to results based on our best ‘theory’ or understanding of how the desired result may be achieved.

A ToC can be used for different purposes and at all stages of a project, programme or initiative. In the case of the BLU project, the main purpose of developing a ToC was:

* To review and sharpen the existing initiative. The ToC process therefore focused on identifying ways to build longer-term impact beyond the projects immediate sphere of influence, clarifying assumptions and risks, and identifying any previously unrecognized or additional strategies needed for achieving the desired goal.
* To help identify and prioritize information and learning needs in preparation for future work on strengthening the project’s monitoring and evaluation system.

With the above objectives in mind the following key processes were undertaken:

* Mid-term review (undertaken prior to the INR team commencing with the development of the ToC) ;
* Information gathering – review of available project documentation;
* Focus group meetings; and
* Workshop sessions at three project quarterly planning meetings.

The following assumptions were identified as underlying the project-level ToC:

* A key reason for the continuing threats to biodiversity in South Africa is the capacity deficit on the part of authorities and landowners to regulate and/or manage biodiversity and land use. Improving this capacity will therefore mitigate some of the threats to biodiversity and lead to changes in practice.
* Authorities and landowners will be able to act more rationally (in terms of following correct procedures even in a context where there are various external factors and pressures to consider) through capacity development and the availability of evidence which makes a case for the contribution of biodiversity to local economic development, job creation, poverty reduction and human wellbeing.
* Improved regulation and management of biodiversity and land-use will provide benefits for all.
* The project design is sufficiently robust to be able to achieve the desired outcomes even under the increasingly fluid and uncertain political, social and governance context.

An updated assessment of risks and opportunities was undertaken to help continue to navigate through the changing context. Two of the identified risks fell into the “high risk” category based on the combination of their probability of occurrence and their potential impact. Both of these risks were considered by project partners to be increasing.

* The risk that participating partner organisations are negatively affected by (non-BLU) budget and/or capacity constraints.
* The risk that biodiversity is threatened by broader issues outside of the scope of the project, particularly mining and climate change.

The following opportunities to strengthen the project’s impact in the time remaining were identified:

* There is a valuable opportunity to amplify the project’s contribution to building understanding and support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing, by ensuring that relevant data are gathered and communicated.
* There is an opportunity to better capture and document the many types of capacity development taking place across the project and with different stakeholders.
* The project provides an opportunity to integrate biodiversity conservation into the broader land reform process through implementing stewardship agreements on communal land. There is currently little evidence for the benefits of stewardship on communal land, and an opportunity therefore exists for the project to provide such evidence.

In addition to these potential opportunities before project close, several opportunities will be created after the project’s completion. These include opportunities arising from the significant capacity development and upskilling of staff and consultants employed through the project, making it possible for these individuals to effectively continue extension work in the four regions. The job-creation activities initiated with the municipalities make it possible for the municipalities to seek further funding to continue with these activities, although it is unclear whether they will have sufficient capacity to make use of this opportunity.

The ToC process provided a stimulus for project partners to review the internal logic of their activities and how they contribute to the various outcomes. The process also highlighted some important dependencies between activities that had not been explicitly recognized before. The ToC responds to the changes in context that have taken place since the project started in the following ways:

* The focus on socio-economic benefits has been strengthened by increasing the emphasis on “Build understanding and support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing”. The formal project goal was not amended but there is a clear recognition that the connection between biodiversity and socio-economic benefits must be demonstrated for successful mainstreaming of biodiversity in the long term.
* Potential contributions from the various project activities towards the above goal have been noted as well as linkages between project components 1 and 2.
* More explicit emphasis has been placed on building relationships and learning. This is an important response to the increasing uncertainty in the political and governance context, which increases the need for effective monitoring and sense making processes to understand “what is going on”.
* Risks beyond the immediate project scope have been identified.

Importantly, this ToC should never be considered a completely finished product, but a “working document” that is reviewed and updated as often as needed. At the project level, it can be used in four main ways:

* To help the PMU and Project Steering Committee to navigate the ever-changing project context and steer through risks in “the swirl”, as suggested in the Mid-Term Review. The more detailed specification of risks provided in this document will hopefully be helpful in this regard.
* The ToC graphic can be used by project partners and stakeholders as a handy reminder of the overall strategic intention of the project.
* To guide the development of communications products by helping to think through which messages are most important to communicate to whom, how the different project components and activities are linked and how they combine to tell a bigger story.
* In the final project evaluation, as an (updated) record of the project’s intentions, approach and understanding of how impact will be achieved.

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# 1 Background

The project “Mainstreaming Biodiversity into Land Use Regulation and Management at the Municipal Scale” or simply, the Biodiversity and Land Use (BLU) project, is funded by the Global Environment Facility (GEF) and implemented by SANBI and a large number of partners over a five-year period (2015-2020). The project aims to enhance the sustainable and effective conservation of globally significant biodiversity in South Africa, through exploring, piloting and implementing innovative mechanisms and approaches to mainstreaming biodiversity and ecosystem services into the regulation and management of land and resource use at the municipal scale.

Municipalities are centres of economic growth and service delivery, responsible for regulating land use at a local scale, and important users and managers of biodiversity and ecosystem services. The interface between biodiversity and sustainable development is therefore highly relevant at the local scale. The project focuses on four district municipalities in global biodiversity hotspots and national biodiversity priority areas, which have high rates of habitat degradation and conversion, high levels of poverty, and other pressing needs for action. These are the Amathole, uMgungundlovu, Ehlanzeni, and Cape Winelands District Municipalities. Since most of the remaining natural areas in these four districts are fragmented in the landscape, a focus on protected areas alone will not be sufficient to conserve biodiversity and ecosystem services, and mainstreaming interventions are needed.

The project follows a two-pronged approach, targeting firstly, landscape-scale planning and the types of development which are driving the transformation and fragmentation, and secondly, the principal production sectors in those areas in order to promote biodiversity-friendly practices. It therefore aims to improve the capacity of (state) authorities to regulate and manage biodiversity (constrain inappropriate development) while simultaneously incentivising land owners and stewards to responsibly manage biodiversity on their land (encourage appropriate development). The move towards collaborative governance including the private sector, and away from an over-reliance on regulation and enforcement, has been a feature of policy and institutional reform in the biodiversity/environmental sector over the past 20 years. There is a strong project focus on capacity development, advocacy and partnership development, motivated by experience with previous projects which showed the importance of these processes for successful mainstreaming. The project recognises the need to influence and strengthen a number of different, interrelated areas within the bigger system, including aspects of policy and process, institutions and people, and products and tools, at local as well as provincial and national levels.

In November 2017 an independent mid-term review of the BLU project was completed (Smith, 2017). This evaluation concluded that the project is working effectively to deliver a wide range of innovative interventions to mainstream biodiversity at the critical municipal level and with land stewards, and is on track to achieve most of its objectives. However, it was recommended that further fine-tuning is needed to achieve some of the higher-order goals and to reassert the link to sustainable development and poverty reduction, which could be better carried through into the project activities. The mid-term review recommended the development of a Theory of Change (ToC) to stimulate and guide this process and to help the Project Management Unit (PMU) and Project Steering Committee (PSC) navigate the challenging and dynamic context in which the project is being rolled out.

As noted in the mid-term review (p. 16), “the project sits at the heart of sustainability debates and at a critical point in the development trajectory of the country: around biodiversity’s value and benefit delivery; managing competing land uses including mining, infrastructure and agriculture; securing strategic water resources – how to, and for whom, all within the context of political challenges, economic uncertainty, severe unemployment, drought and floods, and the need for broad-based economic transformation.”

While much of this context was in place at the start of the project, several developments since 2015 (and even since the mid-term review) have served to further increase the pressure and need for the project to contribute to the national conversation on the relationship between biodiversity, development and governance. These developments include:

* The rise to prominence in 2018 of the “land issue”, with debates around land ownership, redistribution and expropriation without compensation. The re-drafting of Section 25 of the constitution (the property clause) is due to be completed by March 2020.
* The political changes that took place in December 2017 with Cyril Ramaphosa replacing Jacob Zuma as President of the country, a Cabinet reshuffle and ongoing political contestation at local, provincial and national levels. This was followed by further Cabinet changes after the national elections in May 2019 and restructuring of several government departments, including DEA (forestry and fisheries moved from DAFF into DEA to form the new Department of Environment, Forestry and Fisheries)
* Ongoing revelations of corruption and state capture at many levels in both the state and private sectors
* Ongoing weakness and low levels of growth in the economy, with continued worsening of the unemployment statistics
* Decreasing budget allocations and increasing vacancies at environmental authorities and institutions
* The weakness of the mining sector combined with increasing prominence of mining on the political agenda, as a perceived strategy for delivering jobs and economic growth
* Increasing dissatisfaction by many of South Africa’s citizens with the levels of inequality, service delivery and quality of life experienced
* Serious droughts in the Western Cape and parts of the Eastern Cape

This evolving context has increased the amount of uncertainty in the policy environment. While current policy states clearly that development cannot take place at the expense of the environment, what this actually means for land use and management practices at different spatial scales and over different time periods is very much under discussion. The process of amending the Constitution to allow for expropriation of land without compensation has potential to precipitate further changes in policy as well as to affect property and agricultural markets. Uncertainty has also arisen from the two successive reshuffles of Ministers within key departments, including Environmental Affairs, Mineral Resources, Water & Sanitation and Rural Development and Land Reform (Dec 2018 and May 2019) as well as the restructuring of departments. These uncertainties require the BLU project management team to more actively track and manage risks beyond the immediate project scope, and to take advantage of opportunities that may arise for influencing transformational change and achieving broader impact. A Theory of Change, and the project M&E system more broadly, are critical tools for enabling adaptive management of the BLU project.

The BLU project is managed by the Biodiversity Information and Policy Advice Division within SANBI. This division is responsible for managing biodiversity information, developing policy and biodiversity products, and mainstreaming these into relevant sectors. In mid-2017 SANBI sought technical and content support from the Institute of Natural Resources (INR) to ensure successful completion of project deliverables. Part of this support included technical support for the refinement and implementation of the proposed Monitoring and Evaluation (M&E) framework. It was agreed that a Theory of Change (ToC) should be developed for the BLU project, as recommended in the mid-term review.

# 2 Introduction to Theory of Change

## 2.1 What is a Theory of Change?

The concept of a ToC first emerged in the USA in the early 1990’s as a tool to improve evaluation theory and practice in community development initiatives (Stein & Valters, 2012). The term was popularized by Carol Weiss (1995) as “a theory of how and why an initiative works”. She hypothesized that a key reason complex programs are so difficult to evaluate is that the assumptions that inspire them are poorly articulated. She argued that project implementers are typically unclear about how the change process will unfold and therefore pay little attention to the early and mid-term changes that need to happen in order for a longer term goal to be reached (Allen, 2016).

A ToC is a conceptual map that describes how interventions are expected to lead to a desired change. It maps pathways that link actions to results based on our best theory or understanding of how the desired result may be achieved. Logic models (“log frames”) or results frameworks also connect activities and outputs to outcomes. But a Theory of Change goes further, specifying how to create the conditions that help projects deliver on the desired goal. These can include forming the right kinds of partnerships, developing trust, engaging in mentoring, and putting in place processes that help people operate more collaboratively and evaluate their progress better (Allen, 2016). These strategies are often not articulated in results frameworks, which tend to be more focused on tangible outputs.

A ToC can be seen as both a product and a process (Vogel, 2012). While theories of change are sometimes used simply as a product – a technical tool for planning project work that is essentially an extension of a log frame – this is not considered “best practice”. The process of co-developing a ToC with stakeholders through a facilitated process of inquiry and dialogue is considered even more important than the product, because it allows for conscious reflection on the theory underlying particular interventions. Many authors therefore suggest that it is best kept as a flexible process and have avoided specifying a standardised format (Stein & Valters, 2012). Acknowledging the process perspective reminds us that the ToC should be revisited regularly as part of ongoing analysis and reflection in the adaptive management cycle, rather than being seen as a once-off initiative (Allen, 2016). Some authors refer to this type of deliberate, ongoing reflection and inquiry as “Theory of Change thinking” (van Es et al., 2015).

Developing a ToC involves a combination of divergent thinking (exploring “the system” and how and why it functions) and convergent thinking (focusing on specific interventions); it is necessary to zoom in and out to ensure that the planned activities contribute to the overall vision, but are also realistic within the capacity and resources available (Allen, 2016).

Vogel (2012) provides criteria for evaluating the adequacy of a Theory of Change, which include whether it makes sense as a response to the context, whether it includes clear pathways of change, whether it highlights the overall logic, key hypotheses and assumptions, and whether evidence for each key hypothesis is presented (Table 1). Stein & Valters (2012) listed the following additional aspects that should be included, based on a review of 48 documents providing guidance on developing Theories of Change: A summary statement of the ToC, the overall goal or vision, identification of the actors involved, domains of change (if there is more than one thematic area that must be addressed to achieve the desired change), and risks or obstacles to success. Stein & Valters (2012) also note, however, that application of the above “best practice” criteria is less important than designing a process that can realistically be sustained over time in a particular context so that organizations can engage with and learn from it.

Table 1: Key Criteria to include in a Theory of Change (Vogel, 2012)

|  |
| --- |
| 1.Anaylsis of the context |
| Does the ToC make sense as a response to the analysis of the context, the problem and changes needed? Is there one statement that sums up the ToC? |
| 2.Clear hypothesis of change |
| Are causal pathways well mapped in a diagram, i.e.   * In detail, including intermediate outcomes? * No missing links? * Conceptually clear - no congested boxes containing several inputs, outputs, outcomes or causal links all lumped together? * Presenting the specifics of the programme and not just a generic type of intervention?   Are assumptions made explicit (in the diagram or text):   * About the causal links? * About implementation? * About context and external factors?   Does the narrative highlight and describe the overall logic of the intervention and the key hypotheses on which the programme is based? |
| 3. Assessment of the evidence |
| Is there a narrative assessment of the evidence for each key hypothesis?   * Is the strength of the evidence assessed? * Does the assessment make sense given the evidence referred to? |
| 4.Other |
| Are the ToC and log frame consistent? |

## 2.2 How can a Theory of Change be used?

A ToC can be used for different purposes and at all stages of a project, programme or initiative. A ToC process is most effective when tailored to suit the purpose, so it is critical to agree on the purpose beforehand. The purpose also influences who needs to be involved. Some possible purposes of a ToC process include (van Es et al., 2015):

* **Programme or project design:** This would take place as part of the preparation or inception phase, and would entail a broad analysis of the system, key actors, initial programme design and strategic choices, and identify critical assumptions. The ToC products would be used for internal and external communication about the initiative.
* **Review and/or quality audit of an existing initiative:** A ToC process could aim to improve the quality of an existing initiative, for example by revisiting and sharpening strategies, clarifying assumptions and adjusting to changed realities. The outcomes of the review may be used to adapt plans and implementation and improve the M&E framework.
* **Strategic learning design and knowledge generation:** A ToC process is also an effective way to identify knowledge gaps and research questions. It helps to build an evidence base about what works or not, for whom and why, and under which conditions. It allows for comparisons between what is expected to happen and what actually happens, and helps to identify who should participate in the learning process.
* **Evaluation:** A programme or project ToC provides a good basis for a mid-term review or an ex-post evaluation, as it makes explicit what the initiative aimed to achieve, why and how it was supposed to work, and key assumptions made. Evaluation findings based on a clear ToC provide a sound basis for accountability to funding agencies, either by providing evidence for the initiative’s contribution to the overall goal or offering in-depth and relevant lessons learned.
* **Multi-actor collaboration and collective impact monitoring:** For a multi-actor initiative, jointly undertaking a ToC process is critical for shared understanding, decision-making and ownership of the initiative’s design and operations. An important product of such a ToC is a collective M&E process and framework for impact monitoring, a condition for joint learning and demonstrating success. In practice, aligning the systems and M&E practices of different partners often proves challenging. The ToC process can help to clarify the roles and responsibilities of each actor involved.
* **Scaling up and scaling out:** A ToC process can help to analyse the suitability and feasibility of replicating or scaling up and/or out an initiative in a different context. The results will provide insights into the need to adapt the ToC, why and in what way, and will identify assumptions that need to be tested in the new context.

In the case of the BLU project, the main purpose of developing a Theory of Change was to review and sharpen the existing initiative. Since the project was already halfway through its implementation period, it was not necessary to focus on project design, which was recognized as excellent in the mid-term review. A shared understanding of the project design, operations and M&E system had already been reached by the implementing partners. The ToC process therefore focused on identifying ways to build longer-term impact beyond the projects (and SANBI’s) immediate sphere of influence, clarifying assumptions and risks, and identifying any previously unrecognized or additional strategies needed for achieving the desired goal. The ToC process was also intended to help identify and prioritize information and learning needs in preparation for future work on strengthening the project’s monitoring and evaluation system.

# 3 THEORY OF CHANGE DEVELOPMENT PROCESS

According to Van Es (2015) a ToC process starts with creating the big picture, exploring and understanding as best as possible the components and factors that make the system what it is and how it functions. Then a series of informed strategic choices need to be made, which ultimately lead to concrete, context-specific interventions. A ToC process is typically a process of first diverging and then converging (Figure 1). It starts with brainstorming and in-depth exploration and moves towards identifying actionable interventions (i.e. focusing). This provides for a process were we can bring diverse ideas together, prioritise strategic options, identify concrete and feasible opportunities, and consider capacity and resources.

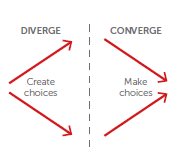


Figure 1: A Typical ToC Process

While Vogel (2012) suggested that the ToC is most effective when it is used right from the start of the research design process (i.e. during preliminary project design stages, ToC can help to focus on the issue the project is seeking to influence, the context and the stakeholders involved). It is acknowledged that ToC can be used for different purposes (Section 2.2), and therefore for the purpose of the BLU project the ToC process was developed to review and sharpen the existing initiative. With this objective in mind the following key processes were undertaken:

1. Mid-term review (undertaken prior to the INR team commencing with the development of the ToC) ;
2. Information gathering – review of available project documentation;
3. Focus group meetings; and
4. Workshop sessions at three project quarterly planning meetings.

## 3.1 The mid-term review

According to Smith (2017) the purpose of the MTR was to assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document, and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR also reviewed the project’s strategy and its risks to sustainability.

The Mid-Term Review (MTR) concluded that “*a ToC was somewhat evident in the project description but lacking in the project design and outcomes: even if all of the project outputs and outcomes were delivered, it would not necessarily “advertise” the contribution of biodiversity to jobs and the economy*. *A missing piece is quantifying and communicating these persuasively in the language that is convincing to the right areas of government that comes at the right time, is carried to the right recipient by the right messengers, and speaks to their immediate development priorities. The risk management framework of the project should be revised to focus on the attainment of the project goal and impacts, as well as updating the risks and assumptions to reflect critical influence of the external environment.”*

Key findings of the MTR, which triggered the need for a ToC, are highlighted below (Smith, 2017):

* An assessment is required to detail the risks and assumptions underpinning the project’s potential impact and sustainability of the interventions.
* The Project Development Goal does not mention people, poverty, resilience or sustainable development.
* The Department of Mineral Resources (DMR) is a major stakeholder in relation to land use questions and decisions around trade-offs. A ToC for the project could assist the Project Board to debate whether, how and through what mechanisms the project should engage most effectively with DMR.
* Given that a measure of the project’s effectiveness is a hectares target for stewardship interventions, a question was raised as to whether it is more important that the project achieves its hectare targets, or demonstrates development benefits from the stewardship interventions.

## 3.2 Information gathering – review of available project documentation

The initial preparation process undertaken included the development of preliminary drafts of a ToC for each component of work for the BLU project. This was undertaken to get a better understanding of the context of the project before embarking on the development on an overarching ToC. The drafting of the preliminary ToCs was achieved by reviewing available project documentation. Key documents reviewed included:

* The mid-term review report for the BLU project (Smith, 2017);
* The PRODOC Report – The 2014 project document which detailed the planned mainstreaming of biodiversity into land use regulation and management at the municipal scale (SANBI, 2014);
* The draft M&E Framework for the project; and
* The self-assessment report for the mid-term review of the project.

## 3.3 Focus group meetings

A key aspect of developing the ToC was to engage as many project partners as possible. The aim was to get their input into developing the preliminary draft ToC into more accurate accounts of the projects components of work. Given the number of project partners and their varying locations throughout the country a challenge arose as to how to engage them. It was considered too expensive for the project to arrange a host of workshops across the country for project partners to contribute to the development of the ToC. As an alternative the INR team investigated some innovative ways of remotely sharing ideas to develop a common goal. After considering options, a decision was taken to use an online platform called ‘Flinga’ (<https://flinga.fi>) Flinga is an online-based white-board, particularly suited for constructive knowledge building. The [Flinga Whiteboard](https://edu.flinga.fi/tools) enabled collaborative building of ‘*mind maps*’ and visual grouping of messages in a variety of ways.

Through the use of both teleconference and Skype facilities representatives of the project partners for each of the components of work were given the opportunity to contribute to the development of the draft ToC for their respective components, via the Flinga platform. After consulting representatives in separate remote workshops for each of the components of work, the INR team then refined the proposed ToC for each component of work. These refined versions of the ToC for each component were used to develop a preliminary overarching ToC for the whole BLU project. The ToC diagrams for the various components are included in Appendix 1.

The need for further meetings to unpack the ToC for the stewardship component of work for the BLU project was identified during the initial focus group meetings and further engagement at the Quarterly Planning Meetings (QPM). This stemmed largely from the need to align with SANBI’s broader plans for stewardship work.

## 3.4 Workshops at project quarterly planning meetings

The project’s quarterly planning meetings (QPMs) were vital to the ToC development process. The QPM provided the perfect opportunity to engage with the majority of the project partners as they were required to attend the QPM to present feedback on their respective components of work. The INR team attended a QPM in December 2017 at which they presented the concept of a ToC process to the partners. After undertaking a review of available project documents and completing the focus group meetings, the INR team was given the opportunity to host a ToC workshop at the April 2018 QPM. The workshop provided a good opportunity to work through the draft overarching ToC for the BLU project and present some key questions for the project partners to respond to. The key questions were separated into two broad categories, namely socio-economic benefits and beneficiaries, and capacity development. The questions included:

* Socio-economic benefits (Development / job opportunities) & beneficiaries:
  + How will the project respond to the issue raised in the MTR about the contribution to jobs and/or development? Does this need more emphasis, and if so, how? Should the overall project goal be re-worded?
  + Who are the primary and secondary beneficiaries of the above socio-economic benefits?
* Capacity Development:
  + What is the relative emphasis on one-directional transfer of skills, knowledge etc. (“us” developing “their” capacity) vs learning together (social learning)? Where are the spaces for social learning, and do we need more?
  + What are the short- and long-term impacts of the seconded staff in strengthening the capacity of municipalities to incorporate biodiversity into land use planning? How can we improve the long-term impacts?
  + How does the approach to capacity development cope with the unpredictable and changeable nature of staffing and political oversight?

The outcomes of the April 2018 QPM were used to further refine the overarching ToC.

The Theory of Change was again presented to partners at the November 2018 QPM, and this was accompanied by group discussions on what data are currently being collected that may have relevance to socio-economic development and capacity development.

Regarding stewardship, the following additional meetings were held to develop a broader national ToC for stewardship work over the next few years:

1. A follow-up meeting with the broader SANBI stewardship team to start developing a national stewardship Theory of Change (May 2018).
2. A meeting with Natasha Wilson of SANBI to discuss recent developments in the thinking around stewardship (November 2018).
3. Meeting of the SANBI stewardship internal reference group to discuss the way forward for the Theory of Change process (November 2018).
4. Theory of Change workshop at the National Stewardship Technical Working Group meeting in Cape Town (February 2019).

The draft national stewardship ToC (Kotschy, 2019) was based on the outcomes of this process, as well as integration of the results and recommendations from an earlier report on enhancing biodiversity stewardship in South Africa (Wright, 2018). The draft stewardship ToC flow diagram is included in Appendix 3.

# 4 A Theory of Change for the BLU Project

The project-level Theory of Change is described below through a combination of diagrams and narrative. The focus is on the overall intention and approach, as well as the way the different project components fit together and influence each other. Detailed Theories of Change for the five project focus areas (environmental management, capacity development, land use planning, stewardship, and certification and standards) are presented in Appendix 1.

## 4.1 Description of the project-level Theory of Change

The following Brief Description from the PRODOC (2014) provides a useful outline of the project’s Theory of Change.

South Africa has exceptional biodiversity of global significance. Since 1994 it has made major strides in protecting that biodiversity. However, it still experiences very high rates of biodiversity loss due to development pressure and habitat degradation: according to the National Biodiversity Assessment (2012) 24% of coastal, 40% of terrestrial, 43% of estuarine, 57% of riverine and 65% of wetland ecosystems are threatened. Furthermore, South Africa has persistently high levels of poverty and unemployment. The unemployment rate was reported at 25.2% in the first quarter of 2012, while the number of people living in poverty is nearly 40%.

Municipalities play an important role as centers of economic growth and service delivery; they regulate land use at local scale, and are also important users and managers of biodiversity and ecosystem services. However, municipalities are often faced with many burgeoning and often conflicting tasks, with poverty alleviation, local economic development and service provision justifiably occupying top priority on most local council agendas. Awareness amongst decision makers of the positive links between improved biodiversity management, human well-being and sustainable development is often low, as are levels of capacity for meaningful incorporation of biodiversity priorities into integrated development planning and land-use management. Since less than 7% of land in South Africa is formally protected, critical biodiversity is under threat from degradation and transformation. There is thus a need to strike a balance between development and job creation, and conservation and sustainable use of biodiversity.

This project is designed to address these challenges by (a) strengthening cooperation, coordination and capacity of municipal and other regulatory authorities that regulate land use decisions to incorporate criteria to avoid/ prevent, minimize and/or offset impacts on biodiversity, and improve compliance monitoring and enforcement, and (b) introducing mechanisms in collaboration with private and communal land owners to better protect critical biodiversity areas and manage land, while demonstrating the potential of biodiversity to create jobs and contribute to economic growth. The project will work in four district municipalities in global biodiversity hotspots and national biodiversity priority areas, with very high rates of habitat degradation and conversion, high levels of poverty, and other pressing needs for action: Amathole, uMgungundlovu and Ehlanzeni District Municipalities are located in the Maputaland-Pondoland-Albany hotspot; and the Cape Winelands District Municipality is located between the Succulent Karoo and the Cape Floristic Region.

The ToC diagram in Figure 2 illustrates in graphical form the flow of logic in the BLU project, from problem framing (“What is wrong?”) to the chosen bounding of the system to be worked on (“What do we want to change?”), to the project design and interventions proposed to achieve the desired change (“How can change happen?”), the intended outcomes, and the final impact if the outcomes are achieved (“What could the impact be?”). The logic is essentially the same as in the text box above, although it includes additional detail about the interventions and outcomes.

Figure 2: Draft ToC for the BLU Project

**OUTCOMES**

**WHAT DO WE WANT TO CHANGE?**

**INTERVENTIONS**

**CONTEXT**

Mainstream biodiversity protection into selected regulatory, planning, management and production processes through a two-pronged approach:

1. Increase the capacity of authorities to regulate and manage biodiversity and land use
2. Increase the capacity of land owners to manage biodiversity and land use

Through a focus on policy/process, institutions/people, products/tools and social learning opportunities.

**WHAT IS WRONG?**

* 1. Criteria to prevent, minimise or offset impacts on biodiversity incorporated into regulatory processes for land and NRM
  2. Increased capacity of regulatory staff and planning professionals to apply criteria
  3. Biodiversity priorities integrated into municipal LUP, decision-making and management
  4. Investment in biodiversity, ES and job creation encouraged and supported
  5. Improved security for priority biodiversity areas
  6. Improved management of priority ecosystems
  7. Improved management of threatened medicinal species
  8. Improved land and natural resource management practices on private and communal land
  9. Financing mechanisms and incentives for biodiversity stewardship created

**HOW CAN CHANGE HAPPEN?**

High poverty, inequality and unemployment and strong political imperative to address these, low awareness of benefits of biodiversity for human wellbeing and sustainable development among decision-makers; weak capacity and coordination for land use regulation and management; biodiversity not well integrated into municipal land use planning and management; much critical biodiversity is on privately or communally-owned land; weak stewardship ethic; biodiversity-unfriendly production processes; unsustainable use of natural resources

* Develop coordination mechanisms
* Develop pre-screening tools
* Support policy & develop guidelines
* Develop a system for CME of authorisations
* Targeted training
* Facilitate placement of staff within municipalities and provincial authorities, mentorship
* Set up biodiversity learning network
* Support development of municipal SDFs and zoning schemes
* Pilot creation of green jobs and job opportunities
* Secure stewardship agreements on private and communal land
* Develop tax incentives for biodiversity stewardship
* Develop management plans for priority ecosystems
* Develop sustainable use plans for threatened species
* Change forestry certification systems to allow small growers to enter the market
* Integrate biodiversity into production standards for fruit and sugar
* Innovate around wetland delineation practices on productive land

Sustainable and effective long-term protection of biodiversity, in support of sustainable socio-economic benefits

**WHAT COULD THE IMPACT BE?**

* The practices leading to biodiversity loss, in 4 selected District Municipalities
* Build understanding & support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing at the municipal scale

Loss of species; deteriorating ecological infrastructure and ecosystem services

**NEGATIVE OUTCOME**

Deteriorating ecological infrastructure and ecosystem services

South Africa experiences high rates of biodiversity loss through development pressure and habitat degradation

The essential problem being addressed by this project is that high rates of biodiversity loss continue to be experienced in South Africa through development pressure and habitat degradation, despite the major strides that have been made in policy reforms and institutions for managing biodiversity since 1994. **Mitigating the multiple ongoing threats to biodiversity is therefore the primary goal of the project**. Protecting biodiversity and ecosystems is important because of their role in sustaining human wellbeing and ecosystem services (Section 4.3), and this is the core mandate of many of the implementing partners.

However, as identified under “context” in Figure 2, this problem cannot be treated in isolation from the complex social-ecological system in which it occurs, and current social, political and governance realities in South Africa form the context to which the project must respond. This context includes poverty, inequality and unemployment and strong political imperatives to address these; political contestation over land; low awareness of the benefits of biodiversity for human wellbeing and sustainable development among decision-makers; weak capacity for land use regulation and management; and insufficient integration of biodiversity into municipal land use planning and management processes. Furthermore, much critical biodiversity is located on privately or communally-owned land and a weak stewardship ethic, biodiversity-unfriendly production processes and unsustainable use of natural resources pose multiple threats to this biodiversity.

While addressing socio-economic issues is not the core mandate of most of the implementing partners, biodiversity protection will only be sustainable and effective in the long term in the South African context if its value is understood and supported by as many different role-players involved in land use, planning and management as possible. These role-players include political decision-makers, municipal technical staff, environmental professionals, land owners and local residents. Project partners therefore agreed that, in addition to aiming to **change the practices leading to biodiversity loss through mainstreaming biodiversity into regulatory, planning, management and production practices**, it is important for the BLU project to **build understanding and support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing**. This includes providing data/evidence to allow for a better understanding of trade-offs between biodiversity and development at different scales, as well as facilitating social learning processes to build a better understanding between different sectors and role-players. This aspect is most obviously addressed by the work on piloting the creation of green jobs and job opportunities in the target municipalities, which includes “making the case” for this approach to the municipalities and to National Treasury (Outcome 1.4). However, several other activities can also contribute to telling this story, as outlined in more detail below.

**Links between project components**

The project interventions and outcomes are organized into two components or areas of focus (Component 1: Planning and land use regulation, and environmental management; and Component 2: Stewardship, and certification and standards). The two components are complementary and function as two “pillars” which are both needed to support the achievement of the project goals (Section 4.3). Building capacity for land owners to manage biodiversity and ecosystems responsibly through incentives, certification schemes and production standards reduces the need for compliance monitoring and enforcement and reduces the load on regulatory authorities by encouraging appropriate development. Strong, coordinated and well-functioning authorization, management and planning processes in turn enable land owners to benefit from well-protected and well-managed ecosystem services and ecological infrastructure at a landscape scale and also to realize benefits from biodiversity on their land (although there may also be trade-offs). This helps to constrain inappropriate development. Simultaneously targeting regulatory/ management authorities and land owners allows for collaboration and mutual support between the state and civil society.

The connections and interdependencies between the two components identified by project partners at the Quarterly Planning Meeting in April 2018 are shown in Figure 3. Several links were identified between stewardship (Outcomes 2.1 and 2.4) and job creation (Outcome 1.4). Firstly, the piloting of green jobs and job opportunities under Outcome 1.4 will, in time and if successful, contribute to building a case for stewardship funding models. Stewardship agreements on communal land may be linked to invasive alien plant clearing or other rehabilitation initiatives with the potential to provide jobs and other benefits. Protected area expansion through stewardship agreements may bring various benefits including expanding the local “wildlife economy”. The stewardship tax incentives being developed under the BLU project are a direct benefit that may be taken up by land owners and potentially passed on to secondary beneficiaries in a variety of ways. The economic benefits of stewardship agreements can also be seen in terms of avoided costs, for example the costs that would be incurred if important ecosystem services were lost (e.g. winter grazing, water provision or pest control).

Stewardship is also linked to land use planning (Outcome 1.3) because land use planning products such as bioregional plans and municipal Spatial Development Frameworks (SDFs) play an important role in guiding land use decisions under stewardship, carrying through into a link between stewardship and environmental management (Outcome 1.1) through EIA and environmental authorization processes. Historically, a number of stewardship sites have been declared as a result of the EIA process where landowners with priority biodiversity have negotiated opportunities for development with the understanding that they would set aside a portion of land for stewardship.

Stewardship is often linked to certification and standards (Outcome 2.3), for example when land owners in production landscapes protect sensitive parts of the landscape like wetlands or riparian zones. These conservation decisions may be required under the certification schemes or standards, or they may be the result of a stewardship ethic that extends beyond the agricultural production activities. However, there are also often trade-offs between stewardship activities and agricultural production. On productive land, wetland delineation policies or requirements must be matched with what is feasible in terms of management of delineated areas and loss of productive capacity (hence the links between certification/standards, and land use planning and environmental management).

Use of certification schemes and production standards (Outcome 2.3) is also linked to job creation (Outcome 1.4). Firstly, the forestry certification scheme being developed for small growers aims to give them access to previously inaccessible markets, thereby facilitating economic opportunities. Secondly, adhering to production standards may allow farmers to increase the secondary benefits flowing from their farming activities (e.g. sustain a greater number of jobs, create a greater variety of jobs or pay higher wages).

Another link connects certification and standards (Outcome 2.3) to land use planning (Outcome 1.3) through site development plans such as those developed under SusFarms. These are used by the land owners and also sent to the municipality, opening up an opportunity for better integrated planning.

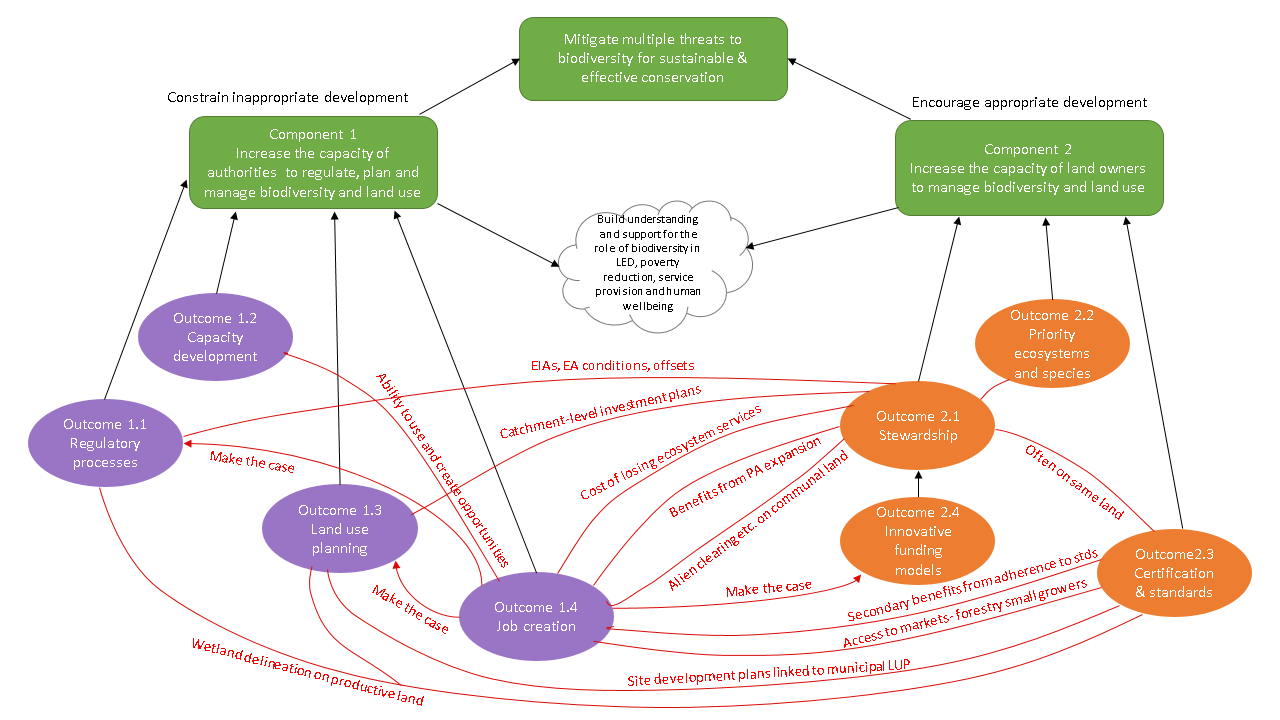


Figure 3: Connections between Project Outcomes under Components 1 and 2

**Contribution to building understanding and support for the role of biodiversity in local economic development, job creation, poverty reduction and human wellbeing**

As described above, besides the activities under Outcome 1.4, activities under stewardship and certification/standards have strong potential to contribute to this goal, if the monitoring and evaluation system is modified to ensure that the right kinds of data are collected and reported. Socio-economic benefit is interpreted broadly here and not just restricted to “number of jobs created”. It includes secondary (indirect) benefits, non-financial benefits that contribute to human wellbeing, and other funding obtained by leveraging BLU funding. Under this expanded definition, all activities under project components 1 and 2 have the potential to contribute to building understanding and support for the socio-economic benefits of biodiversity – as indicated by the arrows in Figure 3. Future work will include discussing the details of how this can be done and the corresponding M&E requirements with the project partners.

Capacity development (Outcome 1.2) also enhances economic opportunities for individual people, through training, extension support and mentorship, development of networks and access to and increased proficiency with products and tools. Capacity development allows people to potentially operate at a higher level within their organizations, find or create new opportunities for themselves or others, or realize more benefits from their land. All project activities contain capacity development elements (links not indicated in Figure 3 for the sake of clarity).

An important point to note is that successful achievement of Outcome 1.4 is an important ingredient in being able to “make the case” to municipalities to appoint suitably qualified staff, and also for making the case to all levels of government, NGOs and private partners for innovative stewardship funding models (Figure 3). The delays that have been associated with Outcome 1.4 activities so far therefore have potential to limit what can be achieved under Outcomes 1.1, 1.3, 2.4 and 2.1 (see Section 4.5 Risks and opportunities).

**Capacity development approach**

Capacity development is a central part of the Theory of Change for the BLU project, as can be seen from the box “How can change happen?” in Figure 2.

Although not stated as such in the PRODOC, the BLU project addresses capacity development in an integrated way, as a combination of focus on policy/process, institutions/people and products/tools. This approach recognises that building capacity requires more than simply training or awareness-raising and that all of the above aspects need to be addressed for successful mainstreaming of biodiversity. The Theory of Change assumes that a **lack of capacity** (to regulate and manage biodiversity and land use) is one of the key barriers and that building capacity can therefore improve the long-term traction of mainstreaming efforts.

Project activities include development of products and tools for use by individuals (guidelines, certification schemes, standards, incentives) and institutions (pre-screening tools, guidelines, spatial plans) in order to give effect to policy and make processes more efficient. There is also a training and mentorship component which includes funding of staff in municipal and provincial authorities (under Outcome 1.2) as well as training and extension support for private and communal land owners, tax advisors and stewardship staff under Component 2. These interventions contribute to building both individual and institutional capacity. Building coordination mechanisms for improved governance and efficiency (under Outcome 1.1) addresses the process and institutional aspects of capacity development.

The importance of **building relationships and trust and advocacy** were recognised during the Theory of Change process as important prerequisites for building coordination mechanisms, developing mutual understanding between institutions and sectors and “making the case” for biodiversity mainstreaming at various levels. Many project partners are involved in such activities, however, they were under-recognized in the project’s results framework. They have been included into the Theory of Change by recognizing **social learning** as an important part of capacity development (see Section 4.3 for further discussion about social learning).

The multifaceted approach to capacity development described above is appropriate for the context into which the project is being implemented. The high degree of political uncertainty, institutional flux and high staff turnover in government departments makes it essential to build capacity at a range of levels (individual, organizational and governance levels) to achieve maximum effect. Individuals with improved capacity will take their skills, attitudes and knowledge with them if they change jobs. Networks of professional relationships support people to learn more quickly in new settings and to transfer skills between organizations. Institutionalization of processes and tools enhances organizational memory in the face of staff turnover. Social learning is an appropriate response to institutional flux as it promotes ongoing engagement between partners even when it is unclear what needs to be learnt or what needs to be done.

Further work is needed by project partners to specify how each of the project activities contributes to the different aspects of capacity development, including social learning (see Section 5.5).

## 4.2 Critical assumptions underpinning the Theory of Change

The following assumptions were identified as underlying the project-level Theory of Change. These were consolidated from the focus group discussions with the project partners. They were presented to project partners at the Quarterly Planning Meeting in April 2018, but have been consolidated and reworded by the authors of this report and Assumption 4 has been added.

1. A key reason for the continuing threats to biodiversity in South Africa is the capacity deficit on the part of authorities and landowners to regulate and/or manage biodiversity and land use. Improving this capacity (according to the approach described above) will therefore mitigate some of the threats to biodiversity and lead to changes in practice.
2. Authorities and landowners will be able to act more rationally (in terms of following correct procedures even in a context where there are various external factors and pressures to consider) through capacity development and the availability of evidence which makes a case for the contribution of biodiversity to local economic development, job creation, poverty reduction and human wellbeing.
3. Improved regulation and management of biodiversity and land-use will provide benefits for all.
4. The project design is sufficiently robust to be able to achieve the desired outcomes even under the increasingly fluid and uncertain political, social and governance context.

Additional assumptions relevant to the different project areas are given in Appendix 2.

## 4.3 Evidence to support the assumptions

This evidence base should be broadened in conjunction with project partners and undergo further testing as new information and data becomes available.

**Evidence that threats to biodiversity can be mitigated through capacity development as it is understood in this project**

**Moderate evidence**

Capacity development can be defined in different ways. It is often considered to be the same as training, where it is assumed that “capacity” can be built by transferring knowledge, skills and tools to others through workshops, courses or mentorship programmes, and that these interventions will lead people to change their behaviour in the desired way (Boyes & Stanisstreet, 2012). Early models of behaviour change assumed that if people understood the impacts of their actions, they would behave in a rational manner and adopt more environmentally-friendly practices (“information deficit models”). In other words, it was believed that there was a relatively direct and positive relationship between a person’s knowledge about environmental problems and his or her willingness to act to reduce these problems. In most cases however the relationship between knowledge and action is not robust and there is a ‘gap’ between cognition and action (Kollmus & Agyeman, 2002). This is because behaviour is influenced by many other factors, including beliefs, social pressures and norms as well as physical or structural constraints (“lock in”) which make practices difficult to change (Boyes & Stanisstreet, 2012).

It therefore follows that capacity development needs to include more than training if it is to produce desired changes. Many development funding agencies (such as UNDP) have therefore expanded their vision of capacity development to beyond improving the way tasks are performed to include changing mind-sets and attitudes. The capacity development approach used in the BLU project is in line with this broader understanding.

Biodiversity mainstreaming is quintessentially a capacity development exercise. It is a “social experiment” in changing the value structures of institutions and individuals, in order to embed biodiversity protection into the management and use of landscapes outside of protected areas. Experience from other mainstreaming projects has highlighted that a particular aspect of capacity development is important for success: building platforms and networks for sharing and learning (GEF 2016). For example, lessons from the Grasslands Programme identified the importance of platforms in providing a neutral space to enable the identification of mutual needs, the development of collective vision and shared objectives” (SANBI 2013). Others have noted the importance of collaborative work and building “learning institutions” for the success of mainstreaming work (Cowling et al. 2008, Lombard et al. 2010, Huntley 2014).

Building networks and platforms is an important enabler of social learning. Social learning is dependent on people and their interactions, taking place in a “social learning space” that enables genuine interactions between participants who recognise each other as learning partners with mutually relevant lived experience, and who are committed to learning together (Wenger, 2009). Social learning is not manipulative because it is open-ended and aimed at discovering new perspectives through peer-to-peer interactions. It does not assume fixed forms of knowledge or understandings of “the problem” and does not assume that what needs to be learned is known beforehand, but rather assumes that knowing arises through the process of constructing an issue and seeking improvements together (Ison et al., 2007). Phenomenological approaches, ‘action learning’, ‘expansive learning’ and ‘reflective practice’ are all social learning approaches. Many authors have pointed out the relevance of social learning for solving “wicked problems” which cannot be solved by the sum total of individual learning, and particularly for changing practices (Engestrom, 2001; Ison et al., 2007; Wenger, 2009; de Kraker, 2017).

Mainstreaming projects have long-term investment horizons, and achieving the desired impacts through social learning processes requires decades (GEF 2016). Nevertheless, some evidence is available to show that mainstreaming projects can deliver results at both the foundational level (capacity development – the “means”) and at the impact level (hectares protected, better managed production landscapes, ecological infrastructure delivering valuable services to people – the “ends”) (SANBI 2013, Huntley 2014). Buck et al., (2006) found that landscapes with effective institutions and governance are likely to improve over time, while those that lack institutional capacity and social capital are prone to deteriorate.

Unfortunately, despite the large number of mainstreaming projects that have been implemented around the world, there has been little analysis of the success of different capacity development approaches in producing the desired impact (Redford 2015). Further research is needed on how different mainstreaming project types have moved along their hypothesized pathways of change, how this relates to biodiversity status and condition and how and when their outcomes and impact might be measurable, to allow the return on investment in biodiversity mainstreaming to be assessed (GEF 2016). Capacity development, particularly social learning, is the “engine” driving this long-term change. Wenger (2009), Ison et al. (2007) and de Kraker (2017) all noted that social learning processes are often constrained by the relatively small number of people who are able to facilitate them successfully (due to a lack of recognition of the importance of this skill in training institutions). However, if done right, mainstreaming allows gains at a scale not easily found in other biodiversity management investments (SANBI 2013).

We therefore conclude that there are strong theoretical arguments for the fact that capacity development can mitigate threats to biodiversity through mainstreaming, although actual (published) evidence from the field is not as strong.

One other aspect that should be considered here is the possibility that it is not capacity that is lacking but the ability or willingness to act. The many examples of corruption and maladministration exposed by the media at local, provincial and national levels recently, in government and the private sector, make this a relevant concern. “Democratic, transparent and stable governance” is considered an important enabling factor for successful mainstreaming (GEF 2016). If people and organisations are following alternative agendas, then even the best capacity development interventions may not produce the desired change. Working in such a context requires extreme flexibility and sensitivity to context (Menkhaus, 2007).

Bhargava (2011) outlined some strategies for working under conditions of non-transparent, unstable and/or corrupt governance. These include involving stakeholders in providing independent monitoring, identifying high-performing organisations, programmes and practices and working with these, supporting “champions” and reform-minded individuals, changing systems to reduce officials’ powers of discretion, increasing access to information and building stakeholders’ capacity to demand accountability. Reeler (2007) argues that under “hot” (conflict) or “cold” (“stuck”) conditions, building relationships becomes a more important strategy for social change than running “projects”. This suggests that under conditions of poor governance and corruption, social learning should become an even more prominent part of capacity development.

**Evidence that biodiversity-friendly land use practices can help with local economic development, job creation, poverty reduction and human wellbeing**

**Moderate evidence**

Although there is generally strong agreement that biodiversity is important for ecosystem services, which are foundational to human wellbeing (Diaz et al. 2006, Tallis et al. 2008; Sjostedt 2012, Sandifer et al. 2015, UN Sustainable Development Goals 2015) there is limited understanding of the actual benefits derived by different groups of people in particular places and at particular times. Part of the challenge is that biodiversity, ecosystem services, poverty and wellbeing are all multidimensional concepts and the relationships between them are highly context-specific and mediated by power relations and structures particular to each context. As such, not all people or groups benefit equally.

Land use and management decisions lead to tradeoffs between different ecosystem services, which in turn lead to tradeoffs between the wellbeing of different people (Rodrigues et al. 2006). Benefits often accrue mainly to the powerful or the relatively better-off members of societies rather than to the poor and marginalised (Kumar 2013, Suwarno et al. 2016). The poor often lose out because they lack access to substitutes for ecosystem goods and services and technologies to offset the impacts of deteriorating ecosystems, and because their voices are less powerful (Diaz et al. 2006).

Turner et al. (2012) found that although the global potential for biodiversity conservation to support poor communities is high, the flows of life-sustaining or economically valuable services from natural habitats are not on their own sufficient to lift people from poverty. They concluded that mechanisms for financial transfers are needed, but noted the potential for these benefits to be captured by elite groups through corruption. They also noted that while biodiversity is always beneficial to the poor, the land use and governance arrangements through which biodiversity is protected are often not beneficial to the poor. Suich et al. (2015), in their review of the empirical evidence of the relationship between ecosystem services and poverty alleviation, noted that a considerable gap remains in our understanding of the links between ecosystem services and poverty, how change occurs, and how pathways out of poverty may be achieved based on the sustainable use of ecosystem services[[1]](#footnote-1). Similarly, Sandifer et al. (2015) found that despite a large volume of literature, there were few robust analyses that identified causal mechanisms. They concluded that the basic premise that biodiversity is beneficial for human wellbeing is supported by observational and correlational evidence, but that the ways in which these benefits are mediated remain largely unknown.

In a South African setting, “The Business Case for Biodiversity Stewardship” (SANBI 2017), suggests that stewardship agreements on privately or communally-owned land have the potential to stimulate rural economies by diversifying livelihood options, creating nodes of rural development and stimulating job creation and skills development. However, the report focuses mainly on benefits to the state (cost savings in the acquisition and management of protected areas) rather than benefits to land owners and other role-players. Similarly, the biodiversity economy (defined as the sustainable utilization of indigenous biological resources including biodiversity-derived products for trade and bio-prospecting, the hunting industry, agriculture and agro processing of indigenous crops and vegetables, livestock breeds and indigenous marine resources and fisheries) also has significant potential to stimulate local economic development and jobs (National Biodiversity Economy Strategy 2015).

The DEA recently launched a programme to transform the biodiversity economy (NBSAP 2015-2025) and in 2016, a Biodiversity Economy Lab was held to operationalise the Biodiversity Economy Strategy. The Lab identified various initiatives that could contribute to a thriving wildlife economy including prioritizing areas for transformation to the wildlife economy, establishing new wildlife entrants, operationalizing biodiversity economy nodes and formalizing the game meat market. Several initiatives were also identified in the bioprospecting sector including mass cultivation, sustainable harvesting, amendments to legislation and improvements to the Bioprospecting Access and Benefit-Sharing permitting system. Work done so far towards achieving the targets set out in the Biodiversity Economy Lab includes the creation of over 782 jobs, donation of over 768 head of game through various wildlife economy projects nationally, and securing of R138 million in private sector investment. The government (through EPIP funding) has invested a further R66.6-million in the wildlife economy sector. The DEA has trained 25 community property associations and 587 people through workshops, training and youth programmes.

Biodiversity Economy Nodes (BENs) are strategic vehicles to achieve economic, social and environmental objectives through an integrated land use planning process. These nodes link core conservation areas to wildlife areas managed by the private sector and communities (often successful land claimants). By pooling the resources of the various partners, extensive wildlife areas can be established that offer viable, long lasting economic opportunities for communities to benefit from economies of scale. Viable business opportunities and sustainable jobs are generated throughout the entire value chain of the wildlife-based industries as well as supporting service industries such as transport and meat processing. Sharing of risks and benefits among landowners stabilises the system and reduces the risk of land transformation within wildlife areas.

Some positive outcomes have been described so far for the uMfolozi BEN and the Greater Amathole BEN, including successful establishment of joint ventures and partnerships and private sector investments in wildlife-based industries on communal land. Employment through the NRMPs is being used to provide benefits to communities during the initial development phase, while hunting and ecotourism operations are still being established.

The benefits of switching from livestock farming to ecotourism are demonstrated in a study of 10 reserves in the Eastern Cape (Langholz & Kerley 2006). This study suggests that ecotourism increased the number of staff by a factor of 4.5 and average annual salaries by a factor of 4.8, with large increases in revenue (although the authors note that the salary figures should be examined with caution). Each reserve was estimated to support an average of 107 full-time employees, and an additional 375 dependents per reserve.

Similar benefits are evident at Nambiti private game reserve, a community-private sector partnership which makes a significant contribution to the local and regional economy. The reserve has a monthly turnover of R3.5 to R4 million, provides jobs for 220 people at far higher salaries than agricultural minimum wages, generates revenue through live game sales and limited hunting, produces game meat for commercial sale and as an affordable source of meat within local communities (DEA Deputy Director General, National Biodiversity Stewardship Conference 2017) .

This evidence is supported by a 18-month national study on the wildlife ranching sector of South Africa by the Endangered Wildlife Trust (Taylor et al. 2016) which found that wildlife ranching is a thriving industry in South Africa and can contribute important conservation, economic and social benefits to the biodiversity economy when practised responsibly. Overall, 65170 permanent jobs were supported. However, Brandt and Spierenberg (2014) found that there has been no real change in the distribution of wealth between land owners and workers in the Eastern Cape because of wildlife ranching, and questioned its potential to transform social relations. Similarly, although some communities surrounding protected areas do receive various benefits, these are not always to their satisfaction (Saayman et al. 2009, Nsukwini and Bob 2016).

The Natural Resource Management Programmes (NRMPs) including Working for Water (WfW) give credibility to the policy of linking conservation to job creation and poverty reduction (Warner 2016). WfW and related programmes spent $519 million between 1995 and 2009, created 15,500 jobs among previously unemployed youth and women in poor communities, and increased annual water flows by an estimated 48–65 million cubic meters a year (Warner 2016). These programmes have also spawned other industries, including charcoal, light furniture, and timber manufacturing. On the negative side, they have been criticised for generating only short-term jobs with very few opportunities for advancement.

Overall, the evidence suggests that despite strong potential for socio-economic benefits from the biodiversity economy, these benefits are not fully realised at present and do not sufficiently reach poor rural communities. Realising benefits from biodiversity, like all economic activity, is a socio-political process which is strongly influenced by power relations. Poverty alleviation and benefit to the poor and marginalised are not guaranteed, and are in fact unlikely without concerted effort and mechanisms to achieve this.

**Evidence that the two-pronged project design is an effective and robust approach to mainstreaming**

**Strong evidence**

Typically conservation strategies to improve biodiversity, fall into one of two categories; bottom-up or top-down approaches. These approaches are different from each other in the degree of engagement in conservation and community participation, and the way resources are managed (Pegas, 2012).  However, bottom-up and top-down approaches have both been criticized for failing to meet conservation objectives and sustain stakeholder engagement through time (Gaymer *et al*., 2014). The failure of these approaches has called for alternative conservation methods, and in particular one approach integrates both methods. The mixed approach uses socio-economic incentives (economic benefits from tourism, education) as “carrots’ and enforcement of environmental laws (policy, legislation) to achieve conservation goals as “sticks” (Pegas, 2012).

The “stick” or regulatory approach to achieve conservation goals has its roots in various global initiatives. Global policy initiatives are relevant to the mainstreaming enabling environment formed in each country (Peterson and Huntley, 2005). These include the Sustainable Development Goals (Griggs *et al*., 2013) and the Convention on Biological Diversity (Djoghlaf, 2008). National governments have played an important role in the enabling environment for mainstreaming work in production landscapes and sectors (Peterson and Huntley, 2005).

Furthermore, four key policy tools at the national scale direct biodiversity management and planning in South Africa. These are;

* The National Biodiversity Strategy and Action Plan (NBSAP)
* The National Spatial Biodiversity Assessment (NSBA)
* The National Biodiversity Framework (NBF)
* The National Protected Areas Expansion Strategy (NPAES).

National Biodiversity Strategy and Action Plans (NBSAPs) have great potential to mainstream biodiversity considerations into sectors of the economy and government departments. The NBSAP includes a long term action plan and framework for sustainable use and conservation of South Africa’s biodiversity and equitable sharing of these resources. The National Spatial Biodiversity Assessment (NSBA) together with the NBSAP helped the creation of the National Biodiversity Framework (NBF) which is a biodiversity act necessity (Sandwith *et al*., 2005). Swiderska (2002) found that despite positive outcomes of NBSAPs, they have not addressed the main factors driving biodiversity loss as they are not connected with use of resources and have not influenced planning in economic sectors. More specifically they have not addressed the linkages with economic policies and plans and have not been adequately integrated into planning mechanisms and national institutions. In South Africa the NBSAP has some legal backing which sets the NBSAP in South Africa apart from other countries. In South Africa projects falling under bioregional programs such as NBSAPs are pioneering approaches to incorporate fine-scale biodiversity priorities into local-level decision making by municipalities and other land decision makers such as the provincial environmental affairs (Sandwith *et al*., 2005).

Examples of successful mainstreaming due to the “stick” or regulatory approaches are the City of Cape Town’s Environmental Management Framework and the Eastern Cape’s Subtropical Thicket Ecosystem Programme. In the city of Cape Town an Environmental Management Framework (EMF) incorporates a biodiversity policy that focuses on biodiversity corridors and nodes. By focusing on important nodes the authorities (City of Cape Town, SANBI, Cape Town Table Mountain Fund) have approached poor local residents to conduct greening activities at local schools and the training of conservation managers from previously disadvantaged backgrounds (Sandwith *et al*., 2005).

In the Eastern Cape the Subtropical Thicket Ecosystem Programme (STEP) has created a suite of decision-support and planning tools, such as the STEP conservation framework and the STEP conservation priority map for municipalities to assist decision makers in integrating biodiversity priorities into the decision-making and land-use planning process. These planning tools have been mainstreamed effectively through stakeholder workshops and the SANBI-WESSA mainstreaming project (Sandwith *et al*., 2005) and are now considered in various instruments including Environmental Assessments, Strategic Environmental Assessments and Integrated Development Plans (Sandwith *et al*., 2005).

Despite the evidence of regulatory “stick” approach successes in South Africa at the local scale, the South Africa Environment Outlook (2006) highlighted constraints of the “stick” approach at a provincial and local scale. At a national level, South Africa has a progressive governance framework for environmental management; however the lack of implementation and enforcement at the ground level is a major hindrance to sustainable development (SAEO, 2006). However, in most provinces most staff are over-committed and have little capacity or resources for enforcement activities and coordinated governance.

In South Africa and globally much of the biodiversity is found on privately owned land (Hanley *et al*., 2012). For example, in the US private land contains at least one population of two-thirds of species listed as being endangered, and in South Africa most priority biodiversity falls outside of the statutory protected land and is found on private land (Groves *et al*., 2003; Muller and Fourie, 2003). The way in which private lands are managed, therefore has major implications for biodiversity and engaging private landowners is critical to enhancing and maintaining biodiversity (Hanley *et al*., 2012; Sorice *et al*., 2013).

For conservation initiatives, tools to resolve human-wildlife conflicts have traditionally targeted wildlife centred measures but have often limited short term success due to a lack of social tolerance. There is a growing recognition among wildlife managers that long term solutions need to alter human behaviour (Baruch-mordo *et al*., 2011). Successful biodiversity mainstreaming relies on incentives to supplement conservation tools such as regulation and land acquisition (Casey *et al*., 2006). Despite studies showing the willingness of private landowners to pay for biodiversity conservation, the supply of biodiversity is usually unrewarded by markets and private landowners receive no direct financial benefit for protecting biodiversity. Protecting biodiversity often comes at an opportunity cost to land owners as it requires the land owners to give up the opportunity for intensification or land conversion. Markets thereby generate too much biodiversity loss and too little conservation effort (Hanley *et al*., 2012). Therefore, government intervention is needed to promote conservation on private land. Practical issues with extending the planning system to agricultural land management and political reluctance to force private land owners to produce biodiversity has led governments in various countries to promote schemes whereby land owners can voluntarily take up contracts to manage land for biodiversity in exchange for payments (Hanley *et al*., 2012). Incentive based programmes for at-risk species management and recovery are gaining traction as private land owners perceive biodiversity management as less of a liability and more of an asset (Sorice *et al*., 2013).

The following are examples of incentives for private land owners to voluntarily take up contracts to manage land for biodiversity (Casey *et al*., 2006; Cadman *et al*., 2010):

* Statutory (Safe harbour agreements)
* Property rights innovations (Conservation easements)
* Market orientated institutions (Ecotourism)
* Financial incentives (Conservation stewardship incentives, financial compensation)
* Public tax incentives (Property tax incentives)
* Facilitative incentives (Education and technical assistance)

The enforcement and presence of penalties and regulation is what drives land owners to comply with environmental laws via incentive programs (Casey *et al*., 2006). According to Borrini-Feyerabend *et al*., (2006) locally implemented and negotiated co-management agreements are ineffective unless supported by enabling policies and legislation. The development of voluntary incentives for habitat or biodiversity conservation does not mean a with-drawl from national environmental laws, incentives must operate within a regulatory framework to ensure habitat is maintained and contracts enforced (Casey *et al*., 2006).

According to Pegas (2012) a combination of regulation and voluntary incentives are needed for successful biodiversity conservation. Examples of the appropriateness of the two pronged approach to mainstreaming biodiversity can be observed in the following examples;

The “carrot” and “stick” approach was investigated by Pegas (2012) in a study titled the Brazilian Sea Turtle Conservation Program (TAMAR), Brazil’s permanent sea turtle conservation program. According to the study turtle nesting has substantially increased indicating a decline in poaching activities. Furthermore, the enforcement of laws to protect turtle nesting sites did not result in conflict with communities and through a combination of good relationship with communities, job creation, and promotion of education programmes the community was accepting and supportive of the TAMAR project. The project demonstrated the effectiveness of a combined regulatory and incentive approach to biodiversity conservation.

Another example of the successful two pronged incentive and regulatory approach to biodiversity conservation was the Socio Bosque program in Ecuador. The programme consists of monetary incentives per hectare of native ecosystem and forest to indigenous communities and private land owners who protect the ecosystems (De Koning *et al*., 2011). The incentive programme works on the basis of voluntary conservation agreements which are monitored on a regular basis for compliance. After two years the project boasts more than half a million hectares of natural ecosystems and over 60 000 beneficiaries. The Socio Bosque programme offers important lessons about combining government policy with ecosystem conservation and poverty alleviation, monitoring of local socio-economic investments, is transparent and straightforward, and included nationwide participation of local residents and farming households (De Koning *et al*., 2011).

There are various examples of the regulatory and incentive approaches working on their own. However, often a purely regulatory or incentive approach fails to achieve biodiversity conservation goals to a lack of capacity in many “stick” approaches to enforce regulations and a lack of legal backing which binds contracts in “carrot” based approaches. Therefore, the TAMAR and Socio Bosque are clear examples of successful biodiversity conservation techniques which integrate the regulatory and incentive based approaches. The evidence highlights the appropriateness of the two pronged “carrot” and “stick” approach to mainstreaming biodiversity for land-use planning and biodiversity management.

## 4.5 Risks and opportunities

An updated assessment of risks and opportunities was needed to help the PMU and Steering Committee continue to navigate their way through the changing context (this was recommended in the Mid-Term Review). Important risks, particularly those that may influence the achievement of the project’s goals and its longer-term impact are identified in Table 2. Several of these risks appear to be increasing, highlighting the importance of regular tracking as part of the M&E system.

Two of the identified risks fell into the “high risk” category based on the combination of their probability of occurrence and their potential impact. Both of these risks were considered by project partners to be increasing.

1. **The risk that participating partner organisations are negatively affected by (non-BLU) budget and/or capacity constraints.** Current difficult economic conditions and the government moratorium on appointments are already affecting the budgets and staffing of provincial and municipal organisations and are likely to do so even more in future. This may affect partner organisations’ capacity to implement the project, and will also influence sustainability beyond the project (e.g. support for posts currently occupied by seconded staff). Although impact to the project at this stage is considered medium, risk to the sector beyond the project’s close is high. This risk is related to risk No. 4 (The flux and vulnerability of governance structures and processes makes it difficult to ensure institutionalization of products and tools).
2. **The risk that biodiversity is threatened by broader issues outside of the scope of the project, particularly mining and climate change.** Unwillingness by the Department of Mineral Resources and environmental agencies to exclude mining as a potential future land use poses a high risk for achievement of the targeted hectares under stewardship in most provinces. Illegal mining and sand mining have increased in certain areas. This is a risk to the impact of the project and the security of the investment made into stewardship, and may reduce the extent to which the project goal can be achieved.

Table 2: Risks to the BLU project - updated September 2019. These were identified through the Mid-Term Review (Nov 2017) and the Theory of Change process (Mar to Sep 2018). Colours are according to the GEF risk assessment guiding matrix (Appendix 3) which combines probability and impact (red = critical, orange = high, yellow = medium, blue = low, green = negligible).

|  | **Description** | **Date identified** | **Type** | **Impact & probability** | **Status (Sep 2019)** | **Mitigation** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Participating partner organisations are negatively affected by (non-BLU) budget and/or capacity constraints | Jun 2017 | Operational | This may affect partner organisations’ capacity to implement the project. It will also influence sustainability beyond the project (e.g. posts currently occupied by seconded staff). Although impact to the project at this stage is medium, risk to the sector beyond the project’s close is high.  P = very likely  I = medium | **Increasing**  Current difficult economic conditions and the government moratorium on appointments are very likely to affect the budgets and staffing of provincial and municipal organisations. This is already affecting conservation agencies in several provinces. | Partly mitigated by spreading capacity development activities across different levels (people, organisations, provincial and national systems/ processes). |
| 2 | Biodiversity is threatened by broader issues that are outside of the scope of the project, including mining and climate change | Nov 2017 | Environmental, political, financial | The impact of the project will be reduced and part of the investment in the project will be lost. The goal of mitigating biodiversity loss may not be achieved.  P = likely  I = high | **Increasing**  Unwillingness by the DMR and environmental agencies to restrict future mining activities poses a high risk for the hectares under stewardship in most provinces. Illegal mining and sand mining have increased in certain areas. Mining impacts should be monitored by the PSC. |  |
| 3 | Political will and support is not achieved, even after a strong case has been made for the contribution of biodiversity to jobs and development | Apr 2018 | Political, strategic | This would weaken the impact of the project to the extent that particular decision-makers are able to influence project outcomes and impacts.  P = likely  I = medium | **Uncertain**  Decision-makers may not respond to the message even if a strong case is made. However, it is unlikely that this will apply to all decision-makers. This risk applies particularly at local government level and to the stewardship work. High-level support has, however, improved since the appointment of the new Minister. | The project team has developed a better understanding of the political dimensions and has formulated a plan to develop appropriate communications. |
| 4 | Funding, including post-declaration financial support, for stewardship is not obtained | Nov 2017 | Financial, strategic | This could lead to loss of some of the stewardship investments made through the project.  P = likely  I = medium | **No change**  Innovative funding models are needed to solve this problem. | This is a focus of work being done by the SANBI stewardship team, which extends beyond the BLU project. |
| 5 | The flux and vulnerability of governance structures and processes makes it difficult to ensure institutionalization of products and tools | Apr 2018 | Organizational, strategic, financial | The long-term impact of the project would be weakened and some of the investment made through the project would be lost.  P = moderately likely  I = medium | **Increasing**  The change in President in Dec 2017 and elections in May 2019 led to further governance instability. Difficult economic conditions make further budget cuts likely, which may increase the vulnerability of governance structures and processes. | Partly mitigated by spreading institutionalization approaches across different levels (people, organisations, provincial and national systems/processes). It was recognised at the start that there are limits to what the project can achieve. |
| 6 | Insufficient social learning takes place within the project | Apr 2018 | Other (social), organizational,  operational | The project’s capacity development impact will be lower than it could have been. Creating opportunities for social learning was not explicitly included in the results framework and therefore, although it has happened, it may not be sufficient to produce the desired transformational changes.  P = likely  I = medium | **No change**  Relatively little time is left in the project to initiate additional social learning processes, and these take time to establish. | Project staff have undergone and are undergoing training in facilitation of social learning processes. |
| 7 | The project is not able to use the opportunity to document how it has built understanding and support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing. | Nov 2017 | Strategic, political | The full impact of the project will not be recognised and the potential for future projects to build on the lessons learned will be weakened. Political support for future mainstreaming projects may be weakened.  P = moderately likely  I = medium | **No change**  Much relevant work has been done but it has not been sufficiently documented and quantified. The opportunity to do so still exists although time is running out. | Plans are being made to better include this aspect in the project’s M&E system. |
| 8 | The project is not able to encourage municipalities to invest in biodiversity and EI to support creation of green jobs within the remaining timeframe (Outcome 1.4). | Nov 2017 | Operational, strategic | This will negatively affect the mainstreaming of biodiversity into municipal development plans and processes, and the building of understanding and support for the value of EI.  P = moderately likely  I = medium | **Decreasing**  Action has been taken to mitigate this risk. However, there may not be sufficient time remaining. Municipal capacity to implement opportunities remains weak. | The project has responded to the delays under Outcome 1.4 by broadening the kinds of investments considered and obtaining help in identifying and following up on opportunities. The project has also responded to this risk by planning to document broader socio-economic benefits across other project areas. |
| 9 | Communities are not able to take up the biodiversity economy | Jun 2017 | Other (social) | It will be difficult to demonstrate the benefits of biodiversity for local economic development and poverty alleviation.  P = unlikely  I = high | **No change**  Uncertainty over land tenure and lack of access to finance will increase this risk. Capacity development may reduce it. | The suggested case study on stewardship on communal land will help to improve understanding of this risk. |

The following opportunities to strengthen the project’s impact in the time remaining were identified:

1. There is a valuable opportunity to **amplify the project’s contribution to building understanding and support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing**, by ensuring that relevant data are gathered and communicated. There is an opportunity for better documentation of how project activities have built this understanding and support in different spheres, e.g. among municipal technical officials, political office-bearers, land owners and those involved in biodiversity-dependent livelihood activities. Being able to provide specific evidence and tell this story convincingly will increase the impact of the project and the likelihood of future support for similar projects.
2. There is an opportunity to **better capture and document the many types of capacity development taking place across the project** and with different stakeholders (not only under Outcome 1.2). This is an opportunity to better report on the project’s impact. Many aspects of capacity development are currently not being adequately reported, for example social learning and capacity building taking place through interactions within networks and forums as well as informal interactions. There is an opportunity for this project to do things differently to other mainstreaming projects around the world (Section 4.3) and thereby contribute to building a stronger base for future projects.
3. The project provides an opportunity to integrate biodiversity conservation into the broader land reform process through implementing stewardship agreements on communal land. There is currently little **evidence for the benefits of stewardship on communal land**, and an opportunity therefore exists for the project to address this need.

In addition to these potential opportunities before project close, several opportunities will be created after the project’s completion. These include opportunities arising from the significant capacity development and upskilling of staff and consultants employed through the project, making it possible for these individuals to effectively continue extension work in the four regions. The job-creation activities initiated with the municipalities make it possible for the municipalities to seek further funding to continue with these activities, although it is unclear whether they will have sufficient capacity to make use of this opportunity.

# 5 Discussion and Way Forward

## 5.1 Insights gained and value of the Theory of Change process

The Theory of Change process provided a stimulus for project partners to review the internal logic of their activities and how they contribute to the various outcomes. Several people stated that they found it useful to “step back” and take a strategic look at their planned activities and the underlying assumptions. This was particularly useful for the partners working on stewardship, some of whom were new to the project, and prompted a series of further meetings to refine the Theory of Change for this area of work and integrate it into broader work within SANBI.

The process also highlighted some important dependencies between activities that had not been explicitly recognized before. Outcome 1.4 (demonstration of the potential for job creation and sustainable economic development) needs to be achieved in order to help “make the case” for both stewardship funding models and municipal investment in ecological infrastructure and relevant staffing (Figure 3). Developing innovative funding models for stewardship (Outcome 2.4) is a prerequisite for full achievement of Outcome 2.1 (securing of biodiversity priority areas through stewardship agreements). Therefore, Outcome 2.1 can only be fully achieved in a longer time period than available in the project. Given this reality, the stewardship team needs to prioritise what is most important to achieve in the time remaining in this project, with an eye on the broader aim of advancing stewardship in South Africa.

Many interlinkages between project components 1 and 2 were identified through the Theory of Change process (Figure 3). This will help to respond to concerns in the Mid-Term Review that the two components are essentially running as two separate projects. Many of these linkages also helped to identify how the various activities contribute to building understanding and support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing.

The Theory of Change process was also useful for developing a more careful description of the project’s approach to capacity development (Section 4.1). Further engagement with project partners is, however, still needed to specify the capacity development contributions in each project area (see Sections 5.2 and 5.5). The process helped to highlight some activities which were not explicitly mentioned in the results framework, namely building relationships and trust (e.g. through participating in existing forums and networks) and advocacy. This was especially highlighted in the Environmental Management project area, although all partners are involved in such activities to various extents. These activities have been included into the Theory of Change by recognizing social learning as an important part of capacity development. The Theory of Change process prompted a discussion on social learning and the importance of investing in social learning processes to improve understanding between different organizations and sectors and facilitate the “mind shifts” required in certain areas.

The Theory of Change responds to the changes in context that have taken place since the project started in the following ways:

* The focus on socio-economic benefits has been strengthened by increasing the emphasis on “Build understanding and support for the role of biodiversity in local economic development, poverty reduction, service provision and human wellbeing” (Figure 2). The formal project goal was not amended but there is a clear recognition that the connection between biodiversity and socio-economic benefits must be demonstrated for successful mainstreaming of biodiversity in the long term.
* Potential contributions from the various project activities towards the above goal have been noted as well as linkages between project components 1 and 2 (Figure 3).
* More explicit emphasis has been placed on building relationships and learning. This is an important response to the increasing uncertainty in the political and governance context, which increases the need for effective monitoring and sense making processes to understand “what is going on”.
* Risks beyond the immediate project scope have been identified (Table 2).

## 5.2 Contribution of the BLU project to the national stewardship theory of change

Besides having provided resouces for the process of developing this Theory of Change, the BLU project contributes to the following areas of work identified as important nationally:

* Changing decision makers’ understanding of the value of stewardship, through hosting of Biodiversity Stewardship Conferences and events, development of communications materials (e.g. case study on success stories at land reform sites), and through collecting data on the socio-economic costs and benefits of stewardship. This is also achieved through building relationships and advocacy work at the municipal level (at which the BLU project is focused).
* Developing innovative funding models, through the work on tax incentives for stewardship sites.
* Optimising the use of existing resources for stewardship, by providing opportunities to understand the nature of state-NGO collaboration in the different project geographical areas and how it can be strengthened and sustained.

## 5.3 Implications for the M&E system

* Data on socio-economic benefits must be collected (both quantitative and qualitative). A useful exercise would be to tabulate beneficiaries (e.g. political decision-makers, municipal technical staff, environmental professionals, land owners and local residents) against types of benefits (including direct and indirect benefits), and then identify which activities can produce data about which benefits and for whom. Short-term and long-term benefits should be distinguished. Project partners will need to agree on how data will be measured/collected and reported, how often and by whom. A section for qualitative reporting on socio-economic benefits could be added into the quarterly reporting template used by partners to report to the PMU. This data collection needs to start as soon as possible.
* Project partner input is needed to identify how each project area contributes to capacity development (as an important route to socio-economic development/empowerment) and to specify how these contributions will be measured and reported. Decisions must be made about how data will be measured/collected and reported, how often and by whom. One possibility is to break it down into policy/process aspects, institutions/people aspects, products/tools aspects and social learning opportunities.
* Social learning needs to be included more explicitly in the M&E system. Building relationships and trust, as a prerequisite for social learning, is important in all parts of the project, but it is necessary to develop more detailed strategies for how to measure and report on this. Project teams need to think about what existing social change processes are occurring in their areas of work and how these affect their work, either positively or negatively. It cannot be assumed that all change comes from the project activities.
* Internal learning mechanisms within the project need to be strengthened to allow for adequate ongoing reflection and sense making, because of the many contextual uncertainties. This is important for all partners, not only the PMU. The Quarterly Planning Meetings provide useful opportunities for learning, but it is worth considering other options as well, such as cross-learning visits between cases/sites; case studies (see next section) and event-based reporting templates for stimulating reflection and learning.
* Risk mitigation: partners from each project area should provide input on how their work responds to or avoids the risks identified in this document.
* As a basis for thinking further about long-term impact, partners could identify synergies between BLU and other projects in the four District Municipalities. This could form part of locating the BLU project activities within the longer-term trajectory of GEF mainstreaming projects.

## 5.3 Case study suggestions

An outcome of the ToC workshop hosted at the QPM at the end of April 2018 was the identification of potential case studies which the project partners felt would add value to the BLU project. The partners were divided into three groups and asked to identify what they thought would be a valuable case study to undertake. The suggestions are summarized in Table 3. SANBI has indicated a preference for starting with the third (stewardship) case study. The other case studies may be undertaken later if time and budget allows.

Table 3: Potential case studies identified by the project partners

|  |  |  |
| --- | --- | --- |
| **Group** | **Case study description** | **Benefit** |
| **Environmental Management** | **Case study on the seconded staff**, focusing on:   * Sustainability of the positions and possible opportunities for maintaining them within the municipalities. This could include investigating lessons learnt from similar projects, e.g. the GEF funded Grasslands Programme. * Institutionalization of the ‘products’ (processes, tools and systems) developed or applied by the seconded staff. * The mechanisms and strategies used by seconded staff to build capacity, with analysis of what has and has not worked well. | The way in which the secondments have contributed to building capacity is not well understood. Identifying successful approaches could lead to a long-term change in the way municipal representatives approach relevant tasks. This case study could help to identify important lessons for future projects of this type. |
| **Planning and Land Use Management** | **Case study on lessons learnt through implementing NRM-based job creation initiatives**. This could include:   * Documenting the team’s own learning and how they have changed their approach along the way. * A review of lessons from other, similar projects that have navigated this difficult terrain. * The role of NGOs in helping municipalities to spend money on such initiatives (municipalities have a challenge with very slow processes, while NGOs are not under the same restrictions). The group identified two areas where NGOs could potentially assist, namely the Western Cape and Bushbuckridge. | This case study would have direct relevance for building understanding and support for the potential of biodiversity-related job creation initiatives. |
| **Stewardship and Certification** | **Case study focusing** **on stewardship on land reform sites.** This could include:   * The community engagement work being undertaken with communal forestry operations in uMgungundlovu District Municipality, including documenting the potential financial and other benefits for certifying communal forestry sites. * The benefit to biodiversity of the certification of communal forestry sites could also be investigated. * A comparison between land reform vs privately-owned stewardship work (e.g. comparing sites in the Western Cape, Blyde and Eastern Cape). | This would be of great value in making the case for the socio-economic and other benefits of stewardship as a land use option, and would link across project components 1 and 2. |

## 5.4 Use of the Theory of Change in the BLU project going forward

Most importantly, this Theory of Change should never be considered a completely finished product, but a “working document” that is reviewed and updated as often as needed. At the project level, it can be used in four main ways:

* To help the PMU and Project Steering Committee to navigate the ever-changing project context and steer through risks in “the swirl”, as suggested in the Mid-Term Review. The more detailed specification of risks provided in this document will hopefully be helpful in this regard.
* The Theory of Change graphic can be used by project partners and stakeholders as a handy reminder of the overall strategic intention of the project.
* To guide the development of communications products by helping to think through which messages are most important to communicate to whom, how the different project components and activities are linked and how they combine to tell a bigger story.
* In the final project evaluation, as an (updated) record of the project’s intentions, approach and understanding of how impact will be achieved.

At the level of project activities, the detailed Theories of Change developed for each project area (Appendix 1) can be used by the project partners for similar purposes to those described above, and can be further developed and periodically reviewed as required. They may also be used as part of work planning processes in conjunction with results frameworks.

## 5.5 Next steps

The following steps are suggested going forward:

* The INR team will obtain and incorporate feedback from project partners on this report.
* The outcomes of ongoing deliberations around stewardship can be integrated into this report if required (including the diagrams and risk matrix).
* The INR team will engage with the project partners and PMU to discuss data collection on beneficiaries and capacity development as a matter of urgency.
* A case study focusing on social, economic and biodiversity benefits from stewardship and forestry certification on communally-owned land will be collaboratively scoped by the INR, PMU and relevant project partners.
* A short brochure or flier will be developed summarising the Theory of Change, for use by project partners.
* The INR team will then start work on further strengthening the M&E system for the project, including strengthening internal reflection and learning processes and providing ongoing support.

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# Appendix 1: Theories of change for the four focus areas of the BLU Project

**Environmental Management**

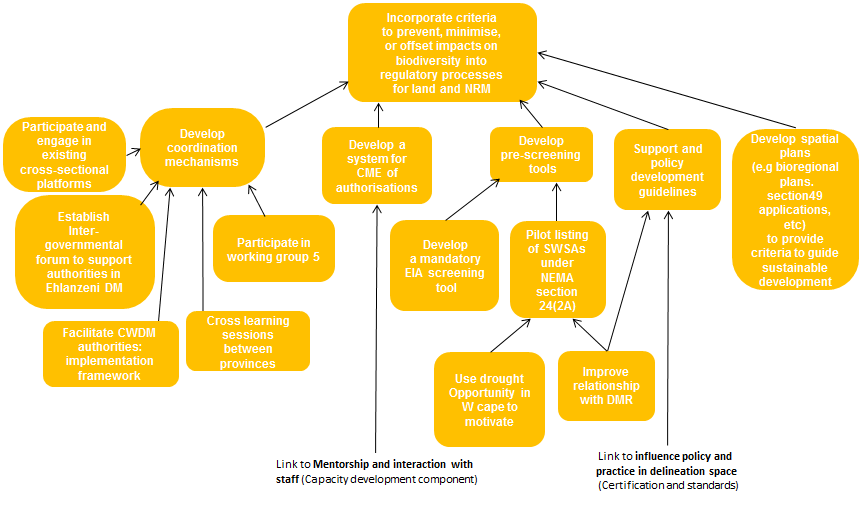
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Figure 4: Environmental Management ToC Flow Diagram

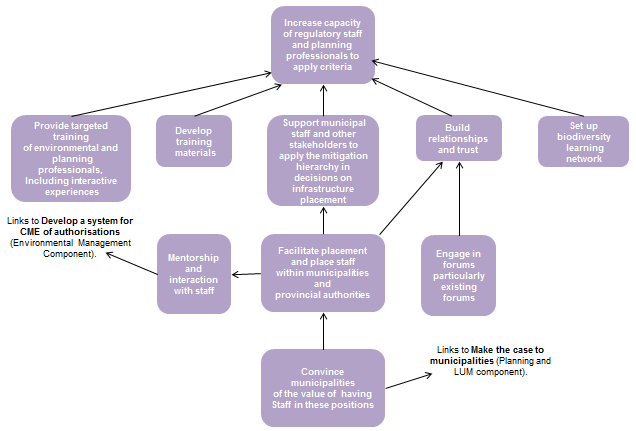


Figure 5: Capacity Development ToC Flow Diagram

Table 4: Environmental Management: Key Questions and Assumptions

|  |  |
| --- | --- |
| **Key Questions** | **Key Assumptions** |
| **Environmental Management** | Job creation/poverty reduction as part of the overall goal? | Improving the capability of authorities to regulate and manage land use and biodiversity will in fact mitigate the threat to biodiversity. |
| Social learning vs top down capacity development - Where are the spaces for social learning, do we need more (links to building relationships)? | Improving the capability of authorities to lead changes in practice (assumes the will is there as well as enabling tools, processes, structures). |
| Change in political landscape and impact it will have on the project? | Political office bearers act rationally based on evidence-so that as long a good case is made for biodiversity, this will produce action. |
|  | That the municipalities will be able to make a case for financing of the posts that the seconded appointees currently have. |

**Planning and Land Use Management**

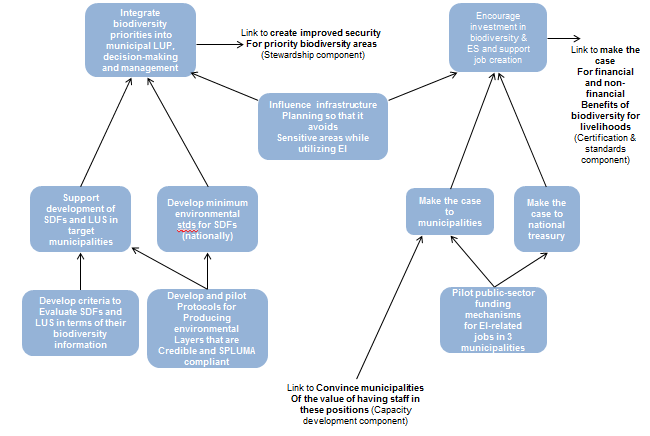
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Figure 6: Planning and Land Use Management ToC Flow Diagram

Table 5: Planning and Land Use Management: Key Questions and Assumptions

|  |  |
| --- | --- |
| **Key Questions** | **Key Assumptions** |
| **Planning and Land use management** | Job creation/poverty reduction as part of the overall goal? | Improving the capability of authorities to regulate and manage land use and biodiversity will in fact mitigate the threat to biodiversity. |
| List ways of improving the long term impact of secondments? | Improving the capability of authorities to lead changes in practice (assumes the will is there as well as enabling tools, processes, structures). |
| Change in political landscape and impact it will have on the project? | Political office bearers act rationally based on evidence-so that as long a good case is made for biodiversity, this will produce action. |
| What activities are taking place in the Eastern Cape? | National treasury is able and willing to increase funding for biodiversity given a good enough case. |
| At what levels or combination of levels does capacity development need to occur? | That the municipalities will be able to make a case for financing of the posts that the seconded appointees currently have. |
| What is the impact both in terms of the long-term and short-term, of the seconded staff in strengthening the capacity of municipalities to incorporate biodiversity into land use planning? |  |
| Is there sufficient time for the pilot interventions around jobs to make the case for increased investment in biodiversity? |  |
| Social learning vs top down capacity development-Where are the spaces for social learning, do we need more (links to building relationships)? |  |

**Stewardship**

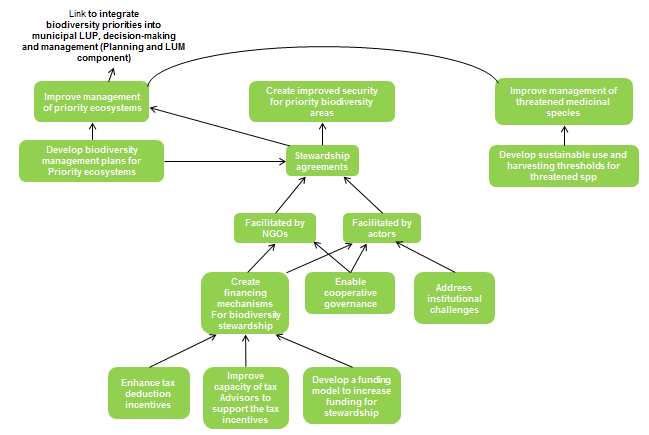


Figure 7: Stewardship ToC Flow Diagram (See Appendix 3 for National Stewardship ToC)

Table 6: Stewardship: Key Questions and Assumptions

|  |  |
| --- | --- |
| **Key Questions** | **Key Assumptions** |
| **Stewardship** | Job creation/poverty reduction as part of the overall goal? | That making the link between stewardships, jobs and development attainment will lead to investment (e.g. from provincial agencies)? |
| Is it more important that the project achieves its hectare targets, or demonstrates development benefits from the stewardship interventions? Impact of stewardship-need to demo impact in terms of other jobs and other development benefits. How will they make the case to provinces, municipalities etc.? | Securing and maintaining agreements: How important are developed benefits, which lead to investments and probable greater long-term maintenance of the agreement for stewardships? |
| Change in political landscape and impact it will have on the project? | That having a biodiversity management plan (e.g. harvesting thresholds, for sustainable use etc.) translates into improved management practices? Evidence? |
| Have direct and indirect beneficiaries been identified? Trade-offs. Evidence will be required for M&E | That people will utilize the tax incentives that have been developed? The plan to increase awareness will likely result in more people using the incentives |
| Resolution taken at the stewardship conference - to strengthen stewardships they should be in line with the SDGs. A resolution was taken to develop a national action plan for prioritizing stewardship work. How does this fit into the project work? |  |
| Are strategic water source areas taken into consideration for stewardships? |  |
| Declaration of stewardship sites, what mechanism is in place to see this will happen if it will only take place after completion of the project? |  |

(Note that these were further refined in a subsequent process to develop a broader national theory of change for stewardship).

**Certification and Standards**

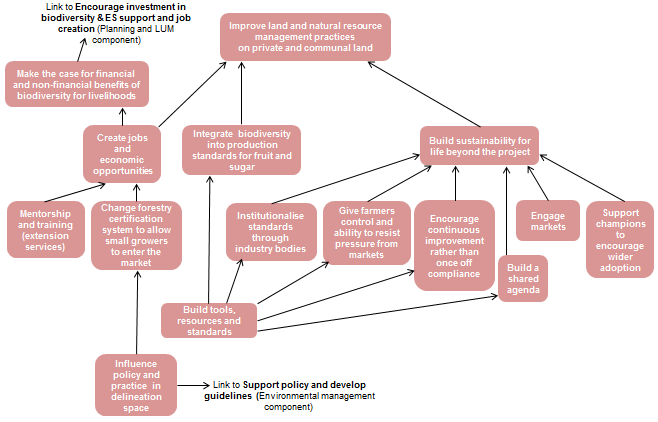


Figure 8: Certification and Standards ToC Flow Diagram

Table 7: Certification and Standards: Key Questions and Assumptions

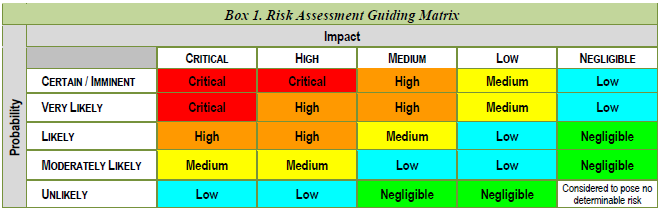
|  |  |
| --- | --- |
| **Key Questions** | **Key Assumptions** |
| **Certification and Standards** | Job creation/poverty reduction as part of the overall goal? | That changes in forestry, and fruit-sugar, NRM practices will benefit biodiversity |
| Change in political landscape and impact it will have on the project? | That by changing certification systems and helping small growers to enter the market , management practices on communal land will be improved |
| Evaluate which incentives would work best as a mechanism to influence land use(enforcement, certification, fiscal incentives) | That entering the timber market will have economic benefits for small growers( and others in the area) |
|  | That there is a benefit to having access to markets that require certification (How large is the market that does not require certification) |
|  | That integrating production standards (and paying attention to the sustainability of the intervention) will improve land and NR management on farms. |

# Appendix 2: Risks listed in the PRODOC (Mar 2014) and the M&E Framework (Jun 2017)

| # | **Description** | **Date identified** | **Type** | **Impact & probability** | **Status** |
| --- | --- | --- | --- | --- | --- |
|  | Enter a brief description of the risk | When was the risk first identified? | Environmental, Financial, Operational, Organizational, Political, Regulatory, Strategic,  Other | Describe the potential effect on the project if this risk were to occur.  P =  I = | e.g. No longer applicable, reducing, increasing, no change |
| 1 | Limited capacity within project partner institutions | Mar 2014 | Financial, operational, organizational | This will affect partners’ ability to carry out project tasks.  P = moderately likely  I = high |  |
| 2 | Necessary policy changes to facilitate project implementation are not approved | Mar 2014 | Political, strategic | The risk is that policy changes fall outside SANBI’s control. If the necessary policy changes are not approved the activities will be carried out but with limited long term impact.  P = unlikely  I = medium |  |
| 3 | Small growers within the production sectors do not want to take up sustainable farming practices | Mar 2014 | Environmental | This will affect project partners’ ability to implement Component 2 project activities.  P = moderately likely  I = medium |  |
| 4 | Poor coordination between institutions, and cooperative governance mechanisms and structures with regard to biodiversity-inclusive planning, financing, review and decision making are weak (comp 1) | Jun 2017 |  |  |  |
| 5 | Shrinking budgets for natural resource management at provincial and municipal levels (comp 1) | Jun 2017 |  |  |  |
| 6 | Poor capacity for extension work, compliance monitoring and enforcement (comp 1) | Jun 2017 |  |  |  |
| 7 | Regulatory challenges and blockages (comp 1) | Jun 2017 |  |  |  |
| 8 | Poor commitment to strengthen coordination & integration of decision making & compliance monitoring (comp 1); | Jun 2017 |  |  |  |
| 9 | Budget constraints within participating partner institutions (comp 1) | Jun 2017 |  |  |  |
| 10 | Capacity constraints within participating partner institutions (comp 1) | Jun 2017 |  |  |  |
| 11 | Weak political will to support intergovernmental cooperation forum (comp 1) | Jun 2017 |  |  |  |
| 12 | Conflicts between different stakeholder groups (comp 2) | Jun 2017 |  |  |  |
| 13 | Low level of willingness to take up the biodiversity economy (comp 2) | Jun 2017 |  |  |  |
| 14 | Poor coordination and cooperation between institutions (comp 2) | Jun 2017 |  |  |  |
| 15 | Poor capacity for extension work, compliance monitoring and enforcement (comp 2) | Jun 2017 |  |  |  |
| 16 | Regulatory challenges and blockages (comp 2) | Jun 2017 |  |  |  |

# Appendix 3: GEF risk assessment guiding matrix

The following table is used by the GEF to categorise risks according to a combination of probability and impact (PRODOC, 2014).



**and**

**in the context of of**

**leading to**

**through**

* Rationalise conservation boards/agencies
* Integrate stewardship positions into organograms
* Improve efficiency of declaration processes
* Reduce legal & advertising costs
* Strengthen state-NGO collaboration
* Provide open access resources for extension workers
* Enhance links with agriculture to reduce conflicting objectives
* Build learning & support networks

**WHAT ARE THE OUTCOMES?**

**WHAT DO WE WANT TO CHANGE?**

**WHAT IS WRONG?**

Improved support for stewardship by decision makers and political principals

Better-functioning stewardship declaration and support processes

**HOW CAN CHANGE HAPPEN?**

* High poverty, inequality and unemployment and strong need to address these
* Land ownership, use and benefit as prominent political issues
* Recognition of stewardship as the most cost-effective means of protecting the large proportion of important biodiversity on private land
* NGO involvement and experience in the stewardship space
* A small but committed and innovative stewardship community of practice
* Develop relationships & connections with other sectors, govt departments & municipalities
* Host events e.g. BDS conferences
* Engage in advocacy
* Develop targeted communications products

**Sustainable and effective long-term protection of biodiversity, in support of sustainable socio-economic benefits**

**WHAT COULD THE IMPACT BE?**

Changing decision makers’ understanding of the value of stewardship for achieving priority national goals (“changing the mindspace”)

Insufficient funding and resourcing of stewardship

High-level decision makers and political principals in South Africa do not see the value of stewardship for achieving priority national goals

We want to improve the resourcing of stewardship in the country

Lobbying for changes to the public finance model for environmental funding to provinces, to reduce the influence of political discretion

Accessing new funding streams and developing innovative funding models

Optimising the use of existing resources for stewardship

* National funding to provinces via a dedicated environmental grant (LandCare model)
* BIOFIN – access funding for climate change adaptation, water resources protection, rural development etc.
* Endowments
* CSI and B-BBBEE
* Industry initiatives
* Tax incentives and property rebates

# Appendix 4: Draft national stewardship theory of change

1. What guidance does Suich et al provide addressing these gaps? [↑](#footnote-ref-1)