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Understanding Climate Finance Readiness Needs in Namibia

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ODI

AFRICAN CLIMATE FINANCE HUB

Contents

Executive Summary

Supporting processes that enhance the access, allocation and spending of climate finance in developing countries, is being increasingly appreciated by the international community. The Green Climate Fund's (GCF) Governing Instrument envisages support for such climate finance readiness activities, and a number of bilateral and multilateral initiatives are being developed to provide resources to this end. This programme of work to explore climate finance readiness needs in Namibia, Zambia and Tanzania, is therefore timely. A collaborative and iterative approach was taken to first distil the core components of climate finance readiness, and second, to engage with key state and non-state actors in order to both identify and build consensus on the practical activities that could strengthen readiness to use climate finance effectively in each country. The climate finance readiness needs assessment for Namibia is being undertaken by the Overseas Development Institute (ODI), African Climate Finance Hub (ACFH), and World Resources Institute (WRI) working in close collaboration with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), with the support of the German Federal Ministry for Economic Cooperation and Development (BMZ).

Overview of findings: Namibia

Namibia has enjoyed political and macroeconomic stability since gaining independence from South Africa in 1990, but income inequality and unemployment – particularly among the youth – remain very high. To address these development shortfalls, Namibia's current five-year national development plan (NDP4, 2012/13 to 2016/17) prioritizes logistics, tourism, agriculture and manufacturing, recognising that significant investments in infrastructure will be needed to support growth in these sectors. Such investments are potentially vulnerable to climate change and it is not clear how climate resilience is to be taken into consideration in the implementation of NDP4. The effect on agriculture, for example, of a hotter and drier climate in Namibia as a result of climate change, increasing the frequency of droughts and floods, further undermining water security and shifting ecosystems, could impact significantly on GDP as well as exacerbate inequality in income distribution due to the rural poor's reliance on agriculture, if no adaptation measures are taken.

Namibia is making substantial progress towards planning its national climate change response. It has also been active in international climate finance processes; in 2012 it made a bid to host the GCF. Stakeholder discussions, however, identified a number of areas on which additional efforts could serve to further strengthen this response, in particular addressing climate finance readiness needs for which recommended supporting activities could be identified. The table below summarizes the report's findings under each of the core components of the framework employed (see section 2), namely Planning, Aptitude and Access. The first column sets out key messages, and the second potential climate finance readiness activities.

Overview of findings

	KEY MESSAGES	POTENTIAL CLIMATE FINANCE READINESS ACTIVITIES
PLANNING: strategies and institutions to support a response to climate change	• Adoption of the National Climate Change Policy and development of a draft Climate Change Strategy and Action Plan (CCSAP) represent important steps in advancing an understanding of the importance of climate change for Namibia. However, there is a need to more precisely specify, prioritise and sequence the activities identified, and to estimate the costs associated with each proposed activity. • There is a need to consider the implications of climate change for the National Development Plan as a whole as there may be tensions between some of its proposed priorities and the requirements of climate-compatible development. • A number of sector policies and plans, for example in the agriculture and energy sectors, are not consistent with the directions outlined in the draft CCSAP. • The lack of attention to renewable energy and energy efficiency options in planning within the energy sector, including lack of clearly defined targets, creates a barrier to attracting private investment in these technologies. • Efforts to engage civil society actors and non-governmental organisations that hold expertise in climate change issues are commendable, but opportunities for broader engagement of the domestic private sector should be explored, particularly in the elaboration and implementation of the CCSAP.	1. Support a work program to explore options for integrating climate change into sector plans and national development plans. This could establish how climate change affects the goals and objectives set out in the National Development Plan and analyse the links and tensions between existing national development and sector plans and the priorities outlined in the draft CCSAP. This would enable line ministries to identify how to address or revise relevant policies to take account of climate change impacts. From this basis, the cost of relevant mitigation and adaptation options can be estimated, and a pipeline of priority projects could be developed at sector level. Such a program would ideally be facilitated by the National Planning Commission (NPC), since it bears overarching responsibility for the development of sector plans and budgets, and supported technically by the Ministry of Environment and Tourism (MET). 2. Develop simple tools which can be applied in key sector ministries to understand the climate implications of policies and proposed investments. These could build on such existing tools as the Threshold 21 model which allows environmental and social considerations to be incorporated into development planning at a macro level, or Strategic Environmental Assessments (SEAs) which are used to assess the environmental impact of a proposed policy. SEAs could be completed for sectoral policies to understand the implications of climate change and opportunities for adaptation and mitigation in key sectors such as energy, water and agriculture. Such tools would ideally be developed in partnership with Namibian research institutions and technical experts to help create a domestic support structure to guide their use and inform decision making. Such tools can provide a basis from which to discuss the options to reduce potential conflicts between climate change and development strategies. 3. Promote the sharing of lessons through exchanges on institutional arrangements for climate finance in peer-countries. Exposing senior government officials to the systems that other middle-income countries in the region are putting in place to plan, coordinate and finance their response to climate change could be of value. South Africa's climate change finance strategy and Kenya's climate change response strategy experience, for example, may be relevant to Namibia. Short exchange programmes with relevant counterparts for permanent secretaries from key ministries, or senior management of leading private companies, could be one mechanism to this end. Alternatively, trainings or workshops that draw in a small number of experts from peer-countries could be utilised.

	KEY MESSAGES	POTENTIAL CLIMATE FINANCE READINESS ACTIVITIES
APTITUDE: for spending and implementation	• The MET has been championing climate change issues in Namibia and leading the development of a climate change policy plus a follow-on strategy and action plan. However, there is a need for strengthened capacity at the MET in order for it to effectively carry out its mandate. • There is substantial expertise in well capacitated research institutions, private sector entities, and in civil society, but there is a need to strengthen government's collaboration and engagement with them. • Implementation of the CCSAP will require the participation of a wide range of line ministries in Namibia, many of whom have quite limited capacity to engage on climate change related issues even though these are material to their roles and responsibilities. • The NPC will have a key role in supporting the execution of, and ensuring alignment between, the CCSAP and successive national development plans. The NPC's technical capacity on these issues will need to be strengthened if it is to effectively play such a role. • There is a need to strengthen capacity and engagement of government, civil society and private sector at the regional and local levels, as well as to strengthen coordination between national and sub-national levels. Community-based organisations have an important role to play in integrating climate change resilience and adaptation into local level decision making. • There are a growing number of ad-hoc studies on climate change impacts in Namibia and a number of operational research partnerships. These, however, do not necessarily result in a coordinated information and research capacity that can feed into national planning.	4. Support strengthened coordination of climate change activities by building on existing efforts, and leveraging existing technical capacity. Several stakeholders saw important roles for the Office of the Prime Minister in mandating a coordinated process, and for the NPC in facilitating it. A forum for periodic exchange of information for Permanent Secretaries (or Under-Secretaries) of key ministries could be one option to pursue. The mandate to work with other line ministries is also needed by a lead entity to ensure accountability. This requires dedicated staff and technical capacity, and robust processes for deliberation and information sharing at both working level and relatively senior level. Support to strengthen knowledge and awareness of climate change issues as well as management capacity among senior officials in key government agencies could be helpful in this regard. 5. Support climate change focal points within ministries, particularly the NPC. There is a need to strengthen capacity on climate change issues and identify a focal point in all relevant ministries. Focal points could benefit from additional technical support, including on issues related to planning and budgeting. This is particularly the case for climate change focal points in the NPC, who will need to take on the substantial task of analysing the implications of climate change policies for development as well as sector plans and programs. Support could develop a common understanding of the roles and responsibilities of climate change focal points. It could also deliver on these responsibilities through small grants for requisite administrative and coordinating support systems, or for technical assistance and peer exchange on key issues. Partnerships with Namibian private sector organisations, research institutes and NGOs might also be useful means to support capacity strengthening of focal points. 6. Strengthen climate change coordination, awareness and capacity at regional and local levels. A number of successful on-going initiatives to promote sustainable development at community level could benefit from increased attention to climate change resilience and adaptation. The Community Based Natural Resource Management (CBNRM) programme in particular has the potential to drive climate adaptation and resilience at the local level. This would also open new opportunities for accessing international sources of funding for CBNRM in Namibia. Support could strengthen awareness of community-based organisations so that they could better integrate climate change considerations into their activities. There is also a need to strengthen regional and local government capacity on climate change issues, and strengthen coordination. 7. Establish a centralised climate data repository. Systems for coordinated data collection will aid information-gathering on climate change impacts and risks in a consistent and centralised manner. Efforts might begin with biophysical data, expanding to include socio-economic data over time. Building on existing information collection structures, such as that for conservancies, the University of Namibia, the National Statistics Authority, and the Polytechnic of Namibia could partner in such an initiative. Technology needs, including for common use software and equipment to facilitate data gathering, as well as investment in agreeing data quality standards up front would also need to be supported.

	KEY MESSAGES	POTENTIAL CLIMATE FINANCE READINESS ACTIVITIES
ACCESS: arrangements for sourcing and receiving finance	• Namibia's focus has been on accessing grants for climate change activities, which have mostly supported small scale projects. Many stakeholders have been wary of taking loans from development partners, in part because of the conditions that may be associated. • Experience with managing large scale adaptation and mitigation programs, and integrating climate change considerations into mainstream development programmes is relatively limited at present. • In the energy sector, a number of initiatives are under way to promote renewable energy and energy efficiency both on and off-grid, with funding from several donors as well as domestic funding. There is considerable private sector interest in renewable energy projects, although investment has been limited so far due to the impediments mentioned above. • Public financial management systems in Namibia have improved, although there is a recognised need to introduce a performance-based orientation to operations and procurement. Systems for financial reporting are quite strong and well established. • Domestic institutions which could play important roles in allocating climate finance to non-state actors include the Development Bank of Namibia (DBN) and the Environmental Investment Fund (EIF). The limited scale and track record of the EIF's activities, and the constraints imposed by its current mandate would, however, need to be addressed. • There is a case for exploring the role that private financial institutions might be able to play in the delivery of climate finance at national level.	8. Strengthen due diligence and appraisal systems for investors and financial institutions working in key sectors to highlight climate related risks and opportunities. Private sector involvement in climate change mitigation and adaptation has been limited. New analysis highlighting climate related risks involved with current investment priorities can raise awareness of low carbon and climate resilient approaches in key sectors including energy, infrastructure and agriculture. Collaboration with international institutions might be opportune and strategic in this regard. Exploring the role of private banks to engage on low carbon investment would be useful. Working with institutions such as the DBN and EIF to engage private sector and NGO actors, particularly in relation to clean energy, and to strengthen resilience to climate risk in their existing portfolio might also be useful. 9. Explore the viability of various financial instruments to enable execution of the CCSAP. This could include supporting the development of a financing strategy for the CCSAP, which would consider a range of options to finance the various activities identified, including national and international sources of finance, and areas where the private sector and domestic financial institutions could play an important role. This would help to identify where international sources of climate finance would be most needed. The possibilities for using budget support through the NPC towards the implementation of costed climate change actions could be further explored. Mechanisms for leveraging private sector engagement, including grants, concessional loans and innovative financing instruments could also be explored. 10. Assess and strengthen institutional capacity to access and effectively deploy international climate finance. Namibia has expressed interest in direct access to international funds such as the Green Climate Fund (GCF). Exploring the relative merits of different institutional arrangements for accessing international climate finance would be useful. Taking stock of efforts to seek direct access to the Adaptation Fund, such support would analyse minimum required fiduciary and associated standards for the GCF. Similarly, an analysis of minimum environmental and social safeguard practices could build on the Global Environmental Facility's policies in this regard. This exploration would assist in identifying existing institutions most likely to meet these minimum standards as well as in understanding the investments required for different institutional arrangements. 11. Strengthen capacity to monitor and evaluate the outcomes of climate finance. There is a need to ensure that monitoring and evaluation is based on the achievement of results, rather than on the completion of activities or on spending. A component that supports the monitoring and evaluation of climate related dimensions of policies could be incorporated into efforts to develop sector level climate change implementation plans. This should also build on efforts to strengthen the information and data base for climate related investment as proposed above, which should provide some of the basis for assessment of the impact of programs and policies.

1. Introduction

The need to support processes that can enhance the capacity of developing countries to access, allocate, and spend climate finance, and also monitor and report on the impact of such action, has gained increasing currency in international efforts to deliver climate finance. Although an understanding of the diverse and context specific dimensions of such 'readiness' activities is still evolving, there is growing interest in supporting countries to acquire capacities that will allow them to make effective use of climate finance. The Green Climate Fund (GCF), for example, makes provisions for funding of readiness activities. In parallel, a number of bilateral and multilateral initiatives are being established for this purpose. In this context, it is timely and strategic to make early investment in an analysis of Namibia's circumstances and needs.

ODI, the African Climate Finance Hub and the World Resources Institute have therefore worked with Namibian stakeholders to develop such an analysis. This initial study has been completed in collaboration with GIZ and the support of the German Federal Ministry of for Economic Cooperation and Development (BMZ). The Namibian Ministry of Environment and Tourism (MET) has also provided support. Our approach recognises that planning for climate change is no easy task, and programming and using climate finance well is a complex undertaking. We developed an analytical framework to build an understanding of climate finance readiness needs by considering the systems and processes in place to plan for climate change, aptitudes and capacities across key institutions, and provisions to access and spend finance well. We seek to understand the actions and supporting policies that would assist countries in adapting to and mitigating climate change, and the role that finance can play in supporting such efforts. Studies using a similar approach have been conducted in Zambia and Tanzania, and in addition to the assessment reports for each country, a synthesis report highlighting lessons from all three countries has been developed.

Namibia has developed a National Climate Change policy (NCCP), which was approved by cabinet in 2011 (MET, 2011a), and is in the process of finalising a national Climate Change Strategy and Action Plan (CCSAP; MET, 2012), which is expected to go to Cabinet for approval in 2013. Namibia has received international climate finance from the Global Environment Facility (GEF) and a number of bilateral partners. It is keen to position itself to access resources from the GCF through its proposed "direct access" modality. It has directed some domestic finance towards climate change activities, in particular through the installation of solar water heaters in government buildings and off-grid renewable energy solutions in remote areas, but will need to significantly scale up domestic climate finance over the next few years to successfully implement the CCSAP. International climate finance can play an important role in enabling Namibia's climate change response and helping to address barriers and additional costs. Improved coordination and awareness among key ministries and decision-makers may help incorporate climate change considerations into development planning and budgeting thereby paving the way to a climate resilient economy. This report outlines the approach taken to understanding climate finance readiness needs in Namibia in Section 2. It then goes on to set the context in Section 3, and progress of the climate change response in Namibia in Section 4. Climate finance readiness needs are identified and elaborated in Section 5.

2. A framework for climate finance readiness

This section outlines the framework approach applied for assessing the climate finance readiness needs of the Southern African Development Community (SADC). The approach had three phases (Figure 1). The first phase consisted of a technical expert meeting that explored the dimensions of 'readiness needs' for climate finance and the opportunities and limits of readiness initiatives from a conceptual perspective. This meeting was held in Cape Town, on the margins of the second United Nations Framework Convention on Climate Change (UNFCCC) workshop on Long-term Finance. Building on existing thinking on climate finance readiness, the discussions focussed on readiness as an on-going process of identifying needs and developing effective strategies to meet those needs.

The outcome of the meeting was a basic framework to understand readiness that is[1]:

- **Relative** – taking a country's socioeconomic and geopolitical characteristics into account;
- **Responsive** – to its particular needs, priorities, and challenges; and,
- **Reasonable** – in terms of having identified the key issues and challenges at hand, and proposing some practical steps that can be taken to address these considerations.

The core components of the climate finance readiness framework that were considered within the country case studies are represented in Figure 2, and were inclusive of:

i. **Planning**: strategic purpose, information and process (including to revise policies, regulations, and incentives that affect climate change relevant investment);
ii. **Aptitude**: the expertise available and the capabilities of institutions; and,
iii. **Access and spending**: sourcing, receiving, and spending funds wisely.

The Planning component includes consideration of the strategic purpose of climate finance, in particular the critical need to align climate finance programming with national strategies and objectives. It relates to climate finance governance and the appropriate institutional framework within a country to support its climate change response.

Figure 1. Readiness diagnostic approach

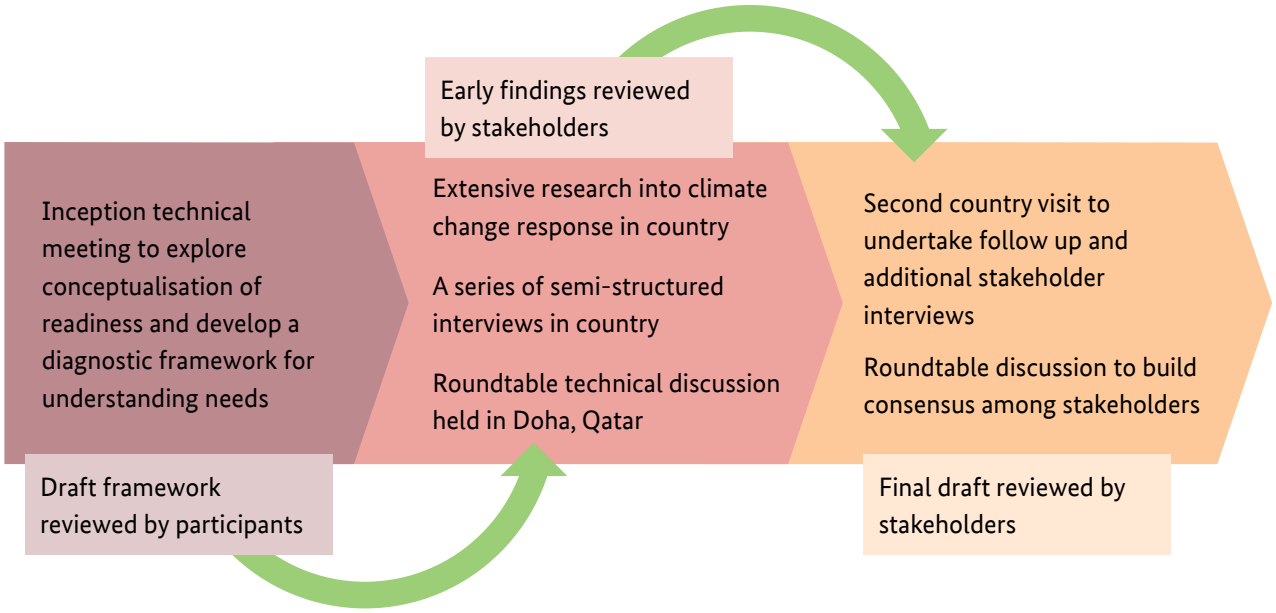
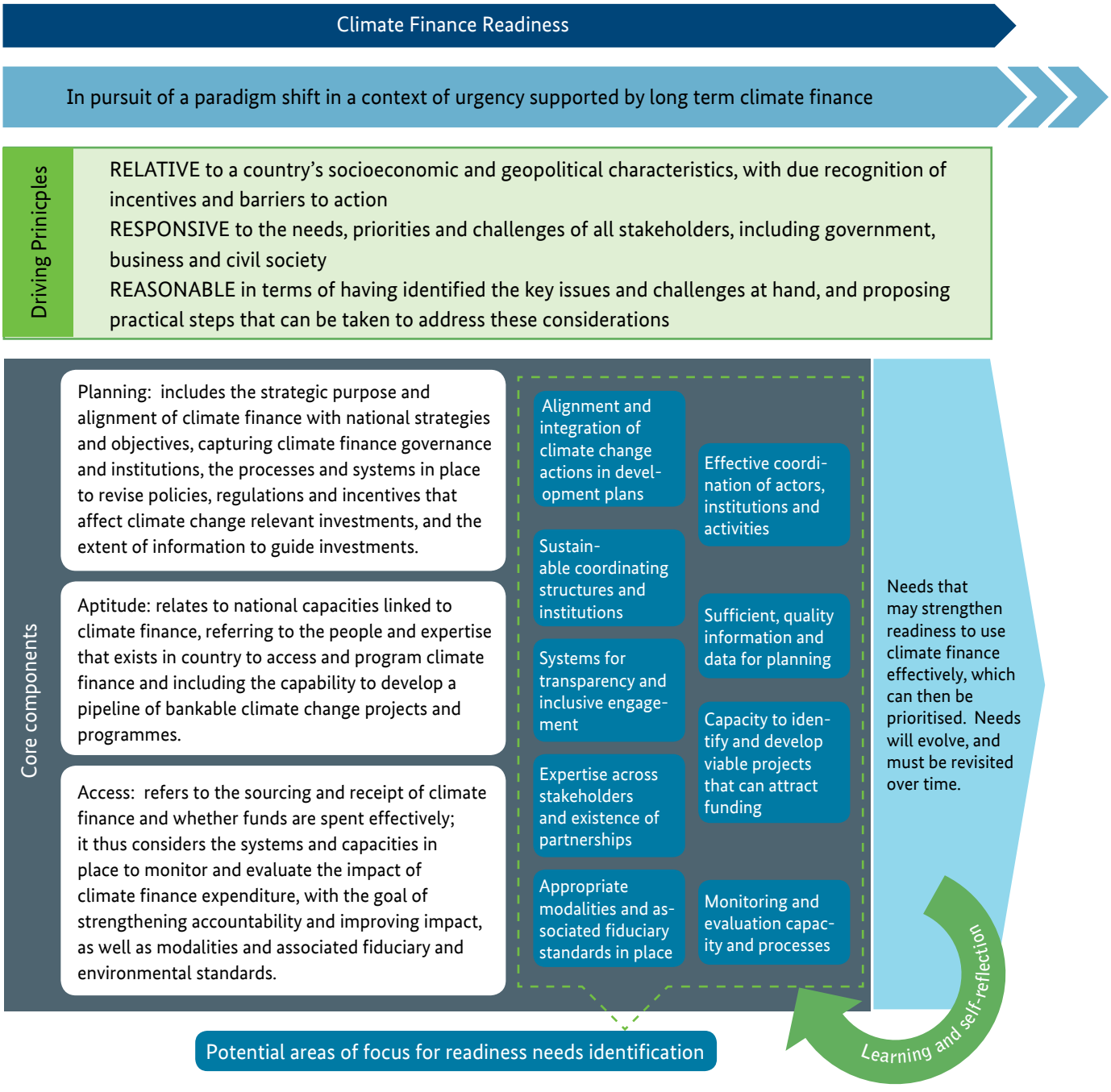


Figure 2. Overseas Development Institute – African Climate Finance Hub framework for diagnosing climate finance readiness



It also takes account of the processes and systems in place to revise policies, regulations and incentives that affect climate change relevant investments. Finally, it considers the extent to which key stakeholders have access to the necessary information to guide investments in solutions to climate change, and integrate climate change into mainstream investment choices.

The Aptitude component relates to harnessing existing national climate finance relevant capabilities, and seeking to build on these. It refers to the people and expertise, or the 'know-how' that exists in country to access and program climate finance. In our view, the term 'aptitude' better captures this than the more frequently used term 'capacity'. It includes the capability to develop a pipeline of bankable climate change projects and programmes.

The Access component refers to how a country sources and receives climate finance and whether such funds are spent wisely. To this end, it captures the systems and capacities in place to monitor and evaluate the impact of climate finance expenditure, with the goal of strengthening accountability and improving impact. It also considers the appropriate modalities and associated fiduciary and environmental and social standards, given the pursuit of direct access modalities for climate finance.

As indicated in Figure 2, climate finance readiness needs are likely to span across these stylised core components of readiness. Progress in one area will also likely contribute to another.

The climate finance readiness framework also acknowledges that any diagnostic must fully take into account political economy dimensions, must allow for learning and self-reflection, and must be inclusive of key stakeholders. Therefore, time was invested in including as wide a group of stakeholders as possible and in exploring the often complex political economy of the country in question.

The core work to understand Namibia's particular circumstances and needs was advanced in the final two phases. We completed extensive desk research into the climate change response measures and preparations for climate finance in Namibia. Following which we conducted a series of intensive semi-structured interviews and discussions with key stakeholders in Namibia during November 2012. The first visit allowed the research team to map the broad range of institutions and initiatives involved in the delivery and use of climate finance, and analyse how Namibia's unique circumstances have shaped its efforts to respond to climate change. Preliminary insights from the first visit were consolidated and shared with stakeholders to provide them with an opportunity to comment, correct or confirm these findings. An advance discussion draft synthesising the highlights from these early efforts was also produced and circulated to international stakeholders at COP 18 in Doha during December 2012[2]. The preliminary findings were also the subject of a round table discussion with expert stakeholders, development partners, and representatives of developing country governments in Doha on 1st December 2012 (convened in partnership with the Climate and Development Knowledge Network).

In the second part of the in-country work, we met again with key government, private sector, civil society and NGO stakeholders in Namibia to refine initial findings, and seek to identify practical activities that could strengthen readiness to use climate finance effectively. We also convened an informal round table discussion that created a forum for national stakeholders to deliberate over priority readiness needs (see Appendix 2). This study synthesises the findings from the three phases of work completed to date. An earlier draft was shared with national stakeholders for final feedback and comments, to ensure that it has appropriately and adequately reflected national circumstances and priorities. Throughout the process, iterative engagement with key stakeholders in each country has been sought. We have not, however, had the opportunity to engage all relevant stakeholders in Namibia in this process, and in particular there is a need to work with senior representatives of government in the future to seek their inputs and guidance on how we might take some of the concepts presented in this study forward. Such engagement might be a priority for future work, if it were of interest to Namibian counterparts.

Namibian case study sector: energy

In order to ground our studies in a more detailed appreciation of practical readiness needs, we have chosen a particular sector in each country on which to provide a more in-depth analysis of the context and climate finance readiness needs as an illustrative case study. In Namibia, we have considered the energy sector as a case study, to complement our overarching analysis of climate finance readiness needs (Boxes 1 and 3). To this end, our team completed further research to map the relevant institutions; policies, strategies and associated targets; existing and proposed projects; challenges and barriers to progress towards low-carbon and/or climate-resilient development; and potential opportunities. While we recognise that each sector will have specific and particular investment needs, it has been beyond the scope of our readiness study to look in depth at climate finance readiness needs in all of the sectors that are likely to be affected by climate change, or where opportunities for low-carbon climate-resilient development may present themselves. We recognise that other sectors may be of equal or higher priority to many Namibian stakeholders, and this choice of emphasis should not be interpreted as reflecting a judgment on where domestic priorities should lie.

3. Climate change in the Namibian context

Since independence in 1990, Namibia has enjoyed political and macroeconomic stability. In 2009, the World Bank classified it as an upper middle income country, a status which masks a high level of income inequality; 29% of its 2.3 million people fell below the national poverty line in 2009 (World Bank, 2013a). In 2011, Namibia's GDP growth rate was 5% and GDP per capita was US$ 4,700. The unemployment rate, estimated at 27.4% overall in 2012, and higher among youth, remains high, but has fallen considerably from 51% overall in 2008[3]. Unemployment remains a key challenge linked to the need to improve education systems to prepare people for job markets. A three year Targeted Intervention Programme for Employment and Economic Growth (TIPEEG) was launched in 2011 to help reduce unemployment by supporting strategic high growth sectors namely agriculture, transport, tourism, and housing and sanitation. The total cost of TIPEEG, including a public works programme and investments by state-owned enterprises, is estimated at N$18.7 billion (about US$ 1.87 billion[4]).

Namibia is part of a monetary union with South Africa, Lesotho and Swaziland; its currency is pegged to the Rand, and it thus has limited control over monetary policy. Fiscal policy has been expansionary over the past few years to maintain economic growth in the face of the global economic crisis. Although this has increased fiscal deficits, the level of public debt remains low. In 2011, the government successfully issued a US$ 500 million 10-year sovereign Eurobond in the international market. Namibia has a relatively attractive investment climate with an investment-friendly legislative and regulatory framework, a competitive incentive regime, and a low crime rate. Its financial sector is one of the most sophisticated, diverse and developed in Africa, with commercial banks that are strong, well-capitalised, profitable and resilient to shocks (African Economic Outlook, 2012).

Namibia's climate is predicted to become hotter and drier as a result of climate change, with more variability in rainfall. This could lead to increased frequency of droughts and floods, severe water scarcity and shifting ecosystems. In an environment that is already arid, marginal for agricultural production and which has a relatively low adaptive capacity, this could significantly affect Namibia's economic development. Several studies have investigated the potential effects of climate change in Namibia, and have predicted significant detrimental environmental, economic and social impacts. For example, Reid et al. (2007), have demonstrated that, in the absence of adaptation, the effects of climate change on agriculture could lead to economic losses. Despite contributing only 4% to GDP in 2010, agriculture is the main economic activity for 70% of the population, including the majority of the rural poor who rely on subsistence agriculture for a living (GRN, 2011).

Namibia has been an active participant in international climate finance related processes. It participated in the UNFCCC supported finance needs assessment exercises, seeking to understand the cost implications of efforts to develop the energy sector in Namibia. In 2012, Namibia offered to host the GCF, a new institution in the international climate finance landscape on which high expectations rest. The country has established a strong international profile on environmental issues through its progressive environmental laws and policies, as well as its advocacy in the international arena, including at the Rio conventions. The Environmental Management Act (EMA) of 2007 provides a legislative framework for environmental assessments on all projects that may affect the environment and natural resources. Namibia has also gained wide recognition for pioneering community-based natural resource management (CBNRM) that promotes sustainable economic and social development targeting some of the poorest rural communities in the country. This approach to sustainable rural development, which was introduced into law in 1996 through the communal conservancy program, has now expanded to 79 communal conservancies and 13 community forests, which are home to more than 10% of Namibia's population (NACSO, 2013). Currently, 42% of Namibia's land is under some form of conservation land use (GRN, 2012); 14% through national parks, 17% through communal conservancies, and the balance through freehold conservancies.

Sustainable development and maintenance of healthy ecosystems and biodiversity for future generations are core tenets of Namibia's Constitution, and are embedded in Vision 2030, its long-term national development policy framework. Nevertheless, there remains an urgent need to make climate change a material issue for mainstream development planning and investment.

Box 1. Climate change and the energy sector in Namibia

Overview

Namibia is heavily dependent on imported energy, domestic resources representing less than 20% of its primary energy supply in 2009 (IEA, 2013). Liquid fuels, which are all imported, account for over 63% of net energy consumed in Namibia (Hatch, 2011), and over 6o% of domestic electricity requirements in the past three years have been met, via the Southern African Power Pool (SAPP), by purchases from neighbouring countries (Hatch, 2013). Aside from the offshore Kudu natural gas field, which has yet to come on-stream, no other commercially viable domestic fossil fuel resources have so far been discovered. Pending the awaited outcome of a project to consider updates or changes to the White Paper on Energy Policy published in 1998 by the Ministry of Mines and Energy (MME), this paper remains the guiding energy sector policy articulation.

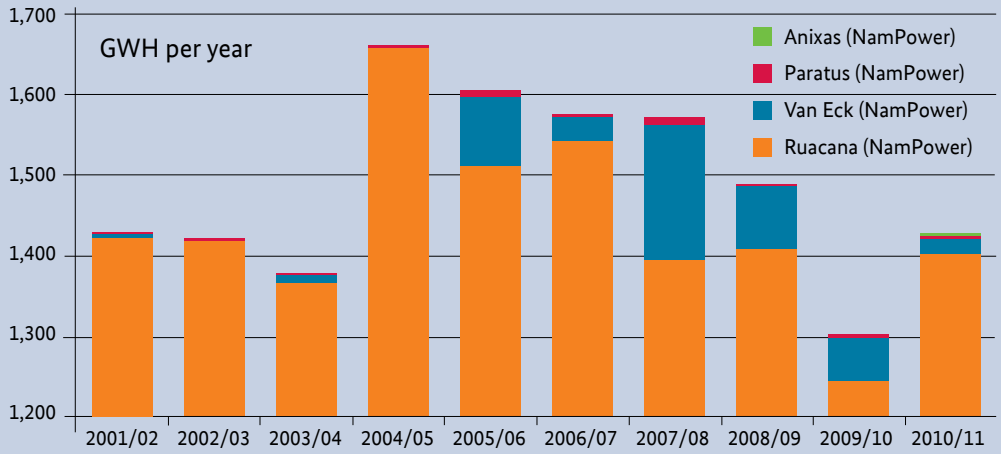
The Electricity Sector

Namibia's electricity sector is dominated at generation and transmission level by a vertically integrated state-owned company, NamPower, and regulated by the Electricity Control Board, both of which are under the purview of the Ministry of Mines and Energy (MME). The distribution sector comprises three regional electricity distribution companies (REDs) and local authority distributors in areas where no REDs have been established.

Since gaining independence in 1990 Namibia has added little to its generation asset base, the bulk of which was built in the 1970s. NamPower has four power stations that feed into the transmission grid: Ruacana, a 332MW hydro plant on the Kunene River which marks the border with Angola in the North and which generates the bulk of domestically produced electricity; Van Eck, a 120MW coal-fired plant just north of Windhoek; and two diesel plants at Walvis Bay, 24MW Paratus and 22.5MW Anixas, used mainly to meet short term demand peaks. However, Ruacana being a run-of-river plant with only a small reservoir for managing water over a 24-hour period, its output is highly dependent on rainfall and water abstraction levels upstream. The amount of electricity it has been able to dispatch to the grid has varied considerably, as illustrated in the figure below. As climate change is deemed likely to exacerbate the existing variability of the Kunene river's hydrology, this critical generating asset represents a considerable climate exposure.

A goal set by the White Paper on Energy Policy "that 100% of the peak demand and at least 75% of the electric energy demand" should be supplied from internal sources by 2010 has not yet been achieved. This low level of investment was made possible largely by the ready availability of cheap electricity from South Africa where generation capacity exceeded domestic demand for a prolonged period; in 2006-2007, however, it became clear that excess capacity in South Africa's system had been absorbed. Combined with growing supply constraints in other countries from which Namibia sourced electricity, this underscored the need to achieve greater self-reliance in future.

Electricity provided by domestic generation plants between 2001 and 2011



Source: von Oertzen, 2012

The White Paper on Energy Policy recognises that Namibia has a range of renewable energy resources at its disposal from which electricity could be generated, but does not set targets for their desired contribution to the domestic generation mix going forward. The past decade has seen a range of efforts to support renewable energy or energy efficiency in Namibia, including three GEF-funded programmes (see Box 4 below) and initiatives to promote renewable off-grid energy solutions in rural areas. In 2008, NamPower produced its own Renewable Energy Policy and an Integrated Resource Plan which incorporates a number of renewable energy projects. Also in 2008, the Renewable Energy and Energy Efficiency Institute (REEEI), a government-funded research institute housed at the Polytechnic of Namibia, sponsored a technical and economic evaluation of electricity supply and demand management options for Namibia (Hatch, 2011). In 2012 the Ministry of Environment and Tourism (MET) released a report assessing the investment and financial flows required by envisaged mitigation measures in the electricity and transport sectors (Muteyauli et al. 2011). Feasibility studies and resource assessments have been conducted for a variety of renewable energy projects including hydro, wind, bio-energy and solar schemes; few, however, have thus far come to fruition.

4. Key considerations for climate finance readiness in Namibia

This section outlines the core components of the climate finance readiness framework presented in section 2, as they related to the context of climate change in Namibia, outlined in Section 3. It reflects on current initiatives, and highlights potential limitations with regards to planning, aptitude, and access.

4.1. Planning

Planning for climate finance includes consideration of strategic purpose, governance and institutions; of the procedural issues to revise policies, regulations and incentives that affect climate change relevant investment; and of the acquisition of sufficient and relevant information. The core component of planning in our climate finance readiness framework reflects the need to align climate finance with national strategies and objectives. In itself, this requires coordination and inclusiveness across a wide range of actors and institutions.

International commitments and actions

Namibia ratified the UNFCCC in 1995 as a Non-Annex 1 party, thereby taking on a commitment to adopt and implement climate change policies and measures. It submitted its Initial National Communication to the UNFCCC in 2002, its Second National Communication in 2011, and has recently begun working on its Third National Communication. It is also a signatory of the United Nations Convention to Combat Desertification, the United Nations Convention on Biological Diversity, and the UN Millennium Development Goals; conventions that have synergies with efforts to address climate change.

Namibia is a member of SADC, the Treaty for which includes a commitment to the sustainable utilisation of natural resources and to environmental protection. The SADC also has a Protocol on Shared Watercourses which provides guidelines for the usage of shared water resources. This protocol has been one of the main reference points for Namibia's negotiations and agreements with other basin states on the usage of trans-boundary water resources which are important not only for its water security, but also in terms of their potential contribution to meeting its electricity needs.

National development vision and planning processes

Namibia has a comprehensive development planning process informed by the longer term strategic goals set out in 'Vision 2030 – A Policy Framework for Long-Term National Development', and advanced by successive five-year National Development Plans (NDPs). Vision 2030 was elaborated between 1998 and 2004 in order to provide a broad, unifying vision which would serve to guide the country's second NDP (2001 – 2006) through to the seventh (2030 – 2035). It envisages that by 2030 Namibia will be an industrialised developed country, and hence that it will have "(..) achieved a level of transformation in the flow of development cooperation resources, and (..) advanced from a recipient of grant assistance to a provider of assistance to countries in need". The Vision is based on the concept of sustainable development, referencing constitutional obligations to "promote the welfare of its people and protection of Namibia's environment for both present and future generations", as well as international commitments including the United Nations Agenda 21 principles. It recognises the need to strengthen inter-agency cooperation and mandates, including better linkages between local initiatives and district, regional, national and global initiatives. It also seeks to "create integrated approaches, and genuine partnerships between government, business, communities, NGO, academic institutions, donors, etc.". Finally, it envisions a move from a focus on outputs (e.g. projects and laws) towards a focus on outcomes (e.g. impact) that actually contribute to achieving the Visions and require good quality participation and process management. Such developments can be supportive of comprehensive integration of climate change initiatives into national planning and for their successful implementation. Nevertheless, the plan suggests a low level of attention to (and perhaps awareness of) climate change as a policy issue. Climate change is listed among 14 threats to sustainable development.

Namibia's fourth NDP (NDP4: 2012 – 2017) was launched

in July 2012. It focuses on three main goals: high and sustained economic growth, employment creation and increased income equality; and prioritises four key economic focus areas: logistics, tourism, manufacturing and agriculture. NDP3 with 21 detailed goals was seen as too elaborate, rendering it ineffective at prioritising investments and making monitoring and evaluation (M&E) overly complex. Once the Offices, Ministries and Agencies responsible for different sectors have elaborated detailed implementation plans, the National Planning Commission (NPC) will scrutinise these to ensure that they fit the programme logic and are feasible. Box 2 summarises key NDP 4 targets. Recognising that meeting these targets will require substantial investment in physical infrastructure, the plan indicates the need for greater use of public-private partnership (PPP) financing mechanisms. Infrastructure investments in each of the focal areas are potentially vulnerable to climate change (and are thus likely to present opportunities for mitigation and/or adaptation). NDP 4 does not elucidate whether or how climate resilience will be taken into consideration during planning. Commentators have described this as "a major shortfall (that) may set Namibia out on a dangerous and unsustainable development path" (Zeidler et al., 2012). Concern has been expressed about planned infrastructure investments in vulnerable areas such as on the coast or in the flood-prone areas of the north, as well as about plans such as the "green scheme" for irrigated agriculture, which are premised on securing a significant share of increasingly stretched and contested water resources.

NDP4 recognises the need for enhanced implementation and enforcement of the Environmental Management Act of 2007, including the use of strategic environmental assessments (SEAs) to guide development decision-making. But there is limited discussion of climate change as a substantive issue. The need to incorporate climate resilience analysis into NDP 4, and consider climate impacts has been noted (Zeidler et al., 2012). SEAs may be one tool to evaluate the potential environmental impact and climate resilience of proposed policies, which could inform sector level planning. Processes to align the NDP and the emergent climate change strategy would be useful.

The relatively low level of priority placed on climate change in Vision 2030 and NDP 4 stands in contrast to the significance accorded to the issue by the Ministry of Environment and Tourism (MET). It is the perception of stakeholders that limited recognition outside the MET is due to climate change being seen as one of several environmental issues rather than as a core developmental concern at senior decision-making levels.

Box 2. Namibia's Fourth National Development Plan (NDP4 2012-17) Key Targets

Logistics: By 2017, the volume in cargo handling and rail-transported cargo is double that of 2012, and the Port of Walvis Bay has become the preferred African West coast port and logistics corridor for southern and central African logistics operations. The Plan envisages emulating the example of Singapore, which successfully transformed itself from a logistics hub to a knowledge-based society by attracting a number of related and unrelated industries.

Tourism: By 2017, Namibia is the most competitive tourist destination in sub-Saharan Africa as measured by the World Economic Forum Travel and Tourism Competitiveness Index. Namibia's ranking has increased from third place to first.

Manufacturing: By 2017, the contribution of general manufacturing in constant Namibia Dollar terms has increased by 50% over the 2010 National Accounts baseline. Progress in identifying and developing upstream and downstream minerals sector economic activities has been made.

Agriculture: The sector experiences average real growth of 4% per annum between 2012 and 2017. Supporting measures include expanding the Green Scheme programme – an initiative developing irrigated agricultural land along river courses – and the scaling up of the de-bushing project across the country aimed at reclaiming land affected by bush encroachment.

Key Climate Change Policies and Strategies

A National Climate Change Policy (NCCP), developed by the

MET with the national development goals of the country in mind, was approved by Cabinet in 2011. The Policy is designed to provide the legal framework which would enable a climate change strategy and action plan to be formulated and implemented. It mandates that sectoral climate change strategies be devised to address issues such as sustainable access to water, food security, agriculture, forestry, biodiversity and ecosystems services, health, fisheries and marine resources, infrastructure, sustainable energy and low carbon development. It also directs that activities be undertaken to ensure that the necessary elements needed to drive effective climate action are developed, for example with respect to education, training, institutional strengthening, policy and legislative development, disaster reduction and risk management, research, technology advancement, public awareness and access to information, international cooperation and of course financial resource mobilisation.

The NCCP observes that many of Namibia's sector-specific policies were developed without due consideration of climate change, because at their time of development, climate change was not regarded as a serious issue, and it provides a summary overview of the key policies and laws which are relevant to climate change. This summary, however, does not provide an analysis of where other national policies conflict or are inconsistent with the NCCP, nor propose how these conflicts may be resolved. The Policy states that it is imperative that all sectors evaluate the impacts of climate change and identify adaptation and mitigation strategies – and that government make sectoral budgetary provisions based on needs assessments of such strategies to ensure adequate resources at all times. It also requests that government consider and explore a range of multi- and bilateral funding options including grants, concessional and non-concessional loans, as well as market-based instruments. This is significant, because interviewees indicated significant wariness at high-level about the potential conditions attached to loans from multilateral institutions. The NCCP also emphasises the importance of evidence-based strategies and action plans, and observes that "Climate change research needs to be properly coordinated, and its benefits optimised to meet the needs of decision-makers in Namibia".

A Climate Change Strategy and Action Plan (CCSAP) for the period from 2013 to 2020 has been drafted to actualise implementation of the NCCP, and is currently undergoing revision and elucidation. The CCSAP is organised around the three key areas of adaptation, mitigation and cross-cutting issues. Adaptation is addressed through four themes: food security and sustainable biological resource base; sustainable water resources base; human health and well-being; and infrastructure development. Mitigation focuses on low carbon development through sustainable energy and transport. Cross-cutting issues comprise the elements necessary to drive effective climate action identified by the NCCP. The Action Plan provides a framework listing activities, time frames, lead and partner agencies responsible.

In particular, CCSAP identifies the need to maximise government financing instruments at the national and local levels; leverage private sector investment; and access scaled-up, new and additional (external) financial resources. It also notes the need to develop assessment tools to inform decision-making, and to establish partnerships among national and local government agencies, business, professional and other private groups, community based organisations, academic and scientific organisations and civil society organisations in order to realise its objectives. It proposes introducing policy and incentive mechanisms to facilitate and leverage private sector investment in climate change, and expects that PPPs will contribute both monetary and human resource capacity to implement the required actions. Stakeholder consultation is relatively established in Namibia, and a wide range of stakeholders have been sensitised to Namibia's proposed climate change response through the NCCP and the forthcoming CCSAP consultation process. The annual Youth Council summit in April 2013 included climate change as a core focus and intends to disseminate information on Namibia's climate change initiatives to the wider public. In parallel, a number of international development partners have also begun to support "green economy" initiatives, aimed at integrating environmental considerations into economic planning processes.

While the NCCP and draft CCSAP represent important steps towards a comprehensive national response to climate change, work remains to be done to support meaningful implementation. The costs of activities proposed in the CCSAP are not indicated. There is also a need to establish clear targets for and the prioritization or sequencing of

more than 100 possible activities recommended, an issue which is reportedly being addressed in the current revision process. Such a prioritisation and cost estimation exercise could usefully inform where available domestic and international resources might be spent most strategically.

As noted, although the NCCP and draft CCSAP are said to have been developed within the framework of the national development plans, Namibia's NDPs do not attempt to assess the extent to which priorities identified therein are likely to be affected by climate change, nor how these

Box 3. Policy and planning in the energy sector

It appears that coordination between policy-making and planning within the energy sector, as well as between energy, development and climate change strategies, might be enhanced in Namibia. In 2010 the ECB, under mandate from the MME and with support from the World Bank, initiated the process of developing a 20 year electricity sector development plan - the National Integrated Resource Plan (NIRP). A consultant was retained in 2011, at which time the REEEI reported that a review of the 1998 White paper on Energy Policy was underway - which it was hoped would provide greater clarity on clean energy targets going forward. In the event, the consultant was not able to factor in such guidance as the Energy Policy review's outcome may provide (Hatch, 2013).

Misalignment between an important element of MET's envisaged mitigation strategy and what is being recommended for adoption as the NIRP's Base Case generation expansion plan is also evident. Whilst the MET has been promoting the idea of diversifying the fuel mix used to power the country's fleet of light load vehicles by introducing liquefied gas (MET, 2011b; Muteyauli et al., 2011), the Base Case generation plan contained in the consultant's final report (Hatch, 2013) envisages that the entire production of the country's only discovered gas field be used to produce electricity. Though more in-depth analysis of the MET's proposal is doubtless required given Namibia's small population size and low density, it is noteworthy that this strategy option is not even mentioned as a factor requiring consideration by the consultants. This option might, in view of the possibility of obtaining compressed natural gas from Angola (Hatch, 2013), present energy cost savings[5] in addition to its mitigation potential. Moreover, building a gas-fired power station twice the size required to meet anticipated domestic demand in the medium term, as recommended in the Base Case plan, has substantial implications (Hatch, 2013):

- Half the plant's output would need to be sold through the SAPP to other countries, and the consultants' sensitivity analysis reveals that even a moderate shortfall in the average price achieved by such sales relative to production costs would have a substantial impact on the project's economics.
- The Kudu gas field's proven reserves being considered only sufficient to supply the envisaged plant for the first 15 of its 25-year economic life, it would have to be powered with imported fuel for the remaining 10 (diesel is envisaged).

Furthermore, there seems to have been limited alignment between the NIRP work programme and the strategic objectives laid out in the NCCP. Namibia faces important investment choices which may not only determine the extent to which renewable energy technologies can be incorporated into its electricity generation asset base over the next two decades, but potentially also the viability of diversifying its transport fuel supply mix. Although the decision to go ahead with the development of the 800MW Kudu offshore natural gas-to-power project seems to have been taken, climate finance readiness support can assist the country in weighing up the trade-offs between the options which remain open. Revision of the Energy Policy that sets clear and realistic targets for renewable energy and energy efficiency would be an important first step in demonstrating national and political commitment. It would also help attract private sector investment in such projects.

might impact on the attainment of climate change goals. Similarly, there is a need to harmonise climate change with other sectoral policies, a number of which identify activities that may be contradictory to or impact negatively on the achievement of climate goals. For example, the Ministry of Agriculture, Water and Forestry has adopted a Green Scheme policy promoting irrigated agriculture which has been noted as being inconsistent with climate related goals, and potentially unsustainable (Zeidler et al., 2012). Policies being pursued within the energy sector too, may not be well aligned with climate policy (see Box 3). The MET has proposed that an ex-post strategic environmental assessment be conducted for NDP4, which could support enhanced alignment. The NPC is also exploring ways to ensure better harmonisation of policies across sectors. The need for strengthened harmonisation between the evolving CCSAP and on-going efforts in the areas of biodiversity conservation and combating desertification, as well as efforts to promote a green economy, has also been emphasized by stakeholders.

Planning: Key messages

- Adoption of the National Climate Change Policy and development of a draft Climate Change Strategy and Action Plan (CCSAP) represent important steps in advancing an understanding of the importance of climate change for Namibia. However, there is a need to more precisely specify, prioritise and sequence the activities identified, and to estimate the costs associated with each proposed activity;
- There is a need to consider the implications of climate change for the National Development Plan as a whole as there may be tensions between some of its proposed priorities and the requirements of climate-compatible development;
- A number of sector policies and plans, for example in the agriculture and energy sectors, are not consistent with the directions outlined in the draft CCSAP;
- The lack of attention to renewable energy and energy efficiency options in planning within the energy sector, including lack of clearly defined targets, creates a barrier to attracting private investment in these technologies;
- Efforts to engage civil society actors and non-governmental organisations that hold expertise in climate change issues are commendable, but opportunities for broader engagement of the domestic private sector should be explored, particularly in the elaboration and implementation of the CCSAP.

4.2. Aptitude

Aptitude relates to maximising existing national capacities to identify appropriate climate change investment choices and the suite of capacities to deal with climate finance. It, therefore, encompasses the capability to develop a pipeline of bankable climate change projects and programmes as well as the people, systems, expertise and know-how that exists in country to access and program climate finance. It relates to the public sector, the private sector, civil society and NGOs.

Key Institutions and Coordinating Mechanisms

The Ministry of Environment and Tourism (MET) has been mandated to advance climate change activities in Namibia through its Directorate of Environmental Affairs. In order to give effect to the NCCP, the draft CCSAP prescribes activities which fall within the purview of several other line ministries. In order for these to be actualised, those other ministries need to incorporate them in their annual action plans and obtain the budget required to implement them. The extent to which the MET will be able to motivate other Ministries to take on these activities once the Strategy has been approved by Cabinet remains to be seen. Several stakeholders proposed that a high-level coordinating unit for climate change be established within an organ of government with the political weight to hold ministries accountable for implementing relevant activities within their purview – an approach that has been implemented in some other African countries including Zambia and Kenya.

The National Planning Commission (NPC), as the organ responsible for national planning and coordination, has a central role to play in ensuring that climate change considerations are properly reflected in sector plans and

budgetary allocations. Several stakeholders noted that the Office of the Prime Minister (OPM), which has a Constitutional mandate to "be the leader of government business in parliament" and to "co-ordinate the work of the cabinet" (Article 36, Namibian Constitution), might be an appropriate anchor for a coordination unit (especially since it already hosts the Disaster Risk Management Unit -DMU). An analysis of institutional arrangements carried out through the Africa Adaptation Project (AAP, see Box 5) proposed that a climate change coordination unit be established in the OPM, while the MET retain the technical leadership and responsibility for mainstreaming the climate change agenda (AAP 2011). Indeed, this arrangement has been considered in the development of the CCSAP, as a recent draft proposes implementation arrangements in which a Climate Change Unit in the OPM oversees coordination and implementation of the strategy. This arrangement is reportedly being revisited in the final version of the CCSAP, however, and a number of stakeholders have been less confident about the extent to which the OPM would be suited to driving the climate change agenda.

Stakeholders also observed important links between efforts to reduce national disaster risk and efforts to address climate change, including the need for strengthened coordination at senior levels of government. The Disaster Risk Management (DRM) Directorate in the OPM is tasked with developing a functional national disaster risk reduction system that minimises community vulnerability to anticipated hazards and effectively manages the impact of disasters within the context of sustainable development. It has established a Disaster Risk Management Policy and Procedures for Namibia which are intended to align with international frameworks for disaster risks associated with climate change. There may be room to strengthen understanding of and attention to the linkages between climate change and DRM in Namibia. An assessment as part of the AAP provided recommendations for strengthening integration of climate-related risk into disaster risk management (AAP 2011).

Advisory committees on climate issues

The Parliamentary Standing Committee on Economics, Natural Resources and Public Administration has the mandate to engage on any environmental issue and provide recommendations to the National Assembly. It has been noted that this body has the potential to play a greater role in raising the profile of climate change and environmental sustainability issues in national legal and policy debates. A National Climate Change Committee (NCCC) was created in 2001 under leadership of the MET to direct and oversee the activities necessary to meet Namibia's obligations to the UNFCCC, and with providing climate change related advice to government - in particular the afore-mentioned Parliamentary Standing Committee on Economics, Natural Resources and Public Administration. It is a multi-stakeholder committee comprising representatives from the DRM Directorate in the OPM, the National Meteorological Service in the Ministry of Works and Transport and other relevant ministries; from state-owned enterprises such as NamPower and NamWater; from academic institutions such as the Polytechnic and the University of Namibia; and from some NGOs such as the Desert Research Foundation of Namibia and the Namibia Nature Foundation; and from UNDP. The private sector, however, does not appear to be represented. The World Bank's Country Partnership Strategy for 2014-2017 observes that during preparatory consultations "many private sector and civil society stakeholders pointed to deficiencies in public-private dialogue as a source of problems in developing and implementing policies in Namibia. Consultative processes for new laws, policies, and regulations tend to be ad hoc. Public dissemination of government information is inconsistent across ministries. Mistrust sometimes plagues discussions between the government and business leaders" (World Bank, 2013b).

Terms of reference for the NCCC set in 2010 provide for a dual structure: a High-Level Segment to be attended by senior decision-makers, and an Inter-Sectoral Technical Working Group consisting of mid-level technical representatives. An evaluation of the NCCC conducted in 2011 (AAP, 2011) found that assigned senior decision-makers often did not attend High-Level Segment meetings, but delegated this to more junior members of their staff instead, in certain cases to different individuals, which impeded continuity. It also identified lack of technical capacity on climate change issues among committee members as a key constraint. Mid-level technical staff interviewed for the present study noted that they often had difficulty convincing superiors of the case for undertaking

climate change activities within their sector. This was attributed, among other factors, to limited understanding of the potential climate change impacts on sector plans, and a lack of knowledge of international best practice. Some stakeholders observed that it would be helpful to disseminate examples of successful climate response initiatives in other peer countries to stakeholders in Namibia, as part of an effort to raise awareness of how a robust climate change response might be advanced.

In addition, a new Sustainable Development Advisory Council has been established under the Environmental Management Act (EMA), comprising eight members from government, the private sector and civil society. Its objective is to promote cooperation and coordination between organs of state, non-governmental organisations, community-based organisations, the private sector and funding agencies on environmental issues relating to sustainable development. The Council has the authority to advise the Minister of Environment on issues relating to sustainable development (GRN, 2007), and could potentially be influential in promoting coordination between climate change planning and other aspects of sustainable development.

Climate capacity within key government institutions at national level

Efforts are underway to improve government capacity and leadership on climate change. Technical capacity on climate change in the Namibian government is concentrated in the MET. Stakeholders noted the continued need to deepen and expand capacity on climate issues within the MET, drawing comparisons with the strong expertise that the MET has developed over the years on biodiversity and desertification. Technical capacity in other relevant ministries to address climate change considerations is, for the most part, limited, creating a challenge for inter-sectoral coordination of climate change planning and a substantial impediment to implementation of climate change activities in Namibia. Strengthened technical expertise on climate change issues within the NPC will be needed in order for it to take on a stronger role in integrating climate change into development planning and ensuring harmonisation of sectoral policies.

Stakeholders also observed a particular need to strengthen climate change related knowledge and capacity in a number of ministries that, so far, have appeared to be on the margins of climate change action in Namibia, namely: the Ministries of Mines and Energy; Works and Transport (in particular the National Meteorological Service, which is responsible for collecting and making available climate-related data); Agriculture, Water and Forestry; Trade and Industry; and Regional and Local Government, Housing and Rural Development. The Ministry of Finance, too, was noted as having limited capacity to play a role that is likely to become increasingly important as the scale of climate finance increases.

Some programmes to train staff have been supported by donors. The AAP engaged in leadership support and development for Namibian stakeholders on climate change, including through a climate change Ambassadors program - which is perceived to have been instrumental in raising awareness, and in strengthening capacity. However, stakeholders remarked that over-extended individuals in key institutions (particularly within government) rarely have the time to participate effectively in training programmes. Furthermore, training programmes are often not very sustainable, and systems to institutionalise the knowledge imparted and to continue constructive initiatives after donor-funded programmes come to an end are not always established.

The need for at least one staff member in all relevant government agencies and state-owned enterprises whose job description explicitly includes integrating climate change into planning within the institution and representing the institution in cross-sectoral discussions on climate change issues was emphasised by stakeholders. Some ministries, such as the NPC, have identified a staff member to act as a focal point for climate change. However, although the majority of ministries and state-owned enterprises have a focal point on environmental issues, many do not yet have a staff member specifically charged with addressing climate change issues. Efforts are underway to introduce performance-based management systems for the Namibian civil service. This may present an opportunity to incorporate climate change responsibilities into job descriptions. Despite considerable resistance to performance-based assessments, this is now being piloted.[6]

Climate capacity outside of government

There is substantial expertise on climate change issues outside of government. Functional and on-going collaborations exist between government and academic institutions, private sector consultancies and NGOs that engage with climate change issues in Namibia. NGOs have long played a key role in intermediating donor funding and implementing or supporting projects and programmes to advance sustainable development in various spheres, including conservation of biodiversity, community based natural resource management, combating desertification, and others; with an increasing attention over the past decade to climate change issues. For example, the Desert Research Foundation of Namibia (DRFN), an NGO with substantial expertise on arid ecosystems and desertification, works increasingly on issues around climate change adaptation and resilience and is Namibia's applicant national implementing entity for the Adaptation Fund. Private consultancies are also active in this field. For example, Integrated Environmental Consultants Namibia (IECN) was engaged in the AAP and is currently engaged in updating the CCSAP. NGOs and the private sector have also been instrumental in building capacity and awareness on sustainable development, including climate change issues, among Namibian youth (including through partnerships with academic institutions) and among rural communities.

Issues related to finance and investment in the context of acting on climate challenges, however, require further attention, although some capacity is emerging in the form of specialised consultancies on energy services, and new funds that seek to invest in renewable energy such as the Solar Revolving Fund to drive investment in solar power. Three of the four major banks in Namibia are part of large South African banking groups, and thus have access to substantial funding and specialist project finance resources. Standard Bank and Nedbank in particular have developed green economy capacity, and supplied substantial funding to renewable energy IPPs in South Africa.

To date, however, there has been relatively limited attention to opportunities to incorporate climate change into mainstream infrastructure investment decisions, and the role that access to climate finance could play in facilitating such a shift. The World Bank notes that the scale of investment needed in public infrastructure exceeds the state's capacity (government and parastatals combined), and that private sector financing must be mobilized. However, lenders are reluctant to finance parastatals even with sovereign guarantees, indicating a need for credit-enhancement products. Unlocking private sector investment in public infrastructure will require complex government-parastatal-private sector arrangements. These maybe difficult to establish (World Bank, 2013b).

Climate capacity at regional and local level

The MET is currently strengthening its regional structures by appointing Director-level regional heads, which may enhance its ability to promote the climate agenda at regional level. It was noted by stakeholders that there is a need for greater coordination between national, regional and local levels of government on climate change issues, as well as the need to strengthen government capacity on climate issues at sub-national levels to enable more effective decentralisation of climate planning and action. One of the recommendations of the AAP was the establishment of regional climate change committees to coordinate the climate change response at the regional level. Outside of government, there is considerable capacity among NGOs and community-based organisations (CBOs) on sustainable development and a breadth of practical experience of climate resilience, although expertise on climate change issues may be less advanced than expertise on other aspects of sustainable development such as natural resource management. In particular, CBOs have strong capacity for implementation and monitoring and evaluation of projects, and there are systems in place in the communal conservancies for collecting and managing information. The potential of the CBNRM programme to drive climate change adaptation at a local level was noted, implying a need to more explicitly integrate climate change resilience and adaptation into local level decision making.

Data availability

A growing number of studies on the implications of climate change for Namibia have been completed. For example, Midgley et al. (2005) looked at the ecological impacts of climate change on Namibian ecosystems, while Reid at al. (2007) looked at the impact of climate change on the economic value of natural resources, and Brown (2009) looked

at its economic impact on commercial agriculture. Dirkx et al. (2008) has also conducted a vulnerability and adaptation assessment for Namibia. Relevant data has tended to be gathered in an ad hoc way by state and non-state institutions in response to specific shorter term imperatives, however. Various line ministries and non-governmental institutions collect data of varying degrees of quality, comprehensiveness and comparability. There are no minimum data requirements established and no real oversight in the direction of climate-related data collection and collation at present. Data collection is more established for other sectors, however, and may offer lessons for efforts to strengthen climate data availability. The Namibian Association of CBNRM Support Organisations (NASCO) produce an annual report on the state, progress and challenges faced each year. This relies on local level data collection as well as analysis of collated and comparable data[7]. The University of Namibia (UNAM) also has a CBNRM bibliography that makes it easier to avoid duplication of research in this sector. The Environmental Information Service[8] an online database that collates a wide range of information on environmental issues, in the form of studies, websites, maps and shape files, legal documents, etc., also enables the public to access a diverse array of existing information on climate change and other issues. It was established through a partnership between the Namibia Nature Foundation and Nampower, and is supported by the European Investment Bank. There are also regional and global initiatives to take advantage of: for example the Council for Scientific and Industrial Research (CSIR) in South Africa is engaged in climate technology research, including on adaptation in agriculture.

There remains, however, a need for longer term and more institutionalised data gathering to inform climate policy and associated investment. Some stakeholders suggested that there might be value in creating a research council that determines research priorities overall, or by sector and field. Such a body might be able to synthesise and consolidate available information, and create better systems for ongoing information gathering and management. Some stakeholders saw the National Statistics Agency (NSA) – previously the Central Statistics Agency under the NPC – as an entity which could potentially play an important role in supporting Namibia's climate change response by collating high quality data on climate impacts and providing related analysis. The Threshold 21 (T21) model - a simulation tool to enable analysis of different policy options and their impact on development indicators and which was adapted for Namibia under the AAP project - is now housed in the NSA, for example. However, such an extension to the NSA's mandate would likely require building its capacity in this field.

Turning data into knowledge

It is clear that a more strategic and well-resourced research system, including training more young researchers, would enhance the skills base for analysing climate change impacts, responses and financing over the long term. The government has provided funding for research on climate related issues to UNAM and the Polytechnic since 2009. Development partners such as JICA have also contributed funds to research in food security. The Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL) programme, a joint initiative of Angola, Botswana, Namibia, South Africa, Zambia and Germany, also has the potential to support climate change research in Namibia. This project, however, is currently at an early stage, and does not yet appear to be very closely linked to domestic policy processes and needs. Strong working relationships do exist between domestic academic institutions and a number of ministries to provide support on climate change issues. Strengthening intra-ministerial research and technical capacity would help drive extra-ministerial research through the good links that already exist.

There is a need for improved understanding of the likely impacts of climate change on various sectors of Namibia's economy, as well as for assessments of the costs, benefits and risks of climate action to inform policy development and funding plans. Such assessment would enable the strategic identification of climate change activities for which there is a strong case for domestic funding, as well as areas where international climate finance may be particularly needed.

Stakeholders stressed the difficulty of building lasting institutional memory through research projects and capacity building. Past programs such as the BIOTA project provided scientific support for conservation and sustainable use of biodiversity in Namibia and South Africa, and trained individuals at the Polytechnic of Namibia and UNAM who have now left these institutions. Researchers at UNAM reflect

that administrative and teaching responsibilities leave little time to lead and design the longer term research projects often required to understand the impacts of climate change that occur over time. Similarly, not all ministries are investing in developing their knowledge and understanding of climate issues, willingness to make such investments being linked to perceived mandates in this regard. Incorporating technical and research objectives related to climate change into the responsibilities of key staff in pertinent ministries could be piloted, as part of the move to introduce performance-based civil service management systems.

There may be room to strengthen capacity and engagement on climate policy implementation of government, civil society and private sector at the regional and local levels, as well as to strengthen coordination between national and sub-national levels. Community-based organisations have an important role to play in integrating climate change resilience and adaptation into local level decision-making.

Aptitude: Key messages

- The Ministry of Environment and Tourism has been championing climate change issues in Namibia, spearheading technical analyses on climate change implications for the economy, and leading the development of a climate change policy plus a follow-on strategy and action plan. However, there is a need for strengthened capacity at the MET in order for it to effectively carry out its mandate;
- There is substantial expertise in well capacitated research institutions, private sector entities, and in civil society, but there is a need to strengthen government's collaboration and engagement with them;
- Implementation of the Climate Change Policy and Action Plan will require the participation of a wide range of line ministries in Namibia, many of whom have quite limited capacity to engage on climate change related issues even though these are material to their roles and responsibilities;
- In particular, there is likely to be a vital role for the National Planning Commission supporting the execution of, and ensuring alignment between, the Climate Change Policy and Action Plan and successive national development plans. The NPC's technical capacity on these issues will need to be strengthened if it is to effectively play such a role;
- There are a growing number of ad-hoc studies on climate change impacts in Namibia and a number of operational research partnerships. These, however, do not necessarily result in a coordinated information and research capacity that can feed into national planning.

4.3 Access

Within the climate finance readiness framework, access refers to sourcing, receiving and spending funds widely. This considers the monitoring and evaluation of climate finance expenditure in countries to gather best practice, but also for ensuring accountability for using scarce public resources. It also considers the appropriate modalities and associated fiduciary and environmental standards, given the pursuit of direct access modalities.

The investment implications of climate change

There have been no comprehensive assessments of the amount of investment needed to mitigate and adapt to climate change across all sectors of the Namibian economy. Stakeholders recognise the need to invest in prioritising, sequencing and costing the activities proposed in the CCSAP.

Some work has been carried out for two sectors, however. Under a global project to strengthen the capacity of policy makers to address climate change, UNDP supported assessments of the investment and financial flows required to address climate change mitigation in the energy sector, and adaptation in the land use, land use change and forestry (LULUCF) sector.

The energy sector assessment estimated that the incremental costs of the package of mitigation measures studied would be US$1.55 billion over the 25-year time period between 2005 and 2030 (Muteyauli et al., 2011). It focussed on two sub-sectors: electricity generation and transport. The electricity generation analysis covered a range of renewable energy options and energy efficiency measures which, taken together, result in a mitigation cost of USD 102 per

ton of CO2 equivalent (rather substantial, but key underlying assumptions which contribute to this estimate are debatable). The transport analysis focused on the possibility of introducing LPG as an additional fuel for passenger vehicles, and estimated that mitigation costs would amount to US$ 28 per tCO2-eq.

The LULUCF sector assessment found that, through additional measures to improve resilience of livestock, crop farming and conversion to more climate-resilient land use options, the incremental costs of the adaptation measures studied would be US$3.13 billion over the same time period (Nhuleipo et al., 2011).

Existing sources of funding for climate change

Namibia has established itself as a progressive actor on environmental issues, and has been relatively effective in raising international finance for issues including biodiversity and land degradation. But to date, it has had limited success accessing international sources of climate finance. There is strong interest in improving this situation. Donor funding in Namibia has been in general decline over the past few years, in large part due to its 2009 reclassification by the World Bank as an upper middle income country. The NPC is currently working to develop a finance strategy to respond to diminishing Official Development Assistance (ODA) that is intended to focus on potential private sector investment in sustainable development.

International public climate finance

The majority of funding for climate change from international sources has been for mitigation activities, primarily in the energy sector. For example, Namibia has received funding from the GEF for several renewable energy and energy efficiency projects (see Box 4). Most international climate finance flows outside of national budget systems, although the NPC is closely involved in negotiating funding agreements with donors and overseeing international funding for government agencies. Line ministries can negotiate agreements directly with development partners, but must seek approval from the NPC for all grant funding and technical assistance agreements. In the case of loans and budget support, approval of the Ministry of Finance is also required and funding is challenged through the Ministry of Finance. However, to date Namibia has not received budget support or loans for climate related activities[9]. Stakeholders noted that weak donor coordination poses an administrative challenge to national institutions that are already under-staffed, in particular due to the difficulty of working to meet different donor reporting and monitoring requirements for project based support. The NPC is considering establishing a development partner forum to promote harmonisation among donors – a forum which has existed in the past and was said to have been effective.

The majority, if not all, of climate finance received in Namibia has been in the form of grants. Namibian officials expressed a strong reluctance to borrow from the multilateral development banks or the International Monetary Fund due to the burdensome conditionalities attached to such loans and the fact that the country is able to access commercial finance at affordable rates. It was noted by at least one interviewee that the use of loans and/or concessional loans could be increased to Namibia's advantage if planned strategically. In particular, loans may become important for large climate resilient infrastructure developments or in the energy sector for lower carbon options. In this context, a strengthened role for the Ministry of Finance on climate finance issues could be envisioned, and it was noted that this Ministry might benefit from activities to strengthen the knowledge and understanding of relevant staff on accessing and managing climate finance.

International finance has supported several NGO led initiatives that have successfully piloted and demonstrated new ideas, and certain NGOs have a strong capacity for financial management and administration. For example, the Namibia Nature Foundation (NNF) has been trusted by the government and by donors to administer funds on their behalf due to its strong track record and ability to meet donor reporting requirements (NANGOF Trust, 2009). Integrated Rural Development and Nature Conservation (IRDNC), an NGO that works with communities in the Kunene and Zambezi regions, also intermediates and administers funding from a wide range of donors for community-level projects. The reduction in donor funding mentioned above poses a challenge to NGO engagement on climate issues, and the need for strengthened awareness among NGOs of climate finance sources and the requirements to tap into them was noted. The importance of continuing to support

Box 4. Major renewable energy and energy efficiency programmes

A number of initiatives have been undertaken to promote renewable energy and energy efficiency in Namibia, with support from several donors. In 2003, the **Barrier Removal to Namibian Renewable Energy Programme (NAMREP)** was initiated with support from UNDP and funding from the GEF. NAMREP aimed to (a) improve livelihoods and income generation opportunities of rural people by providing them with access to off-grid solar energy technologies and (b) reduce dependency on imported fuel by promoting solar water heating (household, institutional commercial sectors) and pumping (agriculture sector) through the removal of capacity and institutional barriers, public awareness and social acceptability barriers, and financial and technical barriers. The project ran from 2003-2011; the first phase (NAMREP I) focused on providing technical assistance to government, NGOs, finance and other sectors to remove and reduce barriers in terms of capacities, institutional development, technical constraints, financial instruments and public awareness. Phase II focused on promoting the delivery of commercially, institutionally and technically sustainable solar energy services to rural and off-grid communities.

Under NAMREP, an **Off-grid Energisation Master Plan for Namibia (OGEMP)** was developed with the aim to provide access to appropriate energy technologies to everyone living or working in off-grid areas. A total budget for OGEMP of N$6.8 million per year, or N$137 million (US$13.7 million) over 20 years period was envisioned. Funding comes primarily from the MME's budget; the Finnish Embassy has also provided some support. The OGEMP includes the following three components:

- Supporting small business in rural areas to establish 'energy shops' which sell energy products and compatible appliances, with emphasis on renewable energy and energy efficiency technologies. They also serve as payment collection centres for the solar revolving fund mentioned below. This component is implemented by the REEEI; implementation begun in 2011 and so far 13 shops have been established in 12 regions (every region except Khomas).
- A Solar Revolving Fund, administered by the Renewable Energy Division the MME, provides loans to households and communities for solar water heaters, solar water pumps or solar homes systems with a favourable interest rate. Uptake of the loans has been high, and the Fund has not been able to keep up with the demand.
- Electrification of rural public institutions in off grid areas using solar power, with the aim of reaching all public institutions (including schools, churches and government buildings) in 5 years.

The **Namibia Energy Efficiency Programme in Buildings (NEEP)** project, implemented from 2009-2013 by the REEEI with GEF funding, aimed to develop a rating system for buildings and building codes to improve energy efficiency in buildings. The Green Building Council of Namibia has been established, and there is a working group comprising architects, Ministry of Mines and Energy, local authorities, and others.

The **Concentrating Solar Power Technology Transfer** for Electricity Generation in Namibia aims to establish a 50MW concentrated solar power plant which would be run by Nampower or an independent power producer. REEEI did pre-feasibility study (in 2012) on concentrated solar power and produced a map of sun radiation. The GEF, through UNDP, is providing funding for a full feasibility study.

In addition to those mentioned above, efforts are under way to assess the feasibility of various renewable energy options, including biomass to electricity projects using invader bush, and through wind resource assessments at several sites along the coast, which are being undertaken in partnership between REEEI, Nampower and the mobile phone company MTC. Solar photovoltaic technologies are already widely used for off-grid applications, and a 2007 Cabinet directive made solar water heaters mandatory in Government buildings.

Box 5: Africa Adaptation Project in Namibia

The **Africa Adaptation Project (AAP)**, funded by Government of Japan and implemented through UNDP in partnership with other organisations, aimed at supporting integrated and comprehensive approaches to climate change adaptation in 20 countries in Africa. The total project budget for Namibia was approximately US$ 3 million for the period 2010-2012. The AAP built on and sought synergies with existing initiatives underway in Namibia, including the CPP –ISLM, the CBNRM programme, and the Small Grants Programme. For example, it funded a number of community-based adaptation projects in partnership with UNDP-GEF, including a sweet-stem sorghum research program at the University of Namibia; a program to educate youth on improved farming practices at Onamulunga Combined School in northern Namibia; and the "Ezystove" pilot project to provide energy efficient cooking stoves to households in Omuthiya in northern Namibia. It also developed community adaptation toolkits for each region, building on a pilot toolkit which was developed under the CPP-ISLM, to provide information to farmers and communities on climate change adaptation.

The AAP also invested in institutional and policy development efforts which targeted improved coordination and integration of climate change programmes into development planning. It supported the use of the Threshold 21 modelling tool to identify vulnerable sectors, in coordination with the National Planning Commission and Ministry of Finance. The tool integrates climate change within economic, social and environmental considerations into a single, transparent computer model. It also initiated a Climate Change Ambassadors programme, with "ambassadors" from ministries, NGOs and private companies, and worked with a diversity of stakeholders including parliamentarians, mayors, regional authorities, private sector representatives and youth leaders to increase awareness of climate change risks and opportunities., Assessments of institutional arrangements and capacity for climate risk management conducted under the AAP led to a number of recommendations for strengthening Namibia's enabling environment for an effective climate change response, which are referred to throughout this report. It also supported outreach and dissemination of the national climate policy, in an effort to inform implementation approaches.

The AAP made an important contribution to strengthening awareness and capacity on climate change issues and making climate change a material policy issue for Namibia. However the program ended in 2012, and stakeholders have indicated that there has been insufficient attention paid to ensuring sustainability and continuity of the various initiatives it introduced or supported. As the preceding discussion on the challenges of turning climate policy intent into practice makes clear, there is a need to build on the progress made under the AAP to continue to support alignment of development strategies and emerging climate change related needs.

Sources: UNDP AAP Namibia Program http://www.undp-aap.org/countries/namibia

diverse stakeholders (including non-governmental partners) to engage on climate change was stressed by several stakeholders that were interviewed.

While Namibia has received from the GEF $55.9 million in grants for 25 projects to date (Table 1), the majority of this funding has been for biodiversity and land degradation focal areas, with only US$8.9 million for seven projects in the climate change focal area (Table 2)[10]. The Country Pilot Partnership for Integrated Sustainable Land Management (CPP –ISLM), an integrated approach to addressing land degradation in Namibia which involved collaboration between several government ministries and NGOs, received funding from the GEF and included several projects to promote adaptive and climate-resilient land management. Namibia has also accessed US$2.9 million in the form

Table 1: Total GEF-financing in Namibia (in US$)

	No of Projects	Total GEF Financing	Total co-Financing
National Projects	25	58,881,900	303,726,790
Regional and Global Projects	20	139,910,412	323,885,407
GEF Small Grants Programme	99	2,973,475	3,788,996

Table 2: Multilateral climate finance for Namibia

Projects	Funder	Year Approved	Amount Approved	Amount Disbursed
Enabling Activities for the Preparation of Initial Communication Related to UNFCCC	GEF	2001	0.13	0.13
Climate Change Enabling Activity (Additional financing for Capacity Building in Priority Areas)	GEF	2003	0.1	0.1
Adapting to Climate Change through the Improvement of Traditional Crops and Livestock Farming	GEF	2012	0.96	0.96
Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase I	GEF	2012	2.6	2.6
Barrier Removal to Namibian Renewable Energy Programme (NAMREP), Phase II	GEF	2011	2.6	2.6
Concentrating Solar Power Technology Transfer for Electricity Generation in Namibia (NAM CSP TT)	GEF	2011	1.72	0
Developing a National Energy Action Plan	Germany's ICI	2010	0.233	0
Namibia Energy Efficiency Programme (NEEP) In Buildings	GEF	2010	0.86	0.86
TOTAL			9.203	7.25

Note: This table does not capture contributions outside of dedicated climate funds and initiatives. All GEF projects were implemented through UNDP.
Source: Climate Funds Update: http://www.climatefundsupdate.org/data and GEF: http://www.thegef.org/gef/gef_projects_funding

of small grants implemented through civil society and community-based organisations in the areas of biodiversity, land degradation, international waters, ozone depletion and climate change through the GEF's Small Grants Programme (GEF, 2012). These projects have all received co-finance. A partnership between the AAP and the GEF Small Grants Programme supported a range of community based adaptation projects. However, Namibia has not yet accessed newer climate funds such as the Adaptation Fund and REDD+ finance initiatives, or larger initiatives such as the Climate Investment Funds. In total, it has received an estimated US$9.2 million from dedicated international climate change funds, of which US$7.25 million has been disbursed. The figure is probably considerably higher when

bilateral initiatives are taken into account. A number of bilateral development agencies have provided funding for climate-related activities, including Germany, Finland, Sweden, Denmark, and the European Commission, largely for energy sector interventions.

Market mechanisms

Two CDM projects are now under validation in Namibia: a biogas power project at the wastewater treatment plant in Windhoek, and a methane recovery and power generation from landfill project in Kupferberg, just outside of Windhoek. Two other CDM projects were proposed but not pursued as a result of onerous procedures and difficulty in demonstrating additionality. With carbon prices at a low point, however, the scope for substantial additional finance through the CDM in the near term appears limited. There has also been interest in exploring opportunities for Namibia to benefit from potential mechanisms to Reduce Emissions through Deforestation and Forest Degradation (REDD+), although the scope for this is not clear.

Domestic climate finance

The early stage of implementation of emergent climate policy is in turn reflected in current public expenditure. Namibia uses the medium term expenditure framework (MTEF) to link the national budget to national development plans and sectoral medium-term plans and provide a longer-term perspective to the budgeting process. In order to receive a funding allocation in the budget, ministries must put forward a motivation to the NPC outlining the purpose to which funds will be applied and how this fits with the current NDP. Once it has approved funding applications, the NPC is responsible for mobilising the necessary finance either from domestic sources or from international partners.

To date, there is no budget allocation associated with the NCCP or CCSAP, and there is no funding set aside for climate change related programming. The 2013/14 national budget does, however, include an allocation of N$1.8 billion (US$180 million) between 2013-2015 to environment and tourism. Most of this funding will support tourism development, and wildlife, protected area and natural resource management, as well as some infrastructure development (GRN, 2013). In the case of a plan such as the CCSAP, which requires cross-sector implementation, each implementing ministry must motivate for budget allocations to support climate change activities within its sector. In the energy sector, domestic finance has supported efforts to promote renewable energy and access to clean energy, including through the off-grid energisation master plan (OGEMP, see box 4).

Mobilising funding for climate change going forward

The CCSAP envisages accessing a range of funding sources to implement the various activities it identifies (MET, 2012). It recommends that the government provides at least 70% of the total financial requirement for implementing climate change adaptation and mitigation initiatives in the country. It notes a potential role for the Environmental Investment Fund (Box 6).

However, there is a need to better specify the likely costs associated with identified activities, and to develop a more detailed finance strategy. As many of the activities identified in the CCSAP fall within the mandate of other sectoral ministries, unless there is an explicit budget allocation for the CCSAP, these ministries will need to make funding applications to the NPC to be able to implement them (see above). The fact that several key sector policies are not yet well aligned with the CCSAP makes it unlikely that the relevant Ministries would seek such budget allocations. As noted, the MET does not have the authority to hold other ministries accountable for implementing CCSAP activities.

The CCSAP envisions that funding will also be mobilised from dedicated international climate funds including the Adaptation Fund, the GEF, and the GCF, as well as through multilateral and bilateral partners. It also recognises an important role of the private sector and NGOs in implementing the proposed activities. Private sector interest is apparent in particular in the energy sector; several independent power producers have been issued licences by the ECB and have begun negotiating a power purchase agreement with Nampower (Sasman 2012), and Nampower recently put out a tender for the construction of three 10MW solar plants.

Institutions to manage climate finance

Efforts have been made to strengthen overarching systems of public financial management in Namibia in recent years. In general, the country has been in a relatively strong fiscal

Box 6: Namibia's Environmental Investment Fund

The Environmental Investment Fund (EIF) was established through an act of Parliament (Environmental Investment Fund of Namibia Act, no 13 of 2001), but only became operational in 2012 with an allocation of funds from the national budget of N$20 million (US$2 million) (The Namibian, 2011). The EIF is managed by a Board of Directors, the Chairperson of which is the Director of Environmental Affairs at MET. It has a technical advisory panel comprised of a number of experts in the field of environment, economics, tourism and finance.

Objectives

The objectives of the EIF are to: i) Procure funds from international donors for the maintenance of an endowment that will generate a permanent stream of income, and ii) Procure funds within Namibia on an annual basis from conservation fees and levies. These funds will be used for making investments in: the sustainable use and management of environmental and natural resources; the maintenance of the natural resource base and ecological processes; the maintenance of biological diversity and ecosystems for the benefit of all Namibians; and economic improvements in the use of natural resources for sustainable rural and urban development. The EIF awarded its first grants in 2012, having to date awarded N$11.5 million (US$1.15 million) (Hasange, 2013) in grants to smaller projects in natural resource management, tourism, and sustainable mining - including one climate change related initiative, a fuel efficient cook-stove project.

Capitalisation

The EIF was intended to secure funding through environmental levies, including potential carbon taxes. However, the National Taxation Act preventing such earmarking of funds, Cabinet recently decided that these levies would go to the Ministry of Finance, and thence be allocated through the national budget process. Whereas it has thus far received approximately N$53 million (US$5.3million) from the national budgets over 3 years, a strategic portfolio planning exercise conducted by the EIF indicated that it would require a budget of N$230 million (US$23 million) over three years. The Ministry of Finance has reportedly agreed that it will increase the EIF's budget if it can adequately demonstrate the development impact of its proposed activities. Whilst the EIF's mandate does not explicitly include climate change projects, it intends to take an integrated approach to addressing climate change within other focus areas. The government is reportedly considering a review of the EIF Act, in part to review the mandate of the EIF in light of its envisioned role in supporting climate related investments.

Recipients

EIF funding is primarily for NGOs and SMEs, and it can also fund initiatives by local government. Although it is not prevented from "adding value" to government initiatives through non-government partners, the EIF's mandate precludes it from financing national government initiatives. To date the EIF has only provided support in the form of grants. However, it plans to scale up its operations over the next five years, having recently established its fiduciary standards and operational manual, and applied to the Namibia Financial Institutions Supervisory Authority (NAMFISA) for accreditation to provide loans.

The EIF has just launched a Green Soft Loans financing mechanism, in partnership with the recently established Small and Medium Size Enterprise (SME) Bank which will act as a financial intermediary. The mechanism will provide small concessional loans to households of up to N$100,000 (US$10,000) for climate and environmental related enterprises (household solar water geysers, solar water pumps for farmers, water efficiency equipment, solar lighting, etc.). This facility is worth N$ 5 million (US$0.5 million) and will be recapitalised with a further N$ 8 million (US$0.8 million) next financial year. The EIF will also provide larger concessional loans directly to households and SMEs for similar types of investments, with a maximum amount per project of N$5 million (US$0.5 million). It has invested N$ 30 million (US$3 million) this financial year in this facility.

Box 6: Namibia's Environmental Investment Fund (cont'd)

There is reportedly an interest among commercial banks to access EIF funds to finance climate related investments, for example, for renewable energy projects. The Solar Revolving Fund has reportedly also expressed an interest in receiving funds from the EIF to continue its lending program, for which demand has exceeded supply. In addition, the EIF has launched a bursary financing scheme to support university students studying in climate and environment related fields.

Strengthening institutional capacity

The EIF has recently entered into a technical cooperation agreement with the Development Bank of Southern Africa (DBSA)'s Green Fund to exchange expertise and experience that would help strengthen EIF's capacity. In return, the EIF plans to share lessons about Namibia's CBNRM program with DBSA. The EIF is set to expand its activities, and anticipates establishing a business planning unit and a financial unit, and expanding its staff from the current eleven people to 25-30 people over the following five years. It is also exploring strengthening its monitoring and evaluation frameworks by contracting independent support.

position (IMF, 2013). In 2009 the European Commission supported a second assessment of national Public Expenditure Systems using the World Bank developed Public Expenditure and Financial Accountability Assessment Framework. On the basis of the assessment, the EC has introduced a budget support program to support investment in education in Namibia. This suggests that over time there may be scope to explore more programmatic approaches to the delivery of climate finance using national systems in Namibia if progress can be made in translating emerging climate change policy priorities into the priorities of relevant sectors and line ministries, along the lines discussed above. As part of its efforts to strengthen donor harmonisation, the NPC is looking at doing away with sectoral bilateral arrangements and nominating a focal person to coordinate donor engagement in each sector to align with national needs. It is also drawing on experiences from other African countries of how to strengthen donor use of national systems for financial management and reporting.

Namibia is in the process of applying for direct access to the Adaptation Fund. The Desert Research Foundation of Namibia (DRFN), an NGO, has been identified as the preferred national implementing entity and is still in the review process for accreditation, after starting the application process in late 2010. The process encountered some hurdles as the institution lacked some of the documentation required to demonstrate that its fiduciary standards were adequate, but it has since addressed this issue with support from UNEP, and it is hoped that the process will now move smoothly ahead. In particular, UNEP provided support to strengthen documentation of systems for risk management, procurement, and M&E. DRFN has been in discussions with MET about projects to fund through the Adaptation Fund, and although a specific project has not yet been identified, it is envisioned that it would be aligned with the CCSAP.

Namibia is also interested in direct access to the GCF, as a potentially important source of finance for its response to climate change and proposed transition to a climate-resilient economy moving forward. A number of stakeholders expressed the hope that the GCF will provide funding that supports an integrated approach to building climate change considerations into broader initiatives. Namibia is considering the most appropriate and effective institutional arrangements for accessing the GCF. A number of options for a national implementing entity have been considered, including DRFN, the Environmental Investment Fund (EIF), and the Development Bank of Namibia (DBN), as well as the possibility of a strategic partnership between the EIF and another organisation such as the DBN. It was noted that the DRFN, which currently manages a budget of around US$5 million per year, may be too small an institution to manage the scale of funding that the GCF is anticipated to provide. The EIF (see Box 6) has been proposed as an alternative; although it is expected to grow in scale, it also currently manages a relatively small amount of funding (N$53 million or US$5.3 million from the budget thus far). Furthermore, as it has only recently become operational, it lacks the history

of fiduciary management that is likely to be an important factor in any accreditation process.

The DBN, created in 2002 through an Act of Parliament, is a more established institution with stronger fiduciary management capacity. It is currently entirely funded by government equity, but expects that it will have to raise funds on the market in the near future[11]. At the end of 2011 it had disbursed N$1.34 billion (US$134 million) in loans, with loan approvals in 2011 of N$616 million (US$61.6 million), predominantly for rural development, fishery and tourism activities (DBN, 2012). DBN has only financed one climate change project to date, Omuriro Biomass Investments, which will harvest invader bush for the production of wood briquettes to be marketed both locally and abroad[12]. It has funded entities both in the private sector (including small and medium enterprises - SMEs) and in the public sector (including local authorities). Private sector entity funding has been provided through both debt and equity, and as a risk limitation measure, DBN has decided to limit equity investments to 10% of its portfolio.

The Namibian government has also been in discussions with the Development Bank of Southern Africa to explore the possibility of using the recently established South African Green Fund as a model for a Namibian equivalent, and the EIF has recently signed a memorandum of cooperation with the South Africa Green Fund who will be providing capacity building and lesson-sharing to this effect.

Access: Key messages

- To date, Namibia's focus has been on accessing grants for climate change activities, which have mostly supported small scale projects. Many stakeholders have been wary of taking loans from development partners, in part because of the conditions that may be associated;
- Experience with managing large scale adaptation and mitigation programs, and integrating climate change considerations into mainstream development programmes is relatively limited at present;
- In the energy sector, a number of initiatives are under way to promote renewable energy and energy efficiency both on and off-grid, with funding from several donors as well as domestic funding. There is considerable private sector interest in renewable energy projects, although investment has been limited so far;
- Public financial management systems in Namibia have improved, although there is a recognised need to introduce a performance-based orientation to operations and procurement. Systems for financial reporting are quite strong and well established;
- Domestic institutions which could play important roles in allocating climate finance to non-state actors include the Development Bank of Namibia and the Environmental Investment Fund (EIF). The limited scale and track record of the EIF's activities, and the constraints imposed by its current mandate would, however, need to be addressed. There is a case for exploring the role that private financial institutions might be able to play in the delivery of climate finance at national level.

5. Readiness needs and recommended supporting activities

While poverty and development remain pressing challenges for Namibia, financially the country is on relatively sound footing compared to many of its regional neighbours, and has a relatively well developed economy with a well-functioning financial system that includes both public and private sector institutions. While important steps to address climate change are being taken in Namibia, there is progress to be made in implementing emerging goals and strategies, and incorporating climate change considerations into investment decisions. Climate finance readiness support has the potential to bring actors that have developed substantial expertise and competence in development finance together to embrace the challenges of climate compatible development. In-depth stakeholder interviews and an informal roundtable discussion between these stakeholders identified a number of needs that might strengthen national stakeholders' ability to use climate finance effectively. These needs are elaborated and explored further in this section.

It is recognised, however, that the shift to low-carbon, climate compatible development will require complex and politically sensitive issues to be grappled with in all countries (developed and developing alike). There is a need to reflect on whether an infrastructure-driven approach to pursuing economic growth can be made resilient to the likely risks of climate change (particularly increased water and resource stresses). Climate finance readiness efforts should therefore focus on the role that international climate finance could play to help decision-makers and investors in Namibia incorporate climate risk into development planning and investment. Efforts to address underlying pricing, incentive and subsidy regimes that impede or disincentivise investment in climate compatible development, for example, may therefore have a central role in readiness efforts in Namibia over the longer term. In this context, there is likely to be much to be learned from the emergent climate planning and finance initiatives of fast growing middle income countries, particularly its principal trading partner and neighbour, South Africa.

At a more general level, Namibian stakeholders observed that many internationally financed capacity building initiatives related to climate change have had limited sustainability. This may be explained by a relatively low sense ownership by national stakeholders, reflected in inadequate human and financial resource investment in these initiatives by national counterparts. It may therefore be particularly important to consider the nature of the partnerships that are forged, with a focus on building collaboration with national institutions (many of which have significant capacity, but are under-resourced). Furthermore, there is a need to consider exit strategies that will allow institutionalisation of the ideas, tools and approaches developed. In this context, it is important to take account of the extent to which Namibian stakeholders consider the following concepts to be timely and helpful, and of the need to ensure that there is domestic commitment to incorporating them into ongoing work.

5.1 Planning: Incorporating climate considerations into the national development vision and sector strategies

As noted, stakeholders saw a significant need to support nascent efforts at linking the climate change considerations outlined in the national climate change policy and strategy with national development plans and Vision 2030 - as with key sector strategies, particularly for energy, infrastructure and agriculture. Furthermore, stakeholders observed a need to support efforts to prioritise amongst the activities put forward in the CCSAP, and for better information about these and their potential investment and financing implications. Stakeholders emphasised that there are numerous initiatives and efforts that go some way towards meeting needs for data collection, translation into knowledge, and integration into policy, on which there is an opportunity to build.

In this context, support for the following activities might strengthen readiness to use climate finance effectively:

1) Support a work program to explore options for integrating climate change into sector plans and national development plans, with expert support, and to develop a project pipeline. This work programme could establish how climate change affects the goals and objectives of the NDP and of key line ministries (including Mines and Energy; Agriculture, Water and Forestry; Works and Transport, and the DRM Directorate in the OPM), and analyse the links and tensions between existing national development and sector plans and the priorities outlined in the CCSAP. This would enable line ministries to identify how to address or revise relevant policies to take account of climate change impacts. From this basis, the cost of relevant mitigation and adaptation options can be estimated, and a pipeline of priority projects could be developed at sector level. Appropriate resources for delivery and execution could then be requested in the next sector budgeting process. Such a program would ideally be facilitated by the NPC, since it bears overarching responsibility for the development of sector plans and budgets, and supported technically by the MET. Furthermore, while the fourth NDP is already in its implementation phase, the opportunity to consider climate change impacts and resilience in the development of the fifth NDP should not be missed.

   Stakeholders observed that a number of activities with potentially positive impact have already been identified, and climate finance readiness support could allow their realisation. For instance, efforts are underway to improve water management in light of anticipated exacerbation of water scarcity in Namibia. The Water Resources Management Act No. 24 of 2004 therefore provides for the establishment of a Water Regulatory Board to manage water and effluent pricing, and assess water pricing proposals from utilities and suppliers. A sector level planning exercise could explore the role that such an institution could play in incentivising resilience, thereby enhancing investment in the context of such a sector-level climate strategy elaboration process. In the energy sector, there is a need to consider the extent to which emerging priorities are resilient to the likely impacts of climate change, and well as their alignment with the mitigation and adaptation goals set out in the CCSAP. As the 1998 White Paper on Energy Policy is currently undergoing review, this provides an opportunity to ensure harmonisation of the new policy with climate goals, and to set clear targets for renewable energy and energy efficiency.

2) Develop simple tools which can be applied in key sector ministries to understand the climate implications of policies and proposed investments. These could build on such existing tools as the Threshold 21 model which allows environmental and social considerations to be incorporated into development planning at a macro level, or Strategic Environmental Assessments (SEAs) which are used to assess the environmental impact of a proposed policy. SEAs could be completed for national or sectoral plans and policies, for example to understand the implications of climate change and opportunities for adaptation and mitigation in the infrastructure, water and energy sectors in particular. Some stakeholders saw particular value in an SEA for the NDP 4. In addition, climate vulnerability and risk assessments for key sectors, and cost-benefit analysis for various adaptation and mitigation options might help inform decision-making. Such tools would ideally be developed in partnership with Namibian research institutions and technical experts (potentially with inputs from well-respected international technical institutions). Partnering with such institutions would help create a domestic support structure to guide and facilitate the use of these tools, and support decision-making informed by the insights from their use going forward. Such tools can provide a better basis from which to discuss the possible options to reduce potential conflicts between climate change and development strategies.

5.2. Planning: lesson learning through peer exchange

Attention to climate change issues has increased in recent years, evidenced by the emergence of a climate change policy and draft strategy. Namibia's recent bid to host the GCF indicates high level political interest in having a higher profile on climate change as a global issue. Furthermore, initiatives such as the UNDP supported AAP in Namibia

have helped engage government and other stakeholders on climate change related issues. Yet all stakeholders noted the need to further raise awareness of the material implications of climate change for investment choices in key sectors, and to deepen understanding of the institutions and systems that other middle income countries are establishing to support investment in climate change solutions. In general, attention to climate change, and understanding of its implications for Namibia's own development choices is relatively limited. In this context, they stressed that continued support for programs that raise awareness of climate change, and options for integrating climate change considerations into investment planning would be a vital component of efforts to strengthen readiness to use climate finance effectively in country.

In this context, the following activities might strengthen readiness for climate finance:

3) Promote the sharing of lessons through exchanges on institutional arrangements for climate finance in peer-countries. Many stakeholders observed that there might be value in exposing senior government officials to the systems that other middle-income countries in the region are putting in place to plan, coordinate and finance their response to climate change. The government has already begun to consider whether it might be able to learn from South Africa's experience in establishing a climate change finance strategy (which includes a Green Fund, and renewable energy finance policy support mechanisms, and the introduction of a carbon tax). Similarly, Kenya's experience establishing a climate change response strategy, and attracting international and private finance to help support its response may also be relevant. Short, 3 – 5 day exchange programmes with relevant counterparts involving permanent secretary-level staff from key ministries including the MET, the NPC, the Ministry of Mines and Energy, Works and Transport, Agriculture, Water and Forestry, and the Ministry of Finance might be one mechanism to this end. Ministers could also be invited to join such programs, potentially accompanied by senior management of leading private companies that might be involved in low carbon and climate resilient investments (particularly in infrastructure). Such programs would, however, require substantial time and investment from counterparts in other countries. Alternatively, one could explore trainings or workshops that draw in a small number of experts from peer-countries to discuss their experiences; however, this might not have the same impact as direct exposure to the daily workings of institutions engaged on climate finance in other countries.

5.3. Aptitude: raising awareness and maximising existing national capacities

Stakeholders noted a general paucity of technical human capacity, particularly within government. There are limits to trainings as a solution to this challenge, because overextended staff can seldom spare time to participate in such programs. Mentoring programs focused on collaborative implementation, and programs that seek to deliver additional support to persons entrusted with championing climate finance issues within their institution may be more useful and impactful.

In this context, the following activities might strengthen readiness for climate finance:

4) Support strengthened coordination of climate change activities. Stakeholders agreed on the need for stronger systems that allow coordination across government on issues of climate change, building on the ongoing efforts of the MET, and leveraging the technical capacity that it has developed. The OPM and the NPC may have a role to play in facilitating better coordination across institutions. The OPM could bring high level political commitment to the process, and authority to drive such a coordinated process. The NPC could play a role in facilitating the process at the level of planning and budgeting. The Ministry of Finance could also have a role to play in managing and coordinating climate finance as the scale of finance and breadth of financing instruments employed increases. The NCCC could also play a stronger role in facilitating multi-stakeholder dialogue and strengthening awareness of climate issues. A forum in which Permanent Secretaries (or Under-Secretaries) of key ministries meet periodically to exchange information on planned activities might also be an effective way to improve coordination. This approach was used effectively in the CPP –ISLM. Such coordination will require dedicated staff and technical capacity, and robust processes for deliberation and information sharing at both working level and relatively senior level.

Support to strengthen knowledge and awareness of climate change issues as well as management capacity among senior officials in key government agencies could be helpful in this regard.

5) Support the establishment and strengthening of climate change focal points within ministries, particularly the National Planning Commission. There is a need for all relevant ministries and state-owned enterprises to establish climate change focal points (individuals or units). This would strengthen their capacity to integrate climate considerations into sectoral planning, and to represent sectoral concerns in cross-sectoral discussions around climate change. Focal points could benefit from additional technical support, including on issues related to planning and budgeting. This is the case particularly for climate change focal points in the National Planning Commission, which will need to take on the substantial task of analysing the implications of climate policies for development as well as for sector plans and programmes. Focal points in the Ministry of Finance, too, will need technical support and training on accessing and managing climate finance. Support could develop a common understanding of the roles and responsibilities of climate change focal points. It could also help state-owned enterprises deliver on these responsibilities through small grants for requisite administrative and coordinating support systems, or for technical assistance and peer exchange on key issues. Again, partnerships with Namibian private sector organisations, research institutes and NGOs might also be useful means to support capacity strengthening of focal points. Support to continue the climate change ambassadors programme, which was initiated under the AAP, might be constructive in this regard.

6) Strengthen climate change coordination, awareness and capacity at regional and local levels. A number of successful on-going initiatives to promote sustainable development at community level could benefit from increased attention to climate change resilience and adaptation. The CBNRM programme in particular has the potential to drive climate adaptation and resilience at the local level. This would also open new opportunities for accessing international sources of funding for CBNRM in Namibia. There is a need to strengthen regional and local government capacity on climate change issues, and strengthen coordination, for example through the regional climate change committees recommended by the AAP. Support could also strengthen awareness of community-based organisations so that they could better integrate climate change considerations into their activities.

7) Establish a centralised climate data repository. There is a need to put in place systems for more coordinated data and information collection, so that data on climate change vulnerability (particularly climate impacts and risks) can be gathered in a consistent and centralised manner. Such efforts might start with biophysical data, and expand to include socio-economic data over time. They could build on existing information collection structures in Namibia, such as that for conservancies, the population census, in line ministries, and the EIS, the University of Namibia, the NSA, and the Polytechnic of Namibia. Technology needs could be supported, including for common use software and equipment to facilitate data gathering. Investment in agreeing data quality standards up front would also be important. In this context, one might facilitate exchanges and peer relationships with staff which have developed similar systems in other countries. These efforts should complement and deepen planned efforts to strengthen statistical systems in Namibia to inform development choices.

5.4 Accessing climate finance: costing and prioritising actions

As discussed, the lack of funding or budget allocation for CCSAP is a substantial impediment to its implementation. It will be important to finalise and obtain Cabinet approval for the CCSAP in order for such a budgeting process to be initiated. Developing a strategy that is realistic and implementable requires that the costs and benefits of various proposed activities be analysed in order to narrow the list of activities down to a smaller number of key realistic priorities. This would enable a more informed discussion about financing strategies for associated activities, including on national budget allocation. Access to climate finance could be used both to support government to address climate change dimensions of development strategies and to support quasi private actors such as parastatals, who deliver most of the infrastructure services in the country and some public finance to do more to address climate

change. There is also a second need for finance to support private sector players and civil society organisations deliver programs at scale. Which sets of activities are best suited to be financed through international climate funds will require further deliberation.

There is strong interest in understanding the most appropriate modalities through which Namibia might be able to access climate finance. As noted, a process to seek accreditation of the Desert Research Foundation of Namibia (DRFN) as a National Implementing Entity for the Adaptation Fund is underway. If successful, this would imply a significant potential role for the DRFN in national efforts to coordinate climate finance. However, our analysis suggests that there are a number of institutions in Namibia, including the DBN and EIF, that might play an important role in mobilising and managing finance for climate related activities from both domestic and international sources. Our research further notes the significant investment that is being made in strengthening overarching public financial management in Namibia, and the fact that some international partners such as the EC have offered budget support to the education sector, structured around performance agreements.

In this context, the following activities might strengthen readiness for climate finance:.

8) Highlight climate related risks and opportunities and strengthen due diligence and appraisal systems for private investors and financial institutions working in key sectors including energy, infrastructure and agriculture. Private sector involvement in climate change mitigation and adaptation has been limited. New analysis highlighting climate related risks associated with current investment priorities can raise awareness of low-carbon and climate-resilient approaches. Work could focus on options to address and respond to these risks starting with leading private sector investors and companies. Collaboration with institutions such as KfW and the International Finance Corporation might be opportune and strategic in this regard. The strengthening of national development finance institutions' due diligence and appraisal systems to understand climate related risks and opportunities could be undertaken in parallel. There may also be scope to invest in an exploratory programme with private banks that are engaging on low carbon investment, such as Nedbank through its Go Green Initiative. Working with institutions such as the DBN and EIF to engage private sector and NGO actors, particularly in relation to clean energy, and to strengthen resilience to climate risk in their existing portfolio might also be useful.

9) Explore the viability of various financial instruments to enable execution of the national climate change policy and strategy, and as a means of achieving greater involvement of the National Planning Commission. This could include supporting the development of a financing strategy for the CCSAP, which would consider a range of options to finance the various activities identified, including national and international sources of finance, and areas where the private sector and domestic financial institutions could play an important role. This would help to identify where international sources of climate finance would be most needed. The possibilities for using budget support through the National Planning Commission towards the implementation of costed climate change actions could be further explored. Justification stems from the use of budget support for public goods interventions by development partners in Namibia with some success. The analysis would identify what such an approach might require, and whether it could help realise efforts to resource and incentivise the National Planning Commission to take on climate change issues. Mechanisms for leveraging private sector engagement, including grants, concessional loans and innovative financing instruments could also be explored.

10) Assess and strengthen institutional capacity to access and effectively deploy international climate finance including prospectively from the GCF. As noted previously, Namibia is trying to position itself as a leader on climate change issues, and to access international funding to support its objectives in this regard. Namibia has expressed interest in direct access to these funds. There is a case to be made for supporting Namibian stakeholders to explore the relative merits of different institutional arrangements for accessing international climate finance, including from the GCF. Taking stock of efforts to seek direct access to the Adaptation Fund, such support would analyse minimum required fiduciary and associated standards for the GCF. Similarly,

an analysis of minimum environmental and social safeguard practices could build on the Global Environmental Facility's policies in this regard. This exploration would assist in identifying existing institutions most likely to meet these minimum standards as well as in understanding the investments required for different institutional arrangements.

11) Strengthen capacity to monitor and evaluate the outcomes of climate finance. There is a need to ensure that monitoring and evaluation is based on the achievement of results, rather than on the completion of activities or on spend. A component that supports monitoring and evaluation of the impact of climate related dimensions of policies could be incorporated into efforts to develop sector-level climate change implementation plans as proposed in readiness need 1 above. This should also build on efforts to strengthen climate related investment information, as proposed in readiness need 9 above, which should provide a basis for assessing the impact of programs and policies.

6. Conclusion

Namibia has made strides in reducing poverty since independence: the share of people living on US$1.25/day having declined by almost 60% between 1993 and 2009, and per-capita income having grown sufficiently for the World Bank to classify the country as upper-middle income. Still, substantial inequalities and social challenges remain. The country has also emerged as a leader on many environmental issues including efforts to conserve biodiversity and combat desertification. But the realities of climate change pose new challenges for sustainable development, and may have substantial implications for future aspirations of infrastructure led growth. Attention to these issues is growing, and with the leadership of the MET new climate change policies and strategies are emerging. International climate finance has helped establish pilot programs, and technical work to support these important developments. But implementation of these strategies will require continuing to further raise the political profile of these issues, and working with pertinent line ministries as well as the National Planning Commission to understand the implications for future investment, notably domestic investment from both the public and private sectors.

This study has provided an overview of the current landscape of climate finance readiness in Namibia, and identified a number of readiness needs and specific activities that could be supported by readiness funding. It should be noted that this represents an initial attempt to identify key gaps and needs; the Namibian government will need to further deliberate on and determine how to prioritise among the needs identified.

Finally, many of the activities proposed in this study are largely consistent with the priorities announced in the recently launched World Bank Country Partnership Strategy for Namibia (World Bank, 2013b). The Strategy is focused on building state capacity to execute development strategies (notably by strengthening statistical systems and the evidence base to inform planning), as well as to promote private investment (particularly in infrastructure), and recognises climate change as a major development threat. There are therefore opportunities to maximise synergies.

Endnotes

1 A technical meeting summary emerging from the expert meeting in Cape Town on 4th October 2012 can be found here: http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/events-documents/4947.pdf

2 The advance discussion draft prepared for COP 18 in Doha, December 2012, can be found here: http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/events-documents/4957.pdf

3 The reduction in unemployment estimates is partly due to improvements in the methods for measuring employment, according to the The Namibia Labour Force Survey 2012 Report.

4 At 10 Namibian $ to the US$.

5 The World Bank (World Bank, 2013b) observes that "Improvements in all transport modes are needed to realize NDP4's ambition of Namibia becoming a regional logistics hub"; reducing transport fuels costs might make a significant contribution.

6 While civil servants will be managed on a performance basis, Ministers will not yet be expected to adopt performance targets.

7 The most recent report, however, is from 2010.

8 http://www.the-eis.com

9 Budget support and World Bank loans for education have been accessed.

10 Namibia has also been part of two regional and global GEF projects with a climate change focus.

11 Development Bank Limits Participation in Equities - Nyasha Francis Nyaungwa, Namibia Economist, 31 May 2013.

12 Idem footnote 12.

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Appendix 2: Interviewees

Organisation	Name	Title
Government		
National Planning Commission (NPC)	Mary Tuyeni-Hangula	Deputy Director of Multilateral Programmes, Department of Monitoring & Evaluation and Donor Management
NPC	Frieda Amwaalwa	United Nations Delivering as One Specialist
NPC	Leena Amukushu	Economist
Ministry of Environment and Tourism (MET)	Teofilus Nghitila	Director, Department of Environmental Affairs (DEA)
MET	Petrus Muteyauli	Chief Environmental Economist, DEA
MET	Reagan Chunga	Project Coordinator for the Third National Communication to UNFCCC, DEA
MET	Ernst Mbangula	Africa Adaptation Program, DEA
Office of the Prime Minister	Timothy Shixungileni	Emergency Management Unit, Directorate of Disaster Risk Management
Ministry of Mines and Energy (MME)	Susan Tise	Renewable Energy Division
MME	Nita Amakutsi	Solar Revolving Fund
Ministry of Agriculture, Water and Forestry (MAWF)	Guido van Langenhove	Head of National Hydrological Services
MAWF	Titus Kayawala	
Ministry of Finance	James Seibeb	Head of Macroeconomic Analysis and Projections Division
Ministry of Trade and Industry	Frans Nekuma	Industrial Engineer
City of Windhoek	John Shilongo	Environmental Planner
Renewable Energy Division, Nampower	Lahja Amaambo	Head of the Renewable Energy Development
Nampower	Mornay Beukes	Renewable Energy Development
Nampower	Gloudi de Beer	Environment Division
Nampower	David Jarrett	Renewable Energy Development
Namwater	Kuiri Tjipangandjara	General Manager of Operations
Non-government organisations and consultancies		
Integrated Rural Development and Nature Conservation (IRDNC)	John Kasaona	Co-director
IRDNC	Karine Nuulimba	Co-director
Namibia Nature Foundation (NNF)	Julian Fennessy	Former Director

NNF	Chris Brown	Former Director
NNF	Sandra Cregan	
NNF/MET	Chris Thompson	Environmental Economist
Desert Research Foundation Namibia (DRFN)	Viviane Kinyaga	Director
DRFN	Fransiska Nghitila	Researcher
DRFN	Charlene Mazambani	Researcher
Amusha Consulting	Harald Schutt	Director
Integrated Environmental Consultants Namibia (IECN)	Juliane Zeidler	Director
VO Consulting	Detlof von Oertzen	Director
Science & Development Group	Elias Shanyengana	Director
World Wildlife Fund Namibia	Chris Weaver	Director
UNDP Country Office	Martha Naanda	Head of Energy and Environment Unit
GIZ (based at MET)	Konrad Uebelhoer	Team Leader Biodiversity and Sustainable Land Management Project
GIZ (based at MET)	Nadine Faschina	GIZ Advisor
Embassy of Finland	Marika Matengu	Programme Coordinator
EU Delegation in Namibia	Sjaak de Boer	
Academic /research organisations		
SASSCAL	Peter Erb	National Coordinator Namibia
Institute for Public Policy Research (IPPR)	Bill Lindeke	Board member
Polytechnic of Namibia	Lameck Mwewa	Dean of the School of Natural Resources and Tourism
Polytechnic of Namibia	Anna Matros-Goreses	Project Research Services Centre
University of Namibia (UNAM)	Margaret Angula	Lecturer/Researcher at Department of Geography, History and Environmental Studies
Renewable Energy and Energy Efficiency Institute (REEEI)	Zivayi Chiguvare	Director
REEEI	Helvi Ileka	Energy Shop Project Officer
Financial institutions and Funds		
Environmental Investment Fund Namibia (EIF)	Benedict Libanda	CEO
EIF	Hendrika Skei	Accountant and Project Services
Development Bank of Namibia	Jefta Goreseb	Investment Analyst
Bank of Namibia	Rowland Brown	Economist

Acronyms

ACCE	Africa Carbon Credit Exchange
AAP	Africa Adaptation Programme
BMZ	German Federal Ministry for Economic Cooperation and Development
CBNRM	Community Based Natural Resource Management
CBO	Community-Based Organisation
CCSAP	Climate Change Strategy and Action Plan
CDM	Clean Development Mechanism
CNG	Compressed Natural Gas
CSIR	Council for Scientific and Industrial Research
DBN	Development Bank of Namibia
DBSA	Development Bank of Southern Africa
DRFN	Desert Research Foundation of Namibia
DRM	Disaster Risk Management
EC	European Commission
EIF	Environmental Investment Fund
EMA	Environmental Management Act
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GRN	Government of the Republic of Namibia
IRDNC	Integrated Rural Development and Nature Conservation
KfW	Kreditanstalt für Wiederaufbau, meaning Reconstruction Loan Corporation
LPG	Liquefied Petroleum Gas
LULUCF	Land Use, Land-Use Change and Forestry
MET	Ministry of Environment and Tourism
M&E	Monitoring and Evaluation
MTEF	Mid-term Expenditure Framework
NAMFISA	Namibia Financial Institutions Supervisory Authority
NAMREP	Namibian Renewable Energy Programme
NASCO	Namibian Association of Community Based Natural Resource Management (CBNRM) Support Organisations (NASCO)
NCCC	National Climate Change Committee
NCCP	National Climate Change Policy
NDC	Namibia Development Cooperation
NEEP	Namibia Energy Efficiency Programme in Buildings
NDP	Nation Development Plan
NIRP	National Integrated Resource Plan
NGO	Non-Governmental Organisation
NNF	Namibia Nature Foundation
NPC	National Planning Commission
NSA	National Statistics Agency
OGEMP	Off-grid Energisation Master Plan for Namibia
ODA	Official Development Assistance
OPM	Office of the Prime Minister
PPPs	Public-Private Partnerships
REDD+	Reducing Emissions from Deforestation and Forest Degradation, sustainable forest management, forest conservation and enhancement of forest carbon stocks
REEEI	Renewable Energy and Energy Efficiency Institute
SADC	Southern African Development Community
SASSCAL	Southern African Science Service Centre for Climate Change and Adaptive Land Management
SEAs	Strategic Environmental Assessments
SMEs	Small and Medium Enterprises
TIPEEG	Targeted Intervention Programme for Employment and Economic Growth
T21	Threshold 21
UNAM	University of Namibia
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNICEF	United Nations Children's Fund
UNFCCC	United Nations Framework Convention on Climate Change
WFP	World Food Programme

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