

Rapid Trade and Environment Assessment (RTEA)

National Report for Namibia

Jessica Jones
Juliane Zeidler
Henoeh Ramakhutla
Pierre du Plessis
Sheila Kiratu
Laudika Kandjinga

Detlof von Oertzen
Andee Davidson
Alexander Toto
Susanne Thalwitzer
Kudakwashe Ndhlukula

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Fax: +1 (204) 958-7710
E-mail: info@iisd.ca
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Jessica Jones, Juliane Zeidler, Henoeh Ramakhutla, Pierre du Plessis, Sheila Kiratu and Laudika Kandjinga (national report), with Detlof von Oertzen, Andee Davidson, Alexander Toto, Susanne Thalwitzer and Kudakwashe Ndhlukula (sector papers)

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About the Trade Knowledge Network (TKN)

<http://www.tradeknowledgenetwork.net>

The TKN is a global collaboration of research institutions across Africa, Asia, Europe and the Americas working on issues of trade and sustainable development. Coordinated by the International Institute for Sustainable Development (IISD), the TKN links network members, strengthens capacity, and generates new research to assess and address the impact of trade and investment policies on sustainable development.

The overarching aim of the TKN is to help ensure that trade and investment contribute to sustainable development, with social development and the environment equitably addressed in trade and investment policies. The TKN furthers this aim by generating compelling research with clear policy recommendations and communicating those effectively to decision makers nationally, regionally and globally.

The TKN is hosted by IISD (see below), a Canada-based not-for-profit organization promoting change towards sustainable development. As a policy research institute dedicated to effective communication of its findings, the Institute engages decision makers in government, business, NGOs and other sectors in the development and implementation of policies that are simultaneously beneficial to the global economy, the global environment and social well being.

About the International Institute for Sustainable Development(IISD)

<http://www.iisd.org>

IISD contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change, measurement and assessment, and natural resources management. Through the Internet, we report on international negotiations and share knowledge gained through collaborative projects with global partners, resulting in more rigorous research, capacity building in developing countries, and better dialogue between North and South.

IISD's vision is better living for all – sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the Canadian International Development Agency (CIDA), the International Development Research Centre (IDRC) and Environment Canada; and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations and the private sector.

About the South African Institute of International Affairs (SAIIA)

<http://www.saiia.org.za>

ACD Consulting es una empresa consultora que ofrece Soluciones Globales para América Latina en sus procesos de desarrollo e inserción internacional enfrentando los desafíos actuales de la globalización, la protección ambiental, el comercio internacional, la necesidad de incrementar la competitividad en los negocios, y generación de equidad social. Su sede está en Ecuador y trabaja con una amplia gama de consultores de la región Andina, Centro América y MERCOSUR. Fue creada en enero del 2008.

Tiene como misión el contribuir a la estabilidad en el desarrollo asistiendo procesos nacionales e internacionales, con el propósito de alcanzar un crecimiento sostenible y mantener un equilibrio entre las oportunidades de mercado y los requerimientos sociales y ambientales que impone el mundo de hoy. Su áreas de trabajo se focalizan en legislación y Gestión Ambiental, Sostenibilidad y Desarrollo, Comercio Internacional y Desarrollo y Capacitación Empresarial con enfoque de sustentabilidad.

Cuenta con una gama de especialistas abogados, internacionalistas, economistas y otras especialidades para una consultoría y asesoría integral, los cuales se han desempeñado en distintos ámbitos de la gestión pública y privada, corporativa y no gubernamental así como con la cooperación internacional.

About Integrated Environmental Consultants Namibia (IECN)

<http://www.iecn-namibia.com>

IECN cc is a Namibia-based company specializing in technical and advisory work in the fields of natural resource management, land use planning, environmental assessments, implementation of environmental conventions and capacity building.

A diversity of clients – ranging from various government ministries to development organizations, from rural communities and farmers to the private sector – commission IECN and its associates to work on short- and long-term assignments using a collaborative and interactive user-focused approach. IECN operations concentrate within Namibia and throughout the SADC region, but its experience can apply to arid and dry sub-humid lands worldwide.

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The assessment was led by the National Expert Advisory Panel (NEAP). The NEAP was chaired by the permanent secretary of the Ministry of Trade and Industry (MTI), Dr Malan Lindeque, with support from national experts and key policymakers. These individuals are (in alphabetical order, details in Annex I): Antonia Baker, Pierre du Plessis, Saarah Hamunyels, Jurgen Hoffman, Rejoice Karita, Sheila Kiratu, Kudakwashe Ndhlukula, Kirsten Probst, Henoch Ramakhutla, Klaus Schade, Robert Schultz, Sem Shikongo and Diana Tjiposa.

The expert authors of sector papers contributed immensely to the substantive aspects of the assessment. These individuals are also recognized as co-authors of the national report: Andee Davidson, Pierre du Plessis, Kudakwashe Ndhlukula, Susanne Thalwitzer, Alexander Toto and Detlof von Oertzen.

MTI, the Ministry of Environment and Tourism (MET), the Centre for Research Information Action in Africa Southern African Development and Consulting (CRIAA SA-DC) and Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) were collaborating partners for the National Stakeholder Workshop on Trade and Environment held on 29 and 30 July 2009 in Windhoek. Presenters and participants at this workshop contributed information and inputs, and raised important questions that ultimately improved the RTEA paper. The workshop organizing team was Laudika Kandjinga, Daniel Kehrer, Juliane Zeidler, Kirsten Probst, Jessica Jones and Pierre du Plessis.

Sharon Montgomery edited the policy briefs that were prepared for the national workshop.

Presenters at the national workshop were: Klaus Schade, Kirsten Probst, Jessica Jones, Antonia Baker, Rob Moffett, Klaus Schade, Detlof von Oertzen, Pierre du Plessis and Kudakwashe Ndhlukula. Facilitators were Sem Shikongo, Pierre du Plessis, Sheila Kiratu and Henoch Ramakhutla. All participants in the workshop made significant contributions to the RTEA process.

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Abbreviations and Acronyms

ABS	access and benefit sharing
ACP	African, Caribbean and Pacific
AGOA	African Growth and Opportunity Act
BoN	Bank of Namibia
CBD	Convention on Biological Diversity
CBEND	Combating Bush Encroachment for Namibia's Development
CBNRM	Community-Based Natural Resource Management
CDM	Clean Development Mechanism
CER	certified emission reduction
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CRIAA SA-DC	Centre for Research Information Action in Africa Southern African Development and Consulting
CSO	Central Statistics Office
CSR	corporate social responsibility
DNA	Designated National Authority
DRFN	Desert Research Foundation of Namibia
EAP	expert advisory panel
EIA	environmental impact assessment
EMA	Environmental Management Act
EPA	economic partnership agreement
EPI	Environmental Performance Index
EU	European Union
FDI	foreign direct investment
FMD	foot and mouth disease
FTA	free trade area
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GHG	greenhouse gas
GNP	gross national product
GSP	Generalized System of Preferences
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HDI	Human Development Index
HIV/AIDS	human immunodeficiency virus/acquired immune deficiency syndrome

IEPA Interim Economic Partnership Agreement
IIP infant industry protection
IISD International Institute for Sustainable Development
IMF International Monetary Fund
IPTT Indigenous Plant Task Team
LULUCF land use, land use change and forestry
MAWF Ministry of Agriculture, Water and Forestry
MCA Millennium Challenge Account
MDG Millennium Development Goal
MEA multilateral environmental agreement
MET Ministry of Environment and Tourism
MFN most favoured nation
MTI Ministry of Trade and Industry
NAD Namibian dollar
NDP National Development Plan
NEAP National Expert Advisory Panel
NEAT National Environment and Trade (Forum)
NNF Namibia Nature Foundation
NTB Namibia Tourism Board
PES payments for ecosystem services
RTEA Rapid Trade and Environment Assessment
TKN Trade Knowledge Network
TRIPS Agreement on Trade-related Aspects of Intellectual Property Rights
SACU Southern African Customs Union
SADC Southern African Development Community
SARB South African Reserve Bank
SMME small, medium and micro enterprises
SPS sanitary and phytosanitary
UHT ultra-high temperature
UNFCCC UN Framework Convention on Climate Change
USD US dollar
VCF veterinary cordon fence
VCM Voluntary Carbon Market
WTO World Trade Organization

Preface

In Namibia and around the world, the growth and liberalization of international trade is changing the way we live and work. At more than \$100 trillion Namibian dollars a year, trade flows and the rules that govern them are a massive force for economic, environmental and social change. International trade is becoming an increasingly important driver of economic development, as it has been expanding at almost twice the pace of total global economic activity for the past 15 years. Notwithstanding the relatively short term contraction in exports that are anticipated to result from the global financial crisis, Namibia views trade and foreign investment as a central part of our efforts towards achieving Vision 2030. Past investments in infrastructural capacity have positioned Namibia well to grow and benefit from regional trade linkages within SACU, SADC and the rest of Africa.

At the same time, Namibia has worked towards strengthening its environmental management, by improving the protected areas network, enacting mandatory Environmental Impact Assessment legislation, and made enormous gains in the conservation of biodiversity, the fight against land degradation and addressing the ever more pressing challenges of climate change and adaptation. Many of these efforts contribute to the solid progress made towards achieving the Millennium Development Goals in Namibia by 2015 and Vision 2030. However, vigilance is needed regarding the potential interactions between trade and environmental sustainability in Namibia.

It is possible, but by no means automatic, that trade and investment flows and trade liberalization might support the achievement of environment and development goals. But this will require close integration of policies in all three areas, as well as mainstreaming and addressing their needs systematically. That integration could take place in the context of international negotiations, such as the WTO's Doha Development Round, and the many ongoing trade and investment bilateral negotiations, as well as at national level, in policies and measures aimed at economic, social and environmental progress. It is evident that a holistic approach in this regard would require the involvement of State and non-State actors.

Namibia has been the first country in Africa to undertake the Rapid Trade and Environment Assessment, applying a framework and tools set out by the International Institute for Sustainable Development (IISD) and partners. The Namibian assessment focused on key issues identified by a multitude of stakeholders to be of priority to Namibia, and a consultative process and discussions on this important issue took place and culminated in a workshop from 29-30 July 2009. A sound basis has been created for further discussions and work programmes on trade and environment. Further support will nevertheless be needed in bringing this initiated work constructively forward. This publication is an important step in setting a record of the process undertaken to date and provides useful technical background information, and will guide future work in this area.

Malan Lindeque

Permanent Secretary Ministry of Trade and Industry

Project Outputs

Project outputs of Namibia's RTEA are available from the TKN's website: <<http://www.tradeknowledgenetwork.net>>. If you would like to receive a copy of any additional materials or learn more about the RTEA method in southern Africa, please contact Sheila Kiratu (<Sheila.Kiratu@saiia.org.za>). Outputs of this process are:

- a summary brief of the RTEA for policymakers (Jones, 2009);
- full sector papers and summaries for policymakers on:
 - biochar (Von Oertzen, 2009);
 - ecotourism (Davidson, 2009);
 - red meat (Toto & Thalwitzer, 2009); and
 - ecolabelling (Ndhlukula & Du Plessis, 2009);
- proceedings of the National Stakeholder Workshop on Trade and Environment on 29–30 July 2009 (forthcoming, with partners MTI, MET, GTZ and CRIAA SA-DC);
- minutes of the NEAP meetings of 27 March and 26 June 2009 (by request); and
- a technical note for assessment practitioners on the African RTEA pilot (forthcoming).

Executive Summary

Introduction: How can Namibia attain its development vision?

Sustainable development is essentially about managing the economy, society and natural resources to meet goals now and into the future. ‘What do we want to achieve?’ and ‘how can we achieve it?’ are the most important questions to be asked in this regard.

The imperatives for development policy setting in Namibia are driven by a necessity to reduce historically inherited disadvantages still evident in a country with one of the world’s highest levels of income inequality. Namibia’s overarching development strategy, Vision 2030, proposes that the country should move forward through technical advancement and industrial modernization towards achieving the standards of an industrialized nation by the year 2030. The current National Development Plan (NDP3) emphasizes rural development and environment-based development as the key to unlocking Namibia’s potential. There are still many questions around what a sustainable development model for Namibia will look like. One point is clear: it must be tailored to Namibia’s strengths in order to succeed.

As the pace of globalization has accelerated, people have become increasingly aware of the pressure that active international trade places on the environment. These same globalizing forces, however, can be harnessed to improve opportunities for sustainable development. Since 1990 Namibia has been exposed to a rapid succession of new and emerging trade and environment issues for its policymakers to consider. Without a quick response, opportunities presented by these issues can easily be missed.

Namibia is well placed to gain from growing international environmental concerns, based on its assets – a pristine natural environment and rich biodiversity, coupled with good governance and committed and sound environmental management. While it faces challenges, the country can boast that it is one of few countries in sub-Saharan Africa on target to achieving the Millennium Development Goals (MDGs) by 2015. Since gaining independence, the country has often been hailed for its modern policy frameworks and innovative approaches.

Namibia’s economy is already heavily liberalized and growth is export driven. A current pressing concern is that trade restrictions in newly negotiated agreements present ‘antiliberalization’ challenges or technical barriers to Western markets, often with huge inherent environmental costs. The country is commonly described as having two economies. The first is a modern industrial economy, heavily dependent on the extraction and processing of minerals (diamonds, uranium) for export and, to a lesser extent, commercial agricultural and fisheries sectors. These sectors are competitive with those of neighbouring South Africa. The second economy is dominated by subsistence farming, where livelihoods are highly vulnerable to environmental changes and the social shocks caused by HIV/AIDS. Most of Namibia’s poor are found in the rural areas, thus programs aimed at accelerating the reduction of unequal development should be focused there.

The evolution of trade and environment linkages

In the 1990s the global trade community grew concerned by the entry into force of major multilateral environmental agreements (MEAs) with potential implications for trade agreements (such as trade bans on products made from animals endangered elsewhere in the world). Meanwhile, environmentalists are worried that the growing influence of the General Agreement on Tariffs and Trade (GATT), and later the World Trade Organization (WTO), would reduce domestic sovereignty over environmental legislation. Legal battles like the Dolphin-Tuna and Shrimp-Turtle cases (see

Najam, Halle & Meléndez-Ortiz, 2007 for more details) began to illustrate the potential implications for developing countries' nascent industries and introduced new threats like 'green protectionism' through complicated technical requirements and the prohibition of export of some nationally important goods. Developing countries were struggling to meet the environmental requirements of MEAs without an economic rationale to do so (Najam, Halle & Meléndez-Ortiz, 2007).

Prevailing wisdom had for a long time tended to assume that trade and environment interactions produce negative environmental outcomes. Today, we believe that trade liberalization is of itself neither necessarily good nor bad for the environment (UNEP & IISD, 2005). Its effects on the environment depend on the extent to which environment and trade goals can be made complementary and mutually supportive. A positive outcome requires appropriate supporting policies for complementary economic, environmental and development goals.

In Namibia, it is felt that there is the potential for both positive and negative outcomes from these interactions. An example of a negative outcome from Namibia's (and other southern African countries') perspective is the global ban on trading ivory, which is a sustainably harvested resource at the national level with the potential to greatly incentivize conservation and reduce rural poverty. A positive outcome is the opportunity presented by growing evidence of consumer awareness and intent to behave in an ethical manner, particularly by Europeans, but also Americans. Namibia's amazing endemic biodiversity can be used to produce a number of niche 'green' natural products and services that command premium prices.

The Rapid Trade and Environment Assessment (RTEA)

The RTEA is an analytical process designed by the IISD to flag areas of concern and opportunity for environmental sustainability in trade and investment policymaking. It provides a relatively fast method for identifying and prioritizing those trade policies, negotiations and sectors that have the potential to negatively or positively impact the environment, and then to deliver the associated policy advice. In some cases, this alone will be sufficient to warrant a change in the negotiating stance or domestic policy framework; in others, it may be the basis for more detailed analysis.

Integrated Environmental Consultants Namibia cc conducted Namibia's RTEA from January to June 2009. The assessment was led by the NEAP, comprising technical experts and leading policymakers. Namibia's RTEA is the first instance of this method being utilized anywhere in Africa. Given the opportunity of pioneering this method in Africa, the Namibian assessment team aimed to give special consideration to African circumstances and needs. Capacity constraints and the identification of market opportunities where opportunities for rural development and sustainable livelihoods could be supported figured highly. Data availability was also more limited in this case (compared to the RTEAs conducted in Asia and Latin America), and in some instances quantitative analysis was necessarily substituted with qualitative analysis.

RTEA complements existing policy processes

Namibia was the first country in the world to introduce the concepts of care for the environment and sustainable development in its Constitution. Since independence in 1990, environmental sustainability has figured highly in Namibia's policymaking and can be considered well mainstreamed into development frameworks such as the NDPs, Regional Development Plans and the Poverty Reduction Strategy Paper, according to a recent case study (Zeidler & Jones, 2007). New legislation for environmental management (Act No. 7 of 2007), which includes requirements for mandatory environmental impact assessments, is taking effect and an environment commissioner will soon preside over national environmental affairs.

The Government of Namibia and many key stakeholders are aware of linkages between trade and the environment and how these relate to sustainable development imperatives. Namibia has been one of

the leading African countries negotiating at the Convention on International Trade in Endangered Species in regard to the impacts of banning trade in ivory, for example, as well as in taking a leading role within the ongoing negotiations of other MEAs. A strong environmental economics program in the Ministry of Environment and Tourism (MET) has led good analysis on many national-level trade and environment topics, and the MET Directorate of Environmental Affairs has published a series of discussion papers relevant to several areas of interlinkages. The Ministry of Trade and Industry (MTI) is a partner in several environment and trade related projects, and houses the national Clean Development Mechanism (CDM) bureau. Namibia has already conducted studies and enacted legislation to address some of the more obvious trade and environment issues like mining and fisheries, and policy work on natural products trade is ongoing. Against such a background, and in consideration of the pressing rural development needs, it was important for a Namibian trade and environment assessment to look at opportunities for trade and environment to be mutually supportive, as well as identifying the threats of trade 'liberalization'.

Some aspects of the trade and environment agenda are less well covered in Namibia's policy community and were selected by a national expert panel for further consideration within the RTEA. The assessment thus focused on examining issues for which there are generally fewer resources available in a 'business as usual' scenario. This gap is where the national trade and environment policy assessment added value to Namibia's ongoing policy processes.

Important linkages for Namibia

Based on the preliminary assessment results, the advisory panel proposed four areas for further study by national consultants. These sector papers (described below) were incorporated into the RTEA national report, but are also stand alone documents with separate policy briefs.

'EU sanitary demands for red meat trade: Impact on sustainable development in Namibia'

Toto and Thalwitzer (2009) examine the impact of European Union (EU) sanitary demands for red meat trade on sustainable development in rural Namibia. While the high value EU market currently yields very good returns, the authors find that Namibia needs to follow up on the policy to diversify into other markets whose sanitary requirements can be met at a reasonable financial and social cost. Diversification will also help the Namibian livestock industry to have some resilience to possible changes in accessing the EU market, whether resulting from low prices, currency dynamics or non-compliance with sanitary requirements. Red meat market options that match smallholder farmers' production systems in a sustainable manner need to be explored.

'Ecotourism and the informal carbon market: Is the climate right for change?'

Davidson (2009) argues that Namibia is at a turning point regarding the future of the tourism sector and its response to climate change. This is made more important by the current (2009) global economic downturn. If the sector decides to continue with 'business as usual', there is a real possibility that Namibia will lose market share and the sector will decline. If, on the other hand, there is a concerted and collaborative effort to embrace change and take advantage of the opportunities presented by climate change, Namibia has the potential to develop as a leading tourism destination.

'Biochar in Namibia: Opportunities to convert bush encroachment into carbon offsets'¹

Von Oertzen (2009) explores the issues and opportunities presented by bush encroachment onto grasslands, specifically highlighting the requirements to benefit from future carbon offset schemes and carbon finance mechanisms. It is expected that an internationally binding post-2012 carbon trade agreement will be developed, and that additional mechanisms from the formal and informal trade in carbon from the land use, land use change and forestry (LULUCF) sectors will be agreed.

1 For a definition of biochar, see section 6.2.1

Biochar may well be included in such future arrangements. Namibia is well advised to develop the required institutional capacities and actively participate in international negotiations in order to benefit from the many as yet undeveloped opportunities that its bush resource offers, both as a carbon offset mechanism and a source of future carbon revenues.

‘Green labelling, eco-certification and fair trade: Opportunities and threats for Namibia’

Within this cross-cutting theme, Ndhlukula and Du Plessis (2009) find that Namibia must strive to understand the power of specific certification schemes in niche markets, make full use of those that have the best ‘brand name recognition’ in the target market, and seek to lower the cost of independently verified and accredited certification. Proposed initiatives include, for example, enhancing collaboration and cost sharing among producers.

Overall assessment findings

- Namibia can achieve its Vision 2030’s wealth and wellbeing objectives if policymakers and decision makers do not expect Namibia’s development to look like the Western or South African industrialization and bulk export model. Geography, low population and unique, sensitive landscapes mean that Namibia should not necessarily aim to be a major exporter of commodities and manufactured products. A ‘smarter’ strategy is to capitalize on its demonstrated strengths in high value niche sectors for specialized products and services based on Namibia’s comparative advantages.
- Many good efforts on, for example, ecotourism and natural products development are already under way. The Millennium Challenge Account (MCA) is notable for capitalizing on Namibia’s advantages for poverty reduction. Its projects are focused as ‘investments’ expected to yield returns rather than donor grants. While this approach is not suitable in all cases, it is certainly useful for the sectors selected.
- Namibia continues to forego many opportunities in the (formal and informal) carbon market. The country has not sufficiently capitalized on the CDM offered through the Kyoto Protocol and may now have largely missed that window.
- Given the vast and rapidly growing proliferation of green labels, certification and fair trade schemes, it is no wonder that Namibia would have difficulty keeping pace with all of the relevant initiatives that can find their way into international practice (even law) and potentially serve to disadvantage Namibian products. Namibia would benefit from appointing a technical body and/or champion (e.g. in the Namibian Standards Institute) who monitors international market and labelling developments and communicates updates to relevant stakeholders, including the private sector.
- Conflict among the rural development imperative, sustainable land management and commercial meat exports needs to be addressed through harmonized policies. A multistakeholder umbrella project on land (the Country Pilot Partnership) is well placed to better integrate trade considerations into discussions about land policies and rural development.
- There is a general need for coordination among those government agencies that negotiate international policies that can negate one another’s efforts. There is no regularized mechanism for sharing information about potentially relevant policies and initiatives, not only at the domestic level, but for international concerns as well. This could be partly addressed through the existing Namibia Trade Forum, which advises government on trade policy, but also an intragovernmental mechanism to coordinate negotiating positions with domestic policy.

Recommendations

According to the RTEA findings, Namibia can better position itself to be a leader on trade and environment issues in order to meet its development objectives by 2030. The country is well placed for expanding sectors like ecotourism, natural products and carbon market opportunities in land use change, which have continued to grow despite the global economic slowdown. As a dryland country with very low population density, Namibia's 'economies of scale' for manufacturing are not attractive.

1. Policymakers need to look at creating **incentives for markets in unique, specialized products**. The country cannot possibly compete against neighbouring South Africa (or Asia) in the export of manufactured goods. However, depending on how policymakers plan ahead, Namibia can become better at some small, yet high value and dynamic sectors such as carbon markets, natural products and ecotourism.

2. Namibia should establish a **national forum on trade and environment issues** to continue working in areas highlighted by the assessment. This body could sit within the existing Namibia Trade Forum, which is a platform for government and relevant stakeholders provide advice on trade-related concerns. The forum has already established a body dealing specifically with agricultural trade. It is important that existing budgetary and decision-making processes are informed and can act on new developments. The forum should continue to monitor and communicate issues and developments to key stakeholders and especially to relevant negotiating teams so that the various arms of law and policymaking do not undermine one another's objectives.

3. Namibia needs more appropriate carbon market mechanisms that support sustainable land management and rural development (so-called 'co-benefits'). A **working group on carbon-related issues** could deliver appropriate advice on potential investments and any barriers to successful carbon market participation. This working group could be a joint initiative with the existing Namibia Climate Change Committee,² if staff time and other support were to be allocated. Namibia should pursue an assertive position and build strategic alliances to negotiate at climate summits.

4. The government should commit resources to **prepare and train Namibian negotiators** attending international forums on the diversity of relevant domestic policy considerations.

A new project through the GTZ Monterrey Fund can enact the most pressing of these recommendations.³

Conclusion: This is just the beginning

The RTEA was a successful pilot of a new assessment approach for Namibia and the first instance of the method's application in Africa. The result has been to bring together policymakers from different sectors with key stakeholders to think about joint issues for mutual benefit. The four sector papers produced through the assessment are useful stand alone documents in their respective areas of emphasis. In the future, Namibia can pursue a more integrated, dynamic, and responsive policy dialogue on trade and environmental issues.

2 For a definition of biochar, see section 6.2.1

3 Contact CRIAA-SADC for details: <<http://www.criaasadc.org/>>.

Key questions

Some critical questions arise from the assessment that will be important for policymakers to debate.

Governance and law

Should legislation on strategic environmental assessments apply to trade agreements or even to all major international agreements that the government engages? What technical guidance would be required?

Should a pre- and post-international meeting or negotiation consultation always occur?

Economic and development strategy

Are the priorities identified in the RTEA in fact discouraging Namibia from a development path that Western countries have evidently benefitted from? Or is another path necessary due to evident global changes?

What more can Namibia do to sustainably capitalize on its comparative advantages in environments like rangelands, biodiversity and natural landscapes?

How can private sector investment and expertise be drawn in more readily?

Knowledge and capacity

How should trade and environmental research and capacity development priorities be set? How should research be funded? Which of these gaps can be supported from core funds and where might fundraising be required? How can private sector expertise and funding be won?

How can talented young Namibians be stimulated to stay in the country and engage in innovative, entrepreneurial areas of work?

Section 1: Introduction

Namibia has recently undertaken an RTEA, a variant of strategic environmental assessment that highlights key policy issues at the intersection of trade and the environment warranting national policymakers' attention. The assessment identified potential 'green' opportunities and likely threats from trade liberalization and has ignited national debate among stakeholders from the often unconnected sectors of international trade, the environment, agriculture, water, energy, tourism and others. The RTEA is the start of a process of greater collaboration among these previously distinct sectors, which will have the opportunity to collaborate to a greater extent in future.

This report presents the results of Namibia's RTEA. It argues that, in order for Namibia to achieve its development vision, it is critically important to understand the intersection of international trade and environmental sustainability. To ensure that sustainable development and poverty reduction are within reach, the country must capitalize on opportunities presented by these dynamics. A robust intersectoral policy framework is required for the different sectors to jointly generate benefits and limit counterproductive outcomes. Namibia's economy cannot compete with neighbouring South Africa's economic and infrastructural advantages, but the country can excel in some niche, high value areas, depending on how policymakers plan ahead.

Interactions between international trade and the environment have been studied extensively as a reaction to the pressure that the accelerated pace of globalization has placed on the environment, but also the potential opportunity for sustainable development presented by improved global linkages. In the 1990s the trade community grew concerned by the entry into force of major MEAs with implications for trade agreements. Meanwhile, environmentalists worried that the growing influence of the GATT and later the WTO would reduce domestic sovereignty over environmental legislation. Key battles like the Dolphin-Tuna and Shrimp-Turtle cases began to illustrate the potential implications for developing countries' nascent industries and introduced new threats like 'green protectionism' through complicated technical requirements and the prohibition of the export of some important goods. Further, developing countries were struggling to meet the requirements of MEAs without an economic rationale to do so (Najam, Halle & Meléndez-Ortiz, 2007).

Opportunities also began to emerge when the positive aspects of increased global trade for sustainable development became clearer. Market mechanisms could provide incentives for developing countries to 'leapfrog' into cleaner technologies and be rewarded for 'sinking' carbon. In just twenty years a whole suite of new and confusing policy tools have emerged for developing country decision makers to consider. Ecolabels and certification schemes, the clean development and joint implementation mechanisms, emissions trading, and other avenues present a daunting range of opportunities for the countries that can exploit them. They also risk further widening the development gap for countries that cannot.

1.1 Namibia in brief

Namibia is a country that can be described in superlative terms: the most arid climate in sub-Saharan Africa, one of the continent's most recently independent states, one of the world's highest income disparities, and an unparalleled concentration of endemic dryland biodiversity. Situated on the south-western coast of Africa, Namibia borders the Atlantic Ocean to the west, Angola to the north, South Africa to the south, and both Botswana and Zambia to the east. Namibia is characterized by hyper-arid to dry sub-humid climatic conditions, and a large proportion of the country's 842,000 square kilometres land mass is classified as desert.

Namibia (like other countries with high income inequality) is often described as having two economies. The first is a modern industrial economy, heavily dependent on the extraction and processing of minerals (diamonds, uranium) for export and to a lesser extent commercial agricultural and fisheries sectors. The second economy is dominated by subsistence farming, where livelihoods are highly vulnerable to environmental changes and social shocks caused by HIV/AIDS. Despite great advances, Namibia performs relatively poorly in its Human Development Index (HDI) on account of its high HIV/AIDS rate, but is on track to meeting most of the MDGs, especially those linked to environmental sustainability. Namibia's advanced natural resource accounts have helped to evaluate the contribution of the environment to national wealth by developing 'satellite' accounts for natural assets such as fish and forests. Natural resources accounts data can be fed into conventional national economic accounts and, combined with the social accounting matrix (Lange et al., 2004), is useful for modeling different development scenarios.

While Namibia is classified as a lower middle income country with an average per capita income in 2008 of an estimated NAD 33,600 (USD 4,200)⁴ (World Bank, 2008), this classification masks a sizeable gap between a wealthy minority and a poor majority. The country still bears the consequences of the economic and social infrastructures it inherited from the apartheid system of colonial South Africa. Inequality in the distribution of income and assets is among the highest anywhere, with a Gini coefficient of 0.7 (Levine, 2007). Disparity among the former 'ethnic' groups (today identified by language groups) is evident in the high discrepancy of livelihood-based indicators even ten years after independence⁵ (Schade, 2000: 119). The difference among HDI scores between groups is extreme; for instance, San-speaking people's indicators are equivalent to those in Sierra Leone, while German-speaking Namibians have indicators higher than those of Norwegians (Levine, 2007; Garcia, 2004: 47). Scholars note that social and political instability is likely to result if such horizontally stratified inequalities are not reconciled quickly (Stewart, 2005).

Namibia's population (2,088,669, according to the 2008 census) is very unevenly distributed across the country, being heavily skewed towards the less arid northern areas bordering on Angola and Zambia. Since close to 40 percent of citizens are below 15 years of age, future population growth is expected. Namibia's rich and diverse culture is reflected in the 25 languages or major dialects spoken in the country. Population densities rise sharply in and around the main urban settlement areas such as Ondangwa, Rundu, Katima Mulilo and Windhoek. 'Urban sprawl' around northern towns stretches far into the regions, affecting large stretches of land and resources. Upwards of 70 percent of the population live north of the veterinary cordon fence (VCF) within the 'infected' (disease endemic) zone. The VCF, or 'red line' as it is commonly known, serves as a cordon through which the country is able to regulate the illegal movement of livestock and livestock products from the country's buffer zones and disease-infested areas to the recognized commercially controlled animal husbandry zones. According to a STEPS Centre briefing (STEPS Centre, n.d.) based on Institute of Development Studies research in Namibia, the VCF

- excludes the people who own the greatest number of cattle from benefiting by export to markets such as the EU, and therefore raises serious questions about the sustainability of the status quo. That the VCF is a constant reminder to the majority of Namibians of apartheid era separation, marginalization and military hostility makes its removal a political imperative, regardless of any benefits it confers in terms of disease control – benefits that are in any case denied to those who suffered most as a result of it.

Namibia has implemented a bovine traceability scheme based on branding, ear tagging and movement permits, and the regions south of the VCF have met EU standards for animal hygiene and

⁴ Estimates for US dollar equivalents of Namibian dollars were made at a median rate for June and July 2009 of NAD 8 to USD 1.

⁵ The most recent analysis available.

slaughter (Scoones & Wolmer, 2006: 11). Nevertheless, under the agricultural projects supported by the US government, a traceability system will be implemented in the north as well. Long-awaited efforts to move the fence northward to the border with Angola, which would open up the northern regions for livestock marketing, have been delayed for several years.

Namibia was occupied by the South African administration and in a state of civil war until 1990. At its independence, Namibia's rich natural resource basis became more accessible for international investment and its potential as an attractive tourism destination could be realized. Namibia has pursued a liberal economic strategy with an eye to reducing inequalities among its population. The country has experienced steady growth, moderate inflation, strong balance of trade surpluses and low indebtedness over the past several years as a result of generally prudent fiscal policies, a stable political environment, a fairly developed infrastructure, and a fairly strong legal and regulatory environment. Economic growth since independence has averaged 4.3 percent per annum, sufficient to increase per capita income in most years.

Today, Namibia is one of just a handful of countries in Africa and one of a few drylands (arid and semi-arid areas) countries worldwide said to be en route to achieving the MDGs. A good deal of progress has been made, particularly in environmental sustainability and providing access to health and educational services. Namibia addresses environmental management primarily via MDG 7 ('Ensure Environmental Sustainability'), and four indicators and targets have been set – land area protected to maintain biodiversity (measured in protected areas, registered conservancies and freehold land), and gross domestic product (GDP) per unit of energy use (not disaggregated in terms of renewables).

1.2 Namibia's Rapid Trade and Environment Assessment

The RTEA is a project of the IISD with the TKN, which contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change, measurement and indicators, and natural resources management. Namibia's RTEA was carried out by Integrated Environmental Consultants Namibia's⁶ team of environment and development practitioners from January to June 2009.

RTEAs seek to answer the following questions:

- What impact will current and contemplated trade negotiations have on the environment and sustainable development?
- How can one best integrate environmental considerations with trade and investment liberalization?
- Are there green growth opportunities?

Namibia's RTEA was the first instance of this method being utilized in Africa. In the context of the first African RTEA, another key question was added this list:

- How can trade and environment policies be mutually supportive of rural development and poverty alleviation?

6 <<http://www.iecn-namibia.com>>.

The evolving methodology of the RTEA tool is based on a six step process:

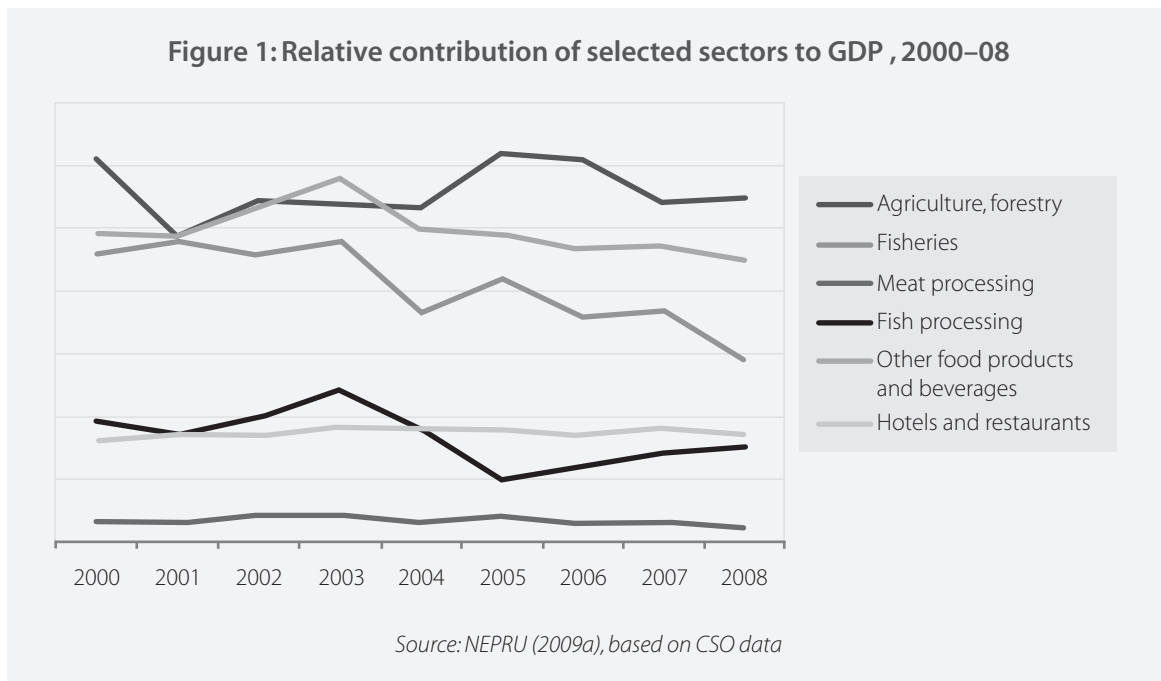
- **Step I:** partnership building with key government and non-governmental actors in the country (establishing an NEAP to guide the research);
- **Step II:** setting the context through statistical, empirical and economic analysis;
- **Step III:** expert input through broad-based stakeholder interviews and a literature review;
- **Step IV:** scenario building to establish the potential economic impact of liberalization agreements;
- **Step V:** analysis of the economic impact scenarios to identify the potential environmental and social results of trade liberalization; and
- **Step VI:** conclusions and strategic policy recommendations.

This national report is based on these steps, carried out with the guidance of the NEAP (see Annex I for details of its membership and terms of reference). Four sector papers focusing on key sectors at the intersection of Namibia's trade and environment were prepared through the RTEA. The RTEA process is detailed in Annex II.

Section 2: Namibia's Economic Profile⁷

Namibia has a small population – and an even smaller domestic market. The sectors of major importance are mostly export oriented and based on natural-resource extraction. Namibia's economic growth is largely dependent on mineral exports, particularly diamonds and uranium. Mining contributes about 16 percent of GDP; however, earnings from diamond exports are falling drastically. During the first three months of 2009, earnings were nearly 65 percent less than the last quarter of 2008 (NAD 430 million – USD 53.75 million – in 2009, compared to NAD 1.2 billion – USD 150 million – in 2008), according to the Bank of Namibia. The year on year scenario looks even bleaker, with the value of exported diamonds plunging by 76 percent from the NAD 1.8 billion (USD 225 million) for the first quarter in 2008. Mining is, however, experiencing a new push due to the growth of uranium mining. Namibia has overtaken the Russian Federation as the fourth largest uranium supplier in the world and is on track to meet its target of becoming the world's third largest supplier by 2015.

Agriculture, fisheries, meat processing, fish processing, food products and beverages, and hotels and restaurants are other major contributors to GDP, according to Central Statistics Office (CSO) data (see figure 1). However, important questions surround the collection and use of this data. For example, satellite accounts (WTTC, 2006; 2008) demonstrate that tourism contributes around 16 percent of Namibia's GDP. The measure of income from hotels and restaurants (around 0.3 percent of GDP) does not sufficiently portray the importance of tourism to Namibia's economy.



Unemployment was estimated at 36.7 percent in 2004 according to the National Planning Commission, based on the official 2001 census for information (NPC, 2004). The sectors that are major contributors to the economy are not necessarily the major employers. In 2004 agriculture accounted for 26.6 percent of employment and tourism 17.7 percent, numbers that are believed to have increased

⁷ With special thanks to the Namibian Economic Policy Research Unit for the latest figures and analysis, especially Klaus Schade.

in the last five years. Mining accounted for only 2 percent of jobs and fisheries just 3.3 percent. Thus, it is important to take the potential employment benefits of various sectors into account when considering their potential to alleviate poverty and reduce structural inequalities.

Namibia's economy is slowly diversifying. It is more diversified than that of neighbouring Botswana (which is also well known for being diamond dependent) and hence less affected by the current (2009) economic downturn. Some of the main mechanisms of Namibian economic diversification are discussed below.

Mineral beneficiation: The government has called for value addition to precious minerals such as diamonds, tourmalines, garnets and aquamarine, and base metals – copper, zinc and lead – rather than continuing to export these in raw form. Beneficiation involves refining an ore, or separating the valuable material of an ore from the waste material, for further processing or direct use. It may be conducted via a range of techniques and enables operators to improve the quality of their end product and to enhance the overall processing performance of an ore. The Chamber of Mines supports the government's view that minerals and metals should be beneficiated in Namibia as far as it is practical and economically viable to do so, but also cautions not to push the industry beyond the ambit of its competence.

Support for horticultural production: Investment in the development of infrastructure for marketing Namibian horticultural produce is yielding fruit. A notable success is the table grapes industry, which has been able to fill orders during Europe's winter season. This sector is under threat if economic partnership agreements (EPAs) are not concluded, as tariffs will be imposed on table grape imports to the EU. Statistics record the growing export of beans, butternuts, cabbages, chillies, gem squashes, grapes, mangoes, onions, papayas (paw-paws), potatoes, pumpkins, sweet corn, sweet melons, tomatoes and watermelons.

Infant industry protection (IIP): Within the Interim Economic Partnership Agreement (IEPA) with Europe and the Southern African Customs Union (SACU), some Namibian industries warrant special protection as they are under tremendous strain from neighbouring South Africa's cheaper imports. IIP for both pasta and UHT (ultra-high temperature processing) milk have been extended to 2012 and 2014, respectively, but lapsed for broiler chicken, which required unsustainable quantities of water to become viable. Even with these protection measures in place, imports that are more competitive due to economies of scale in those countries are able to circumvent IIP and can undermine competitiveness of these nascent local industries.

Textiles: Namibia had made large investments to develop a textile industry. Termination of quotas under the WTO Agreement on Textile and Clothing in 2005 may have damaged these efforts, although Namibia's main textile and clothing export markets are the US under the African Growth and Opportunity Act's (AGOA) duty-free and quota-free provisions, and to some extent the EU IEPA and the Generalized System of Preferences (GSP). Namibian economists have long felt that Namibia's preferential export benefits could not possibly offset the cheaper production costs of major textile producers such as China, Indonesia and Pakistan. The local textile industry has been dealt a blow following the closure of a subsidiary of the Malaysian company Ramatex Textiles due to poor orders from abroad. Ramatex employed about 7,000 Namibians for a time, and in 2005 Ramatex registered net sales of NAD 2.6 billion (USD 325 million) and net income of NAD 128 million (USD 16 million). However, Ramatex has blamed the labour movement for contributing to the demise of its Katutura-based operation by allegedly sharing information with international campaigners about the treatment of its Namibian workers. This, Ramatex said, had led to the boycott of its products. Major underground water pollution requiring substantial remediation is the legacy of Ramatex's presence in Namibia.

The Namibian economy is closely linked to South Africa, with the Namibian dollar pegged one to one to the South African rand. Increased payments from SACU put Namibia's budget into surplus in 2007 for the first time since independence, but SACU payments will decline after 2008 as part of a new revenue-sharing formula. Increased fish production and mining of zinc, copper, uranium and

silver spurred growth in 2003–07, but growth in recent years was undercut by poor fish catches and high costs for metal inputs.

The Namibian Economic Policy Research Unit's economic forecast for 2009 (NEPRU, 2008) was conducted in 2008 ahead of the full extent of the global economic downturn. It predicted production cuts for diamond mines, but that uranium mines would do well because of increasing demand. Agriculture crop production was expected to be average or even slightly above average because of early rains and a normal-to-above rains forecast. Construction was expected to do well because of ongoing government projects; however, the cost of cement has risen and there are reportedly sometimes shortages. The lower and middle market segment for tourism was expected to be worst hit by the global downturn, with the upper end of the market less affected. Weakening of the South African rand/Namibian dollar will increase costs of imports, but benefit exporters. A growing trade deficit is expected for 2009, with a growth forecast of about 2.5 percent dependent on the duration and depth of the slowdown in Europe, the US and China. The forecast was slightly downward adjusted to between 1 and 2 percent for 2009 when the scale of the economic downturn became more apparent.

The country has suffered a substantial drop in commodity prices and closure of the copper mines (for the time being). The joint venture with De Beers, Namdeb, is on a production holiday to bring production in line with demand, although De Beers Marine continues production. The country's uranium mines are still doing relatively well (demand exceeds supply), but agriculture, for example, has been hit by lower growth in South Africa of demand for Namibian meat. In the manufacturing sector, diamond cutting and polishing are suffering from a drop in demand. The beverage industry is likely to feel the pinch of reduced consumer demand shortly. In the services sector, tourism growth is expected to slow down, but this may be offset to some degree by the benefit from currency depreciation. There is overall less demand for business services, including in the financial sector. Namibia's financial institutions are not directly affected by the global slowdown, but the banking sector is exposed to consumer and housing loans. Share prices have dropped, affecting institutional and private investors, and the wholesale and retail trades are affected by a drop in consumer demand. In the informal sector, where many Namibians make their livelihoods, declining demand is expected in particular in the northern areas. No firm data is available on the extent of the impacts on the informal sector, but those working in this sector are the most vulnerable in society.

Growth performance for 2001 to 2008 is presented according to the standardized codes for recording GDP contributions. Such codes are internationally standardized according to industry classification systems. The International Standard Industrial Classification of All Economic Activities is a UN system for classifying economic data. The UN Statistics Division describes it in the following terms. Such tools foster the international comparability of data and promote the development of sound national statistical systems. Developing countries are in this case (as in many other) 'standard takers' rather than 'standard makers'. Thus, many important sectors are not reflected as accurately as possible in the official statistics.

Supplementary estimates demonstrate that non-traditional sectors make a large contribution to Namibia's economy. Other major sectors in this regard are discussed below.

Tourism: Namibia is one of the world's fastest growing countries in terms of travel and tourism. The national tourism satellite account was conducted by the World Travel and Tourism Council in conjunction with Oxford Economic Forecasting and commissioned by agencies of the Namibian government. The satellite account estimate combined direct and indirect contribution to GDP, which demonstrated that the impact on GDP from the sector was around 16 percent in 2007. Namibia's tourism sector provided 77,000 jobs and contributed NAD 7.8 billion (USD 97.5 million) to the country's GDP, a number that surpasses the fisheries sector and is second only to mining. Projected growth of the tourism industry is 7.4 percent annually for the next ten years and reached 10.2 percent in 2007 (WTTC, 2006; 2008). This sector has been identified as having considerable further growth potential where Namibia has important competitive advantages. Many of these visitors are 'ecotourists' visiting parks and other natural environments. Tourism can create jobs in remote rural areas where there are few other employment opportunities.

Protected areas: Namibia's national protected areas now cover 140,394 square kilometres or 17 per cent of the country's land surface. NAD 50 million (USD 6.5 million) in park gate fees was collected in 2008, a figure that has tripled since 2003, while park fees contributed NAD 2.5 million (USD 312,500) to the national economy. About NAD 20 million (USD 2.5 million) in annual income is generated by Namibia's flagship tourism product, the Etosha National Park. The economic impact of Namibia's protected areas overall translated into NAD 17 million (USD 2.1 million) in income from live game exports; NAD 19.5 million (USD 2.4 million) from a recent game auction (for international zoos and protected areas) that included eight black rhinos, which went for NAD 500,000 each (USD 62,500); and around NAD 10 million (USD 1.25 million) from hunting concessions (Turpie et al., 2005).

Conservancies: Namibia has 52 proclaimed communal conservancies in rural areas, within the Community-Based Natural Resources Management (CBNRM) program, which gives communities the right of ownership of their natural resources to derive benefits from them in a sustainable manner. More than a tenth of the population – 230,000 people – now live in conservancies. The income in 2007 from tourism and trophy hunting in these conservancies came to NAD 223 million (USD 27.9 million). Conservancies are economically efficient and able to contribute positively to national income and the development process (Barnes et al., 2005). They also provide a channel for the capture of international donor grants (wildlife non-use values) as income and generate attractive financial returns for communities.

Natural products: Namibia has a distinct advantage in the production of indigenous natural products because of its remarkable variety of habitats and ecosystems; high levels of species richness and endemism; and a multicultural society with a high level of traditional knowledge about wild foods, medicinal plants and other resources. Products such as hoodia, wild silk and natural oils such as from the marula tree have shown great promise. The export value of natural products was estimated at around NAD 2,690,050 (USD 336,250) in 2008.⁸ This figure includes marula, Kalahari melon seed and ximenia oil; the estimate does not include hoodia (used for weight loss); devil's claw (*Harpagophytum procumbens*) with analgesic, sedative and diuretic properties; or commiphora, which is made into incense, perfume and medication. The US government funded MCA will advance the business capacity of Namibia's industry of indigenous natural products.

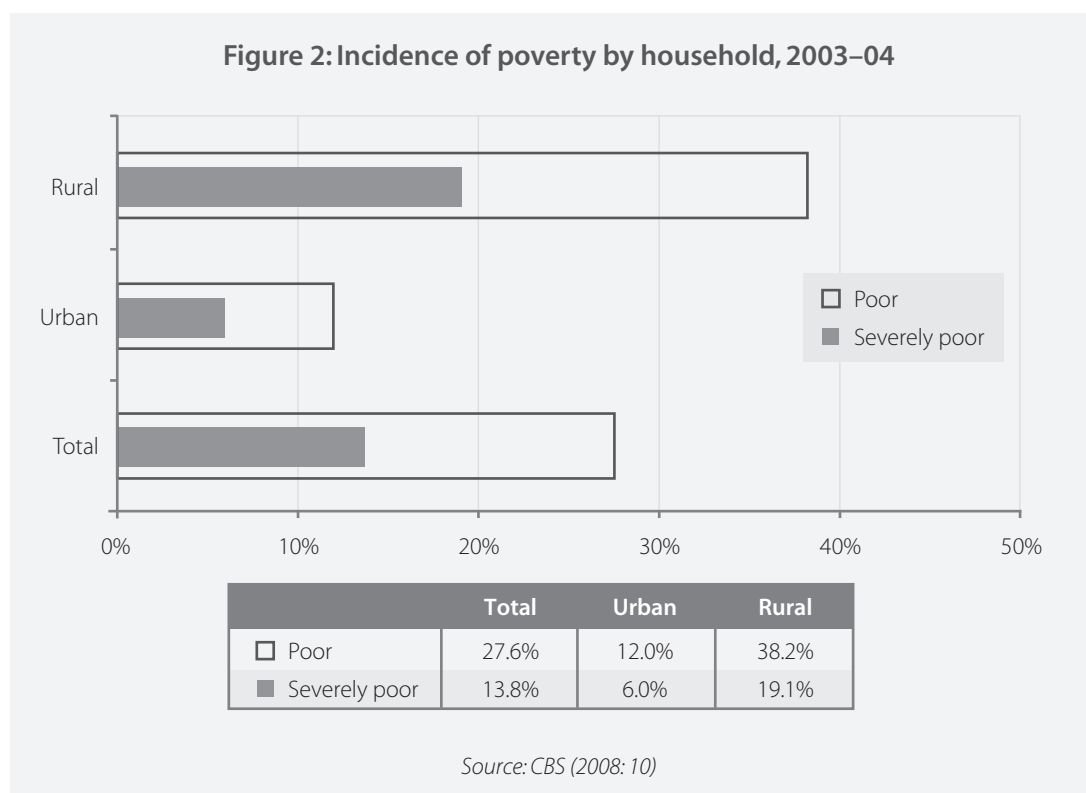
Non-timber forest products: Total woody resources volume for Namibia was estimated at 257 million cubic metres in 2005 (Barnes et al., 2005). The used volumes are small relative to the physically utilizable potential. The value of current forest use in terms of the gross output is some NAD 1.2 billion (USD 150 million). This made a direct contribution to the gross national product (GNP) of NAD 1 billion (USD 125 million) in 2005, amounting to some 3 percent of GNP; in other words, roughly half the estimated contribution made each by agriculture, fishing, mining and tourism. The total direct and indirect economic impact of the forest use sector on the broader economy was estimated at NAD 1.8 billion (USD 225 million). Government is only capturing one half of one percent of the resource rents generated in the forest use sector through licence fees. Most rents accrue directly to low income rural households, so there is little incentive for government to capture more resource rent. Namibia's standing forest assets (the natural capital stock) were estimated to have a value of NAD 19 billion (USD 2.4 billion) in 2005 (Barnes et al., 2005).

Game meat: The venison market value is around NAD 219 million (USD 27.4 million) at the national level, measured by income to farms and conservancies. The additional income to the harvesting teams, abattoirs, exporters and outlets in Namibia has not yet been calculated, but with the multipliers to the national economy it could make the game meat sector worth as much as NAD 500 million per year (USD 62.5 million) (Brown, 2007).

While these 'alternative' sectors are among the fastest growing with the greatest potential for poverty alleviation (according to the MCA analysis described below), Namibia's economy is still not strongly diversified. The country's small population forces it to be well integrated with other markets, as the

8 Personal communication with Pierre du Plessis of CRIAA SA-DC.

domestic market is not only small, but has high levels of poverty and income disparity, reducing potential demand for local products. Namibia still has a high rate of unemployment (36.7 percent in 2004) and poverty, notably in rural areas, where 38.2 percent are poor and 19.1 percent are severely poor (see Figure 2).



About 29 percent of the total population indicated subsistence farming as their main source of income, while in rural areas the corresponding figure is 48 percent (CBS, 2007). A high per capita GDP relative to the region hides one of the world's most unequal income distributions. Measures exist to redress economic disparities – in particular broad-based black economic empowerment, affirmative action, and tender preferences based on the composition of the labour force and the extent of Namibian ownership.

During the preparation of the MCA proposal, national advisors indicated that the country could boost efforts to reduce poverty by focusing on its comparative advantages. These were said to be:

- large areas of semi-arid communal land suitable for livestock grazing;
- natural products indigenous to Namibia; and
- diverse wildlife and unique landscapes.

Namibia is now set to benefit from a NAD 2.3 billion (USD 288 million) poverty reduction grant from the MCA over the next five years. Part of this sum will be used to enhance the economic performance of the agricultural sector by supporting the construction of five veterinary centres in rural areas. It is also planned that the MCA will finance effective community-based rangeland management practices for farming in rural areas and advance the business capacity of Namibia's indigenous natural products industry.

The country has a fairly well developed infrastructure network. The efficient deep water harbour of Walvis Bay and the major road transport corridors (the Trans-Caprivi and Trans-Kalahari High-

ways) provide indispensable links to neighbouring countries. Meanwhile, Namibia's heavily modernized and expanded telecommunications network serves as an enabling infrastructure base for any investor. Infrastructure for tourism will also be supported through the MCA.

Large increases in international food and fuel prices pushed inflation over 10 percent in 2008. The 12 month inflation rate rose sharply during the first half of the year and remained at 10.9 percent in December, compared with 7 percent a year before. In line with the South African Reserve Bank (SARB) rate cut, the Bank of Namibia (BoN) reduced its official bank rate (the repurchase or 'repo' agreement rate) by 50 basis points in December 2008. (Since the time of writing, there have been more rate cuts; see BoN for the current rate.) This left the rate at 10 percent, still 150 basis points below the SARB repo rate, after the BoN opted not to follow three SARB rate increases in 2007–08. Mirroring the weakening of the South African rand, the Namibian dollar depreciated by 26 percent against the US dollar during 2008, roughly two-thirds of which took place during the period September–December. The International Monetary Fund (IMF) encouraged Namibian authorities to implement the planned reforms of state-owned enterprises with a view to reducing their burden on the budget. Sustained further efforts are needed to address the high unemployment and HIV/AIDS challenges. The IMF also called on the country to expand growth in non-mineral sectors to help ease poverty.

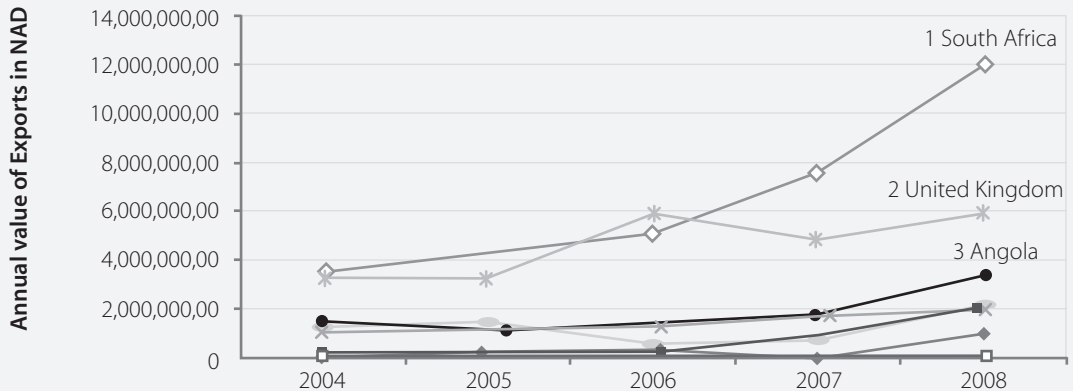
2.1 Exports, imports and trade balance

In 2008 exports accounted for 48 percent of total GDP and imports accounted for 50 percent of GDP. Namibia's balance of goods and services has been in slight deficit since 1995. The main exports are diamonds (80 percent of Namibia's mineral output) and other minerals, including uranium and zinc, followed by fish, tourism, beverages and meat, varying by years. The relative importance of ores, uranium, copper and other minerals has declined from a high of 48 percent in 2000. Fish exports have fallen from 23 percent to 15 percent. South Africa remains the most important export destination, followed by countries within the EU. China is gaining importance as an export destination: the trade surplus with China in 2007 and 2008 exceeded the trade deficit in 2005 and 2006.

Imports account for 50 percent of total GDP. Most food and consumer items are imported from South Africa. However, imports from South Africa are on the decline, and imports from the US, China and the United Arab Emirates are gaining in importance.

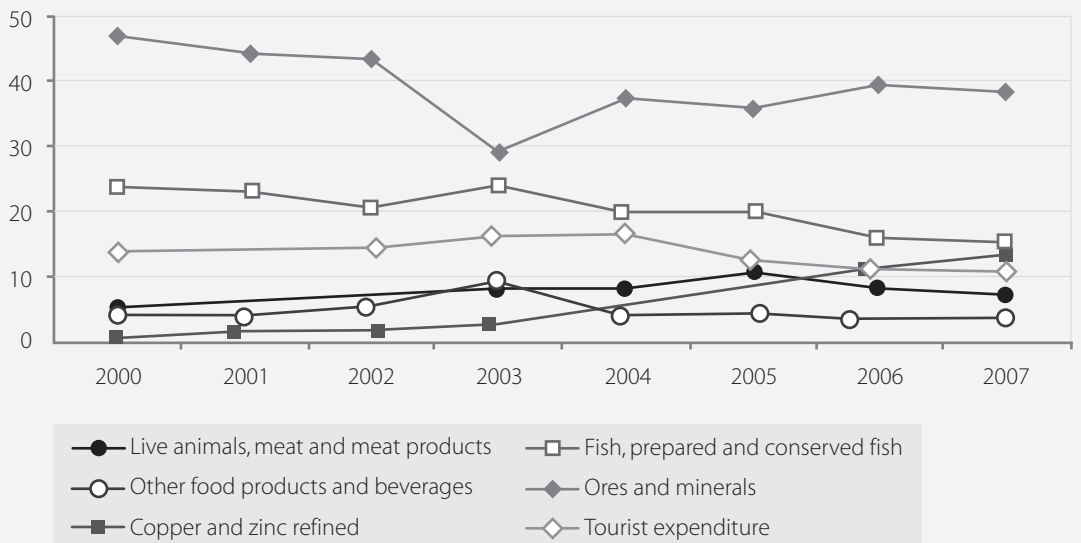
Despite a large proportion of food products exports, Namibia is still considered to be a food importer, because the types of foods exported are not those that are consumed domestically. It has been declared a net food-importing developing country, a designation that will provide Namibia with more policy space in order to increase national food production (Frøystad, Hoffmann & Schade, 2008).

Figure 3: Namibia's major export destinations, 2004 to 2008



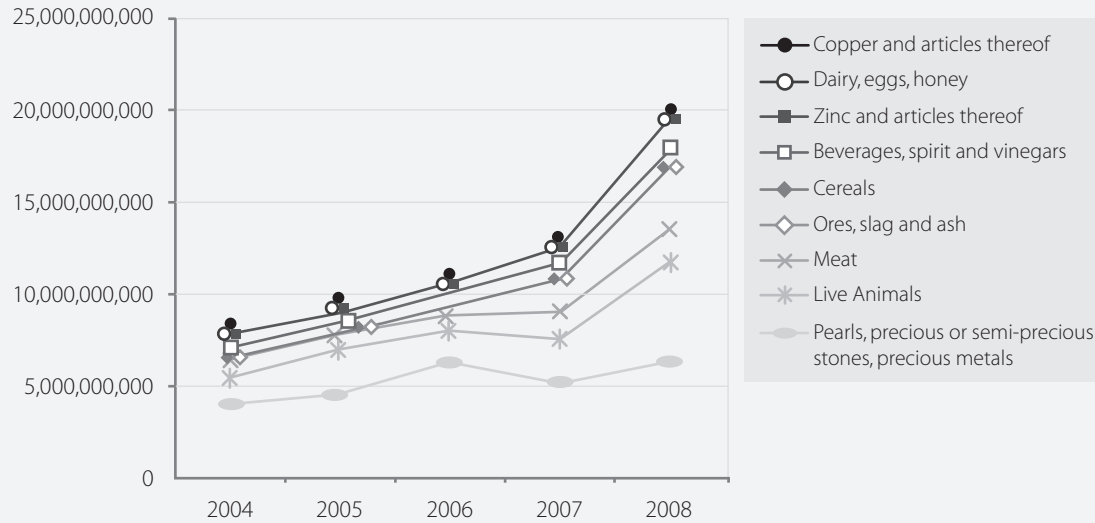
Country	2004	2005	2006	2007	2008
Angola	1,523,354,017	1,145,258,927	1,310,237,402	1,836,400,778	3,354,460,809
Brazil	475,055	486,635	135,000	382,166	955,309
China	205,128,829	288,494,488	332,694,406	866,652,734	2,048,558,406
India	2,301,262	9,345,124	12,433,716	2,134,634	5,245,793
Malaysia	19,474,799	217,102,717	301,094,156	14,416,637	941,161,317
South Africa	3,547,849,228	4,245,950,582	5,024,353,963	7,569,762,722	11,986,107,445
Spain	1,061,465,064	1,150,212,047	1,372,599,790	1,709,234,280	2,004,820,911
United Kingdom	3,407,266,465	3,274,299,364	5,877,692,800	4,807,313,223	5,868,904,934
USA	1,258,828,188	1,454,472,824	555,237,409	718,660,429	2,159,221,545

Figure 4: Composition of Namibia's exports (%), 2000-07



Source: NEPRU (2009b), based on CSO data

Table 2: Performance of selected exports in USD, 2004 to 2008 (provisional figures)



2.2 Development framework

Namibia is guided by its overarching sustainable development plan, Vision 2030. The vision is for Namibia to be a prosperous and industrialized country developed by its human resources and enjoying peace and stability by the year 2030. This vision guides all national development planning and was developed through a large participatory process after independence. The vision emphasizes industrialization as a means for Namibia to reach the health and wellbeing standards of a developed country.

The vision is enacted through NDPs, a medium-term planning tool for all sectors of the national government that sets achievable development targets within a time framework of five years. To date, Namibia has devised, elaborated and implemented three NDPs, NDP1 (1995/96–1999/2000), NDP2 (2001/02–2005/06) and NDP3 (2007/08–2011/12). The regular periodic revisions of the NDP provide an opportunity for the adjustment of development targets to realistic levels while enabling the incorporation of contemporary developmental paradigms. The theme of the current NDP is ‘Accelerated Economic Growth and Deepening Rural Development’. NDP3 emphasizes environment-based rural development as the way forward for poverty reduction, rural development, growth and the reduction of inequalities.

Section 3:

Namibia's Environmental Profile

Namibia's natural environment is one of its key strengths. The country has a remarkable variety of habitats and ecosystems – from extremely arid deserts to subtropical savannahs – and large numbers of rare, endemic and otherwise important species. The country contains part of the world's only dry-land biodiversity 'hotspot' and high levels of species richness and endemism.

Key environmental issues for the country⁹ are the following.

Water: There are no natural perennial watercourses within the borders of the country. Water is a limiting factor both in terms of availability and quality for human use, as well as for the maintenance of ecosystem services. High variation in rainfall, and consequent available water from rivers and underground sources, is a major limitation to development at the national level. At the transnational level, the distribution of water and the possible interruption of rivers through damming would have serious environmental impacts (e.g. on the Okavango Delta) and cause tension among regional countries. Droughts and dry spells are a normal and common occurrence. The country is heading towards a situation of absolute water scarcity by 2020, even without taking climate change scenarios into consideration (Zeidler, Jones & Chunga, 2007). This year (2009) had exceptionally high rainfall, however. Flooding has been severe, and by May more than 85 deaths had been attributed to the floods in northern Namibia. Thousands were displaced and required humanitarian aid.

In most years, only 8 percent of the country receives over 500 millimetres of rainfall, which is considered the minimum necessary for dryland cropping. This area is concentrated in the northeast, mainly the Caprivi region. The central regions of the country have relatively productive soils and reliable rainfall, and are well vegetated to support livestock, but not cropping. Namibia's formal and informal economies are highly dependent on the natural resource base, mainly livestock farming and, more recently, larger scale game utilization, fishing, wildlife and nature tourism. Arid environments are adapted to recurring droughts, but their resilience and recovery can be impaired by human induced mismanagement.

Land degradation: In an arid zone with high population growth, land and resource degradation, and consequently potential loss of productivity, have been identified as key threats (Quan, Barton & Conroy, 1994; Krugmann, 2001; MET, 2005; Zeidler, 2006). The main immediate impacts include groundwater depletion; soil erosion; declining land productivity; and loss of woody vegetation, shrub and ground cover. Open access, habitat conversion and the overexploitation of resources are among the main suspected causes. Bush encroachment alone (De Klerk, 2004), for example, is estimated to affect 26 million hectares of savannah and woodland areas throughout Namibia. Sixteen million hectares affected are on freehold land. Land productivity, especially in terms of cattle ranching, is believed to have declined significantly in certain land areas due to bush encroachment. The risk of land degradation is high. Both bush encroachment and desertification are major problems. This can also lead to tension, as transborder migration to more fertile areas is possible. The commonly accepted prognosis is that climate change will accentuate the above problems.

Land tenure: The historical distribution of land and land tenure rights has led to a concentration of indigenous peoples in a narrow zone along the country's northern border. The high rate of human fertility and the limited fertility of agricultural lands means that these rural communities have very low per capita income. This is compounded by a lack of secure land tenure, and these factors mean

⁹ According to the consultative process for a national core set of environmental indicators (Nakanuku et al., 2001; Noongo et al., 2002; EIS, 2003), a country environmental profile (UN, 2002), a regional ecosystem assessment (Biggs et al., 2004), recent analysis of environment and drylands issues mainstreaming (Zeidler & Jones, 2007) and others (Krugmann, 2001).

that many are unable to manage the land sustainably. Under the Traditional Authorities Act, land belongs to the state, but can be given to the communities to manage, but this arrangement is frequently the trigger of local conflicts between communities and state managers. Livestock density is closely linked to human density, but there is no restriction on livestock numbers per person or per household, and there is also no organized grazing system, such as rotation or herding, which could prevent further land degradation. Livestock also have a traditional cultural value, e.g. as a dowry, which can prevent them from being sold when the price is highest.

Climate change: Namibia is considered to be particularly vulnerable to the effects of climate change. Climate change predictions for the next 50 years (Biggs et al., 2004; Scholes & Biggs, 2004) indicate with high levels of certainty that major parts of Namibia will experience a significant increase in temperatures and a decrease in rainfall. Already limited agricultural potential will potentially be further restricted and major changes in vegetation structure and biodiversity are expected (Midgley et al., 2005). Namibia is highly vulnerable in sectors such as crop and livestock production; coastal flooding; fisheries (warming of the Benguela current); and impacts on biodiversity, ecosystems and infrastructure (drought, flooding). This vulnerability is intensified by high economic dependency on coastal fisheries, wildlife-based tourism and (commercial and communal) agriculture. Desertification – under its various forms of deforestation, soil erosion, bush encroachment, loss of biodiversity and soil salinization – is an additional challenge reducing productivity (including water supplies), altering natural habitats and endangering biodiversity.

Climate change impacts on Namibia's environment (summarized from Zeidler, Jones & Chunga, 2007) have been predicted as follows:

- **Water:** By all accounts, Namibia's water sector is most vulnerable to climate change. Any increase in temperature is associated with an increase in the evaporation rate, thus the Namibian water balance is anticipated to become drier. Models assuming limited policy intervention to limit greenhouse gases (GHGs) worldwide indicate a best case scenario of a 15 percent increase in evaporation and no change in rainfall, still resulting in severe water scarcity; and a worst case scenario of decreasing rainfall of 30 percent coinciding with an increase in evaporation of 30 percent, with extreme results (Zeidler, Jones & Chunga, 2007).
- **Agriculture:** Agricultural output is extremely sensitive to climatic conditions. Millet is vital to the food security of most rural households in the north, and if effective soil moisture decreases, then decreases in yield are likely. Maize is the principle commercial crop, and with the probable impacts of a decrease in rainfall and increased evaporation, a decrease in yields is likely. A rise in mean winter temperatures would be detrimental to the production of winter wheat and fruits that need the winter chill. Impacts on household food security could be dramatic and climate change has the potential to cause significant social disruption and population displacement in rural communities.
- **Ecosystems, biodiversity and tourism:** Using pessimistic climate change assumptions, over 40 percent of plants will become critically endangered or extinct by 2080. At the optimistic end of the spectrum, 30 percent of the plant species will join those categories. Importantly, endemic species showed lower susceptibility to climate change (between 19 percent and 12 percent predicted to be critically endangered or extinct by 2080). Endemic species are not only arid adapted, but are also frequently located in regions of lower predicted climate change, e.g. areas with topographic diversity that have been buffered against past climate changes and enable species survival (Midgley et al., 2005). However, many endemics, e.g. in the desert, are already near their tolerance limit and some may not be able to adapt further under hotter conditions.

In terms of habitats, wetlands (less than 5 percent of Namibia's terrestrial area) are highly vulnerable to a decrease in water flow, although savannahs and woodlands (84 percent of Namibia's terrestrial area) are unlikely to be threatened. Arid to semi-arid grasslands are under threat from land degradation and desertification. Coastal areas, including the Ramsar site at Walvis Bay, would be impacted by a southward movement of warm tropical waters, threatening large flocks of birds and marine biodiversity.

Droughts and/or reduction in precipitation could devastate wildlife and reduce the attractiveness of some nature reserves for tourists. As nature-related tourism constitutes up to 16 percent of GDP (2006 est.), this sector of the economy may be highly threatened by climate change. State protected areas, conservancies and other measures under way today are not sufficient to guard against climate changes, but offer some insurance against habitat fragmentation.

Research in Namibia (Reid et al., 2007) suggests that over 20 years annual losses to the Namibian economy could be up to 6 percent of GDP due to the impact that climate change will have on its natural resources alone. This will affect the poor most, with resulting constraints on employment opportunities and declining wages, especially for unskilled labour.

3.1 Environmental management

Namibia's relative youth as a country has served it well in terms of providing the opportunity to develop a modern framework to achieve sustainable development. Namibia became one of the first countries in the world to incorporate an environment and sustainable development clause within its national Constitution. This commitment to the environment is enshrined in Article 95 (1)(i):

- the State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future.

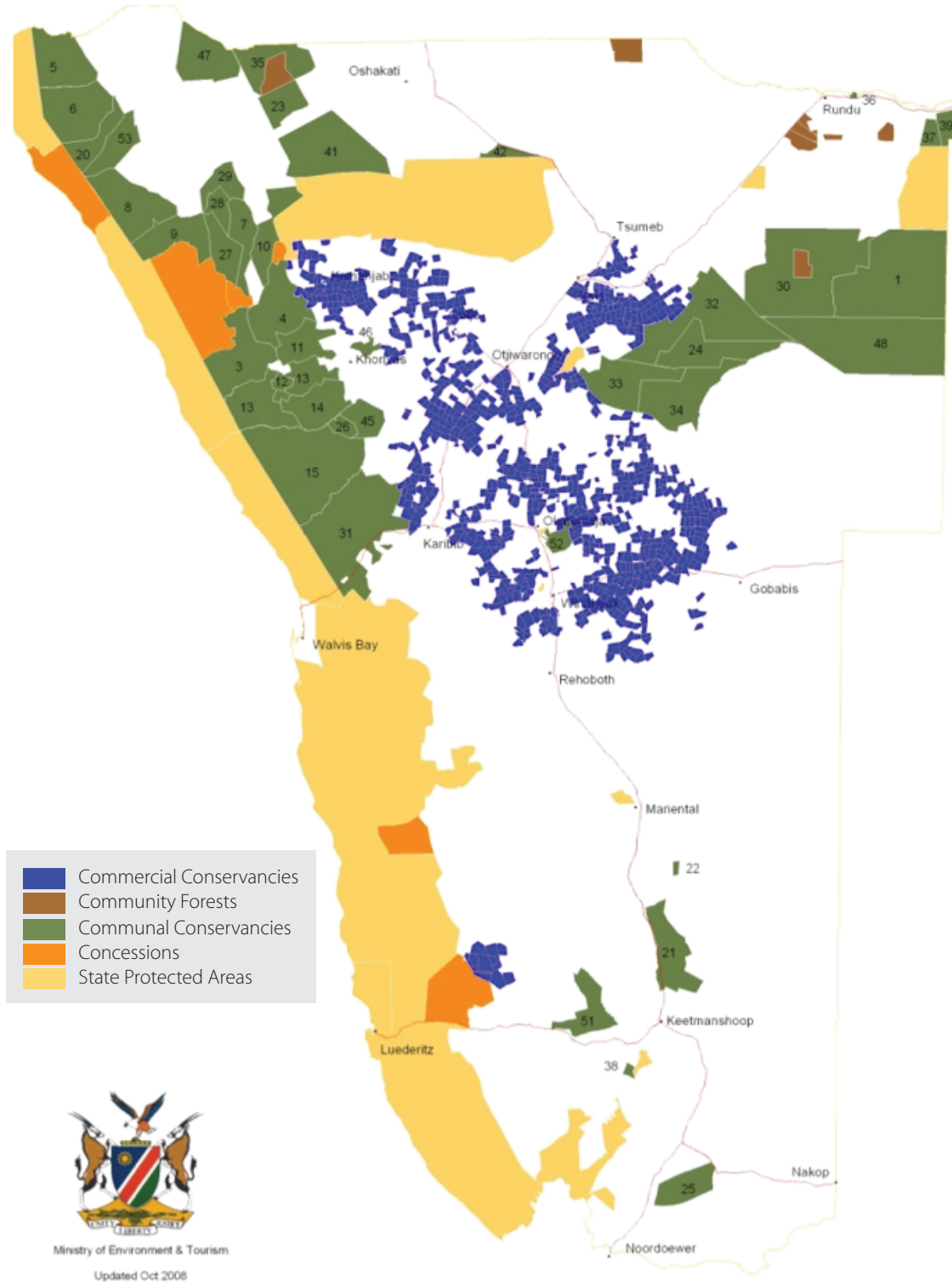
To this end, the government, in partnership with civil society, created a national common vision for sustainable development known as the Green Plan, which was tabled at the UN Conference on Environment and Development (the Rio Earth Summit) in 1992.

The new Environmental Management Act No. 7 of 2007 (EMA) prescribes environmental management principles that all government institutions and private people must adhere to with regard to resource utilization, land use and conservation. It lays down stiff sentences of NAD 500,000 (USD 62,500) or 25 years in prison for non-compliance, and gives a lot of power to the environmental commissioner and his deputy. The commissioner will review all applications for environmental clearance certificates and issue these certificates after approval. The commissioner must also travel around the country and carry out inspections to see if institutions and companies such as mines and tourism operations comply with the EMA. The commissioner further determines whether a listed activity requires an environmental impact assessment. This means that any mining company or land developer for agricultural, industrial tourism or conservation activities must seek approval in the form of a clearance certificate from the commissioner.

Already, 38 percent of Namibia's total land surface is under conservation management (NACSO, 2008, sec. 4) through:

- communal conservancies: 14.4 percent comprises areas in which communities gain rights to use game;
- freehold conservancies: 6.1 percent, on a voluntary basis by private landowners;
- tourism concessions and community forests: 1.3 percent. The latter are formed when a community gains rights to manage forest and associated natural resources in communal land; and
- protected areas on state land: 16.5 percent (national parks and game reserves).

Figure 5: Land under management with conservation as a core objective, 2008



Combined with a strengthened policy framework, Namibia's environmental management is about to undergo a significant change. The founding of the Namibia Institute for Sustainable Development has recently been announced, through the incorporation of the country's two largest NGOs, the Namibia Nature Foundation (NNF) and the Desert Research Foundation of Namibia (DRFN). The NNF and DRFN between them implement and/or support over 100 environmental and sustainable development projects and programs in Namibia, work on a number of transboundary initiatives, collaborate with and support at least eight ministries, work in partnership with more than a dozen local and international NGOs, provide support to many communities and community-based organizations, and carry out research and rural development. The two organizations play an extremely important role in ensuring that Namibia's environment remains healthy and productive and that Namibians use their natural resources in sustainable and productive ways. The institute will command significantly more resources than MET, thus the former's role in Namibia's approach to sustainable development will be significant.

3.2 Environmental performance

Namibia consistently ranks one of the highest in sub-Saharan Africa on the Environmental Performance Index (EPI). A partnership between Yale and Columbia Universities, the EPI offers a composite index of current national environmental protection efforts. Recognizing that on the ground conditions are the ultimate gauge of environmental performance, the EPI focuses on measurable outcomes that can be linked to policy targets and tracked over time.

The EPI builds on measures relevant to two core objectives:

- reducing environmental stresses to human health (the environmental health objective); and
- protecting ecosystems and natural resources (the ecosystem vitality objective).

The quantitative metrics underlying the 2008 EPI encompass 25 indicators chosen through a broad-based review of the environmental science literature; in-depth consultation with a group of scientific advisors in each policy category; the evidence from the Millennium Ecosystem Assessment, the Intergovernmental Panel on Climate Change, the Global Environmental Outlook-4, and other assessments; environmental policy debates surrounding multilateral environmental agreements; and expert judgement. Each indicator builds on a foundation either in environmental health or ecological science.

Namibia's performance on the index for 2008 is as follows:

- EPI rank: 88 of 149 countries (1 being the leading performance);
- EPI score: 70.6 from a possible of 100 (the highest rank obtained is 95.5 by Switzerland);
- income group average: 76.8;
- geographic group average: 57.9; and
- income decile 5 (1 = high, 10 = low).

Namibia's performance on objectives, policy and indicators compared to its region and income category indicates an overall strong international ranking (EPI, 2008).

Section 4: The Trade and Investment Context

Namibia has an open trade and investment outlook, which is reviewed in this section.

4.1 Trade agreements

As is to be expected from Namibia's sectors of economic emphasis and its small domestic market, the country is signatory of many trade agreements and a member of two regional economic communities. Besides the WTO, the country was a member of the Cotonou Agreement with the EU and now the IEPA; the Southern African Development Community (SADC) with 12 other members; and SACU with Botswana, Lesotho, South Africa and Swaziland. These agreements have a varying influence on trade in different sectors. These and other key agreements are presented below.

4.1.1 World Trade Organization

Namibia is a member of WTO and subject to its three main legal instruments:

- the GATT and its associate agreements, applying to trade in goods;
- the General Agreement on Trade in Services, which applies to trade in services; and
- the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS).

The WTO also serves as a forum for trade negotiations and the settlement of trade disputes among nations. WTO rules are applicable to all trade, imports and exports.

Namibia, like many other countries, has incentive schemes as elaborated in the earlier sections of this profile paper. These schemes make it possible for exporters to claim exemption from or drawback of customs duties paid on inputs used in the manufacture of export products and the reimbursement of indirect taxes borne by such products. Such schemes are permitted for limited periods under GATT rules.

4.1.2 Interim Economic Partnership Agreement with the European Union

EPAs are free trade agreements between the EU and the African, Caribbean and Pacific (ACP) countries. While the lack of compliance of the Cotonou Agreement with WTO rules is one reason why EPAs are being negotiated, another reason is that agreements with the EU were failing to promote economic growth as expected. EPAs are therefore meant to be designed as instruments for development and are more than a standard trade agreement. The process of negotiating the EU EPA has been challenging. In some ACP countries, demonstrations against signing EPAs have been witnessed. The SADC EPA Forum has degenerated into a group of a few states. This fragmentation is due to the move by member states to realign themselves with other regional economic communities of their choice.

The Namibian offensive position in the SADC EPA negotiation is to demand a duty-free and quota-free access for beef and grapes (like Chile), which the EU granted in its interim offer to the SADC EPA. The EU proposal to not limit the negotiation to market access is a position that could cause problems to Namibia and other SACU members that do not seem ready to deal with issues such as non-tariff trade barriers, rules of origin, aviation and safety standards, possibilities of having joint funding for infrastructural development, and the inclusion of a new generation of issues – investment and procurement – because SADC negotiators have less experience in these issues. The key issue is reduced policy space.

There has been a lot of public interest surrounding the EPAs that Namibia is currently negotiating with the SADC EPA group of countries. The EPAs had to be negotiated because the Cotonou Agreement was not WTO compatible and the waiver that exempted this trade arrangement expired in December 2007. Namibia, as part of the SADC EPA configuration (comprising Angola, Botswana, Lesotho, Mozambique, South Africa and Swaziland), initialled the IEPA in December 2007. Angola and South Africa did not initial the agreement.

Namibia has reservations about concerns that had been raised throughout the negotiation process and how these will be addressed in the context of the final EPA. The concerns revolved around, among other things, the most favoured nation (MFN) clause, infant industry protection, quantitative restrictions, export taxes, free movement of goods and definition of parties. The IEPA entails duty-free and quota-free treatment for all Namibian goods entering the EU market, as opposed to the old trading regime under the Cotonou Agreement that had quota restrictions and duties.

CTA (2008) provides analysis of the more contentious issues, summarized here. The various IEPAs will have profound and immediate implications for national development policies. Key concerns are:

- provisions prohibiting or limiting the use of import and export licences and other market regulation measures;
- provisions restricting the use of export taxes as a policy tool to stimulate movement up the agricultural value chain;
- the tariff standstill commitments made in the evolving context of high global food prices;
- the provisions dealing with IIP and their consistency with existing national and regional arrangements for IIP; and
- the provisions dealing with agricultural safeguards and food security issues.

There are concerns that the provisions of the SADC EPA could prevent the use of many important policy tools that help to achieve national development goals. The use of tools such as export taxes in ACP countries needs to be seen against the background of the more limited range of policy tools available to stimulate value added processing. Export taxes may prove a useful tool in developing the value chains associated with products based on traditional knowledge such as hoodia. The commercial value of hoodia lies not in the root itself, but in the value added products derived from the root. A 100 kilogram pack of hoodia and rooibos blended tea retails at NAD 70,000 (USD 8,750), equivalent to NAD 700,000 (USD 87,500) per tonne. The important question is thus how to stimulate the production of value added hoodia products. One suggested tool is the use of export taxes on raw hoodia, with export licences only being issued on the basis of a progressively increasing percentage of local value added processing. An EPA could prohibit the government from applying such a strategy.

The provisions of the IEPA on IIP can also give rise to problems for regional integration initiatives. The IIP provisions under the SACU agreement stipulate that provisions for IIP only apply where duties are levied equally on like products imported from outside that area. Thus, were the IEPA provisions to be applied, involving separate measures and arrangements for their invocation, then the IIP made available under the SACU agreement would be brought into question and would de facto become inoperative. This could then serve to undermine IIP accorded to newly established agrifood processing industries, to the detriment of the local structural development of the agrifood sector (e.g. pasta and UHT milk production, mentioned previously).

However, without an EPA offering preferential access to the EU for Namibian beef and other items, local industries would lose market share. Namibia is at a very difficult fork in the road with regard to moving further towards regional integration¹⁰ or maintaining its crucial link to European markets.

10 See <<http://www.saiia.org.za/development-through-trade-opinion/on-the-future-of-the-southern-african-customs-union.html>>.

4.1.3 Generalized System of Preferences and the African Growth and Opportunity Act

As a developing country, Namibia receives preferential market access for some of its products in certain developed countries' markets under various GSP schemes. These are mainly manufactured/processed goods and agricultural products. Eligible products can enter these markets duty free or at reduced duty rates. The following countries grant GSP treatment to some products originating from Namibia: Australia, Canada, the EU, Hungary, Japan, New Zealand, Norway, Switzerland, the US, Poland, the Czech and Slovak Republics, the Russian Federation, and Bulgaria. GSP-granting countries have different requirements.

One GSP is very notable. The US AGOA provides reforming African countries with the most liberal access to the US market. It provides duty-free and quota-free access to the US market for essentially all products originating from eligible sub-Saharan African countries. However, an exception is made for the textile and apparel industry, which is regarded as sensitive in the US market. For an eligible country to enjoy duty-free benefits provided for under this sector, it is required to put into place an effective tracking system that would ensure that illegal transshipment of textile and apparel products into the US market does not occur. Namibia is one of the countries that was designated as eligible for the AGOA benefits and has been certified as eligible for the textile and apparel benefits, after establishing the required visa system.

4.2 Regional economic communities and trade agreements

Regional integration could in future become one of the most significant forces in Namibia's international trade relations. Three agreements mentioned below represent important mechanisms, but other forms of economic cooperation are also significant.

4.2.1 Southern African Customs Union

SACU, the oldest customs union in the world, comprises Botswana, Lesotho, Namibia and Swaziland (known as the BLNS countries) and South Africa. Namibia became a member of SACU in 1990, after having been a de facto member during the time the country was under South African rule. In terms of the SACU Agreement, there is free movement of goods among the members. Article 2 of the agreement prevents members from imposing duties or quantitative restrictions on goods grown, produced or manufactured in the common customs area. Duties are levied on goods once they enter the common customs area, but when inside the area, no further duties are charged.

SACU has a free trade agreement in place with Mercosur, which is a regional trade agreement among Argentina, Brazil, Paraguay and Uruguay, and the European Free Trade Association. These agreements have not yet had a major impact on Namibia's trade flows and potential to attract investment.

4.2.2 Southern African Development Community

Namibia is a member of SADC, whose ultimate objective is the creation of an integrated regional economic bloc. Member states are Angola, Botswana, the Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. Each member state has responsibility to coordinate a sector or sectors on behalf of others. Namibia is responsible for marine fisheries and resources, as well as the legal sector.

In August 1996 member states adopted the SADC Trade Protocol, which aims to establish a free trade area (FTA) in the SADC region. The FTA was launched in 2008. Goods are accepted as originating in a SADC country if they have been wholly produced in a member state. Alternatively, goods must have been produced in the member state partially from materials imported from outside the member states or of undetermined origin by a process of production that effects a substantial transformation of those materials.

4.2.3 Bilateral agreements

Namibia has bilateral trade agreements with partners who, it can generally be said, supported the country during the war for independence: Angola, Tunisia, Zimbabwe, Cuba, Ghana, India, Malaysia and the Russian Federation. Of these agreements, trade with Angola is notably growing in significance.

4.3 Foreign direct investment

The Government of Namibia has an open attitude towards foreign direct investment (FDI), with the exception of farmland. Incentives are available, especially with regard to manufacturing and the export of manufactured goods. Government policy supports free enterprise and protects against expropriation. The country further possesses a sophisticated banking system and its own stock exchange. Investors choose Namibia from among its neighbours because of its peace, stability and good governance. The country possesses quality infrastructure, including extensive road, rail and air networks; efficient ports; world class telecommunications services; and a reliable, good quality power supply.

MTI is responsible for the development and management of Namibia's economic regulatory regime, and the Namibia Investment Centre promotes and facilitates investment in Namibia. The government has created a liberal investment regime with generous investment and tax incentives and a fast, efficient and transparent bureaucracy, while maintaining macroeconomic stability.

In 2005 Namibia was classified as a low FDI potential/high FDI performance country by the UN Conference on Trade and Development, meaning that it has had to overcome significant limitations with respect to a small domestic market, skilled labour shortages and critical infrastructure challenges to perform above potential. Gross fixed capital formation is about 23 percent of gross national income, which is the total value produced within a country (i.e. its GDP) together with its income received from other countries. While this figure is relatively good by regional standards, Namibia aspires to compete with the most dynamic emerging markets, which usually perform much better (FIAS, 2006).

Section 5: Sectors of Environmental and Economic Importance in Namibia

Sectors of major importance in Namibia are reviewed in Table 1, along with their performance in the period from 2001 to 2008 and outlook in the coming years.

Whenever there is an economy, there are environmental impacts. These impacts may be positive or negative, but trade is linked to the environment, because economic change has environmental impacts. If we accept that trade can be both good and bad for the environment, the need to analyze the environmental impacts of trade becomes obvious. Where trade is liberalized, policymakers need to be prepared to capture the positive opportunities and avoid any negative outcomes that may result.

Types of trade impacts on environment were categorized as follows (adapted from OECD, 1994; Copeland & Taylor, 2003; UNEP & IISD, 2005):

- **Scale effects** indicate that more economic activity can lead to the more environmental damage, with all other factors being equal. Demand may allow economic activity to utilize resources that had previously not been used, increasing the national scale of such activity. Increased wealth may eventually increase the country's capital stock, meaning again that a greater amount of activity is possible, increasing raw material use and consequent process-related pollution. In a positive light, some sectors can scale back their production and countries can import from a more efficient producer.
- **Structural effects** refer to increased efficiency in the economy overall, the result of comparative advantage, whereby each trading partner produces those items at which it is relatively more efficient. Production increases where a country has comparative advantage; some sectors scale back and import; the result is a changed economic structure for the country as a whole. If a country specializes in more environmentally friendly sectors, there is an overall net benefit to the environment, and vice versa.
- **Technology effects** are apparent when efficiency means less use of raw materials and/or less waste and pollution created in the production process. Trade liberalization increases efficiency through the importing of new technologies, through new FDI or through the innovation of domestic firms that are forced to become more efficient when their tariff protection is removed.
- **Direct effects** are a direct result of trade itself. This can include pollution from transporting traded goods, invasive species that are transported with traded goods, trade in endangered species and other forms of illegal trade.
- **Regulatory effects** are the environmental impacts caused by trade-induced regulation. A positive example is higher environmental standards that result when the country's citizens become increasingly wealthy as a result of trade liberalization and seek such change; or when the provisions of investment law allow environmental regulations to be challenged as indirect expropriation.

Shackleton, Shackleton and Gambiza (2008) consider the effect of international trade agreements within the framework of ecosystem services and poverty alleviation. Trade agreements are important indirect drivers of both positive and negative impacts on ecosystem services and their linkages to poverty.

At the international level, globalization is a significant process having numerous impacts on ecosystem services. Although limited information exists, it is clear that it is not always positive and it is likely to involve trade offs, especially for the poor. Examples cited in Schakleton, Shackleton and Gambiza's report include IEPA policies for beef (in Botswana), which are likely to further drive negative trends in rangeland degradation. Further, global markets tend to seek the lowest priced supply so that producers are vulnerable to being undercut and losing market share. Producers thus try to maximize short-term gains, usually leading to accelerated rates of environmental degradation and 'eventually leaving local people in the position where they have neither the capacity to produce commodities nor the local resource base on which to fall back' (Shackleton, Shackleton & Gambiza, 2008: 86).

Ash and Jenkins (2007: 6) find that '[a]lthough not explicitly recognised, it is clear that many national and international processes, treaties, policies and negotiations in non-environmental or development sectors relate directly to ecosystem services and biodiversity'. Typically, for example, natural resource commodities such as timber and genetic resources, and trade in agricultural products are considered in isolation from their roots as the services supplied by ecosystems. As a result, the value of the ecosystem in their supply is seldom recognized. In particular, the global trade agenda and ongoing discussions under bodies such as the WTO are in practice affected greatly by the changing capacity of biodiversity and ecosystems to provide services, and decisions taken from the international level through to the individual in all areas of society have the potential to impact on biodiversity and ecosystems, and thereby on the services from which people benefit.

There is thus significant scope for further consideration of trade and human wellbeing linkages through an ecosystem service rather than through a purely environmental lens. This will be explored further in section 7.

Table 1: Sectors of major importance to Namibia's economy

Sector	Contribution to economy	Performance in 2000s	Outlook
Mining	<ul style="list-style-type: none"> - Good for GDP contribution, FDI and foreign currency reserves - Negligible contribution to employment or poverty reduction 	<ul style="list-style-type: none"> - Strong interest in uranium mining, long-term contracts, but influenced by spot prices, which dropped from about USD 90 per pound in January 2008 to about USD 44 in October, but recovered slightly to USD 53 end of 2008 - Production increased due to Langer Heinrich Mine - Diamond production declined slightly during 2008 due to a drop in onshore production. Substantial drop in demand experienced at the end of 2008 - Copper mine closed mid-December 2008 reportedly because of price decline; 640 direct job losses + indirect losses in service industries (transport, repair, etc.) 	<ul style="list-style-type: none"> - Good for uranium; diamonds expected to remain stagnant
Agriculture	<ul style="list-style-type: none"> - High contribution to employment - Potential for greater GDP contribution and investment - Highly vulnerable to changes in climate, e.g. increased aridity leading to decreases in maize production and a reliance on millet (Stige et al., 2006) 	<ul style="list-style-type: none"> - Subsistence crop farming affected by floods and droughts; below average harvest - Commercial crop sector; 50 percent under irrigation, hence less affected by weather conditions; overall, above average since less affected by droughts and not by floods - Horticulture affected by fruit fly at the end of 2008 resulting in border to South Africa being closed, but did well otherwise - Input costs increased significantly, especially for phosphate-based fertilizers - Debate on Small Stock Marketing Scheme continues 	<ul style="list-style-type: none"> - Excellent potential in overseas organic market if certification costs can be brought down - Improved if more sustainable options for northern farmers and appropriate insurance schemes are devised - High oil prices raise interest in jatropha plantations in Caprivi and Kavango
Fisheries	<ul style="list-style-type: none"> - Fishing industry largely foreign owned and operated; greater potential for job creation realized through pulling back value chains, i.e. canning and certification in-country 	<ul style="list-style-type: none"> - Had to cope with high oil prices - Landings of some species increased, but dropped for others, although total allowable catch remained unchanged - Marine aquaculture almost collapsed because of red tide 	<ul style="list-style-type: none"> - Marine Stewardship Council certification could improve margins
Manufacturing	<ul style="list-style-type: none"> - Contribution to GDP increased over past years, indicating diversification of the sector 	<ul style="list-style-type: none"> - Textile industry, but short lived (Ramatex) - Diamond cutting and polishing - Mineral processing (copper and zinc) - Farmers restocked herds; less livestock 	<ul style="list-style-type: none"> - Good if cleaner production efforts increase and EMA takes effect in practice
Construction	<ul style="list-style-type: none"> - Growing, but foreign dominated 	<ul style="list-style-type: none"> - Infrastructure projects such as railway and road network extension and rehabilitation, Caprivi Interconnector, etc. - Development of new mines and related infrastructure - Additional tourism and office facilities - Additional electricity-generating capacity 	<ul style="list-style-type: none"> - Good, but requires attention to ensure local benefits
Energy	<ul style="list-style-type: none"> - Limited contribution to GDP and employment 	<ul style="list-style-type: none"> - Electricity 'crisis' withstood, but at high costs - Demand is declining due to demand side management (electricity-saving bulbs) and reduction in economic activities (in particular, closure of copper mines) 	<ul style="list-style-type: none"> - Carbon sinking status threatened by coal fired power plant proposal - Good prospects for renewables, biofuels, but more demonstration ('proof of concept') projects needed
Services (including tourism)	<ul style="list-style-type: none"> - Large contribution to employment and significant contribution to GDP demonstrated through satellite accounts (but not CSO codes) 	<p>Tourism:</p> <ul style="list-style-type: none"> - Increase in tourist arrivals of 7 percent, but lower than in 2007; 'soft landing' from recession due to low currency - Bed occupancy rate increased slightly <p>Transport:</p> <ul style="list-style-type: none"> - Increased handling of cargo at the two ports - Sector affected by high oil prices <p>Wholesale and retail sector:</p> <ul style="list-style-type: none"> - Affected by lower disposable income due to high food and fuel prices during the first half of 2008 <p>Government:</p> <ul style="list-style-type: none"> - Expansionary budget (expenditure increased by over 20 percent) resulting in anticipated budget deficit of 2.7 percent 	<ul style="list-style-type: none"> - Very good, despite global economic downturn
Financial markets	<ul style="list-style-type: none"> - Limited 	<ul style="list-style-type: none"> - Banking sector not directly affected by slowdown, since not heavily exposed to foreign markets - Namibia Stock Exchange index declined, indicating losses for portfolio investors - Pension funds and hence pensions are affected - Stock of foreign reserves healthy and supportive of repo rate differential between Namibia and South Africa 	<ul style="list-style-type: none"> - Limited

Source: Adapted from NEPRU (2008; 2009a; 2009b) and EIU (2008), based on CSO data

5.1 Opportunities

Underexploited opportunities for Namibia's economic development can be identified in carbon markets, biodiversity, agriculture and tourism.¹¹

5.1.1 Carbon markets

There are opportunities within the CDM (trade in the formal carbon market), as well as the voluntary carbon market (VCM) (an informal carbon market) described below. As a non-Annex I party to the UN Framework Convention on Climate Change (UNFCCC), Namibia is eligible to host GHG mitigation projects to earn certified emission reductions (CERs). In August 2007 the cabinet approved the establishment of an office for the Designated National Authority (DNA) at MET and the country's CDM office at MTI. In May 2009 DNA is established and operational, and is supported by the Namibia Climate Change Committee, but the establishment of the CDM office has experienced delays. Project proponents wishing to benefit from CERs are required to work through the CDM and DNA offices to identify, prepare, and ultimately launch and undertake their projects. A number of project idea notes, which constitute the very first step in developing a project that is to benefit from CERs, have been assessed. These include a proposal for the development of geothermal sources, using invader bush in cement production and a biogas to electricity plant, and a wind farm. While Namibia has made some progress towards participating in the CDM-related activities, further institutional and project development support is required to ensure that the country can fully benefit from the many opportunities presenting themselves through the CDM.

The VCM exists in parallel with the CDM. Unlike the regulated CDM, the VCM has no regulatory body and relies on various voluntary standards. These standards specify how projects can benefit from GHG emission reductions without having to fulfil the CDM's many bureaucratic and administrative requirements. VCMs therefore provide greater flexibility to those offering carbon credits and to those wishing to purchase carbon certificates. A host of special purpose carbon credit vehicles exist. Some VCM schemes are set up to specifically benefit projects offering more than just carbon reductions. For example, development projects promoting specific development initiatives while simultaneously reducing the carbon signature of such activities are popular. The VCM caters for individuals who wish to reduce their carbon footprint, such as airline passengers, companies and institutions that wish to benefit from a greener image and see other benefits, such as the support of a project in a developing nation, by offsetting their emissions.

5.1.2 Land use, land use change and forestry

At present, the UNFCCC has approved CDM methods for afforestation, reforestation and agriculture. Within these methodologies, the following topics could be of interest for the development of LULUCF opportunities in Namibia:

- restoration of degraded lands through afforestation/reforestation;
- afforestation/reforestation with trees supported by shrubs on degraded land;
- afforestation/reforestation on degraded land for sustainable wood production;
- methane recovery in animal manure management systems;
- methane recovery in agricultural activities at the household/small farm level; and
- GHG emission reductions from manure management systems.

¹¹ These opportunities were arrived at through expert input and analysis.

Any formal post-2012 carbon trade arrangements will to a significant degree determine the scope and potential of LULUCF-related certificate trading activities. The following preliminary LULUCF-related issues require further investigation:¹²

- sustainable land use criteria for bush-encroached areas in Namibia;
- cost benefit analyses of the various LULUCF options, with a focus on those areas that have established baseline procedures and methodologies;
- field trials to investigate the recommended dose, longevity and method of application of biochar,¹³ and associated costs and benefits under Namibia's climatic conditions;
- quantification of benefits of value chains related to the biochar production process;
- opportunities for synergies in the production of biochar, especially from related sectors and existing or new agricultural and/or forestry products;
- business models for private sector and institutional biochar production;
- local, regional and international market opportunities for Namibian-produced biochar;
- biochar production chains, using existing agricultural and/or forestry practices;
- value-adding processes that could benefit from biochar production in Namibia;
- institutional support mechanisms to establish and sustain a biochar sector in Namibia;
- technology requirements for the establishment of a biochar sector; and
- human resource requirements to initiate and sustain a biochar market in Namibia.

5.1.3 Trade in biodiversity

It has long been believed that Namibia could be a significant exporter of plant-based natural products resulting from its unique terrestrial biodiversity and indigenous traditional knowledge found within its numerous cultural groups. The ongoing GTZ-supported Biodiversity and Sustainable Land Management project (2004–11) supports the development of selected indigenous natural products and the exploration of marketing channels in order to promote alternative income opportunities and adds value to Namibia's biodiversity. The project works closely with Namibia's Indigenous Plant Task Team (IPTT), a multistakeholder coordinating body that proactively creates sustainable economic opportunities based on harvesting, processing, and trading indigenous plants and natural products. The promotion of the utilization and commercialization of indigenous plant resources is included in Namibia's NDP3 and forms part of the country's agricultural policy.

Namibia's National Biotrade Pipeline is steered by the multistakeholder IPTT, but implementation is guided by flexible, market-driven responses. Information sharing between this and other projects, as well as with partners, maximizes synergies. The MCA will also support capacity for the certification of Namibian natural products. By value, Namibia's biodiversity and natural resource commodities trade is already significant – and growing through the global economic slowdown.

5.1.4 Agricultural trade

The Green Scheme Policy aims to build capacity through the training of small scale farmers in irrigation technology and the production of high value agricultural products, as opposed to low-level cereal crops. It has been enhanced at various irrigation schemes along the perennial rivers that bor-

¹² Further information is available from Zeidler (2008).

¹³ Biochar and its significance are discussed in detail in section 6.2.

der the country, which it shares with other riparian states, as well as near major dams. The mission of the Green Scheme is to create an enabling, commercially viable environment through effective public-private partnerships. The premise is to attract and enable large scale commercial farming enterprises to establish commercially viable entities in remote undeveloped rural areas and act as a service provider to small and medium scale farmers.

Other opportunities can be realized through increased horticultural production and development of both marine and inland aquaculture.

5.1.5 Tourism diversification

The current national tourism policy (2001–10) states that Namibia has a unique, but fragile resource base and all stakeholders must strive to develop high quality, low impact tourism products. This should include the promotion of the diversification of activities, e.g. cultural, craft, historic, etc., while issues such as improvement of the service industry should be addressed. Several projects have been successfully established and the Namibian Community-based Tourism Association has put an online booking facility in place. Cultural tours are growing in popularity, the best known being Katurura Face-to-face Tours. Diversification of the tourism product to the north-central regions and into more cultural tourism products is encouraged.

5.1.6 Small, medium and micro enterprises development

The small, medium and micro enterprises (SMME) sector is critical to Namibia's poverty alleviation imperative and reducing historical inequalities, and economists generally agree that SMME are drivers of developing economies. Small business can be divided between established formal SMME in predominantly urban settings and the emerging SMME economy in townships, informal settlements and rural areas. Women continue to make up the bulk of the subsistence sector of SMME and of the poor, and the empowerment of women is a significant rationale to develop small businesses.

5.1.7 Payments for ecosystem services

Payments for ecosystem services (PES) promote the conservation of natural resources in the marketplace. PES programs provide incentives for the private sector to incorporate sustainable practices into production and resource management. PES are also framed as a redistributive mechanism between different social groups that is framed in the context of inequality concerns in rural-urban dynamics. PES are a great idea, but are only really working very effectively in wetlands in the US. Buying shares of protected areas is another market possibility. Watershed protection is another growing area of PES. Bundling more value into PES schemes helps to enhance the co-benefits to biodiversity of such an arrangement, especially when conducted with carbon market projects. A pilot project in the Succulent Karoo biome will yield interesting results for policymakers considering PES in drylands.

5.2 Environmental impacts on sectors

From the analysis of Namibia's trade and environment situation, using the previously described categorization of types of trade and environment effects, the effects of trade agreements on various sectors are summarized in Table 22. Positive impacts are denoted with the short form '+ve' and negative impacts with '-ve'.

Table 2: Environmental impacts of trade and investment in Namibia

Economic sector	Trade and investment drivers	Main environmental impacts	Mediating factors/environmental management framework
Mining	<ul style="list-style-type: none"> - Growing demand from emerging markets - Potential of increased FDI 	<ul style="list-style-type: none"> +ve Increasing pressure for corporate social responsibility and voluntary rehabilitation by e.g. parent company Rio Tinto -ve Mining in protected areas: impacts on landscape, flora and fauna 	<ul style="list-style-type: none"> +ve EMA in place for mandatory environmental impact assessments (EIAs) and rehabilitation of mined sites -ve Slow implementation of the provisions on the mandatory rehabilitation of mining sites -ve Limited enforcement capacity for the EMA
Agriculture	<ul style="list-style-type: none"> - Pressure to increase regional trade - Technical provisions in the IEPA with the EU 	<ul style="list-style-type: none"> +ve Rural development opportunities reduce urban sprawl -ve Increasing use of water – a very scarce resource -ve Land degradation and loss of biodiversity where agriculture is not managed sustainably -ve Conflict over access to land 	<ul style="list-style-type: none"> +ve Country Pilot Partnership for Integrated Sustainable Land Management provides framework for harmonizing policies -ve Limited implementation of the Water Act
Fisheries	<ul style="list-style-type: none"> - Global growth in demand 	<ul style="list-style-type: none"> -ve Unsustainable fishing and depletion of fisheries -ve Illegal fishing 	<ul style="list-style-type: none"> +ve EMA in place and coastal management projects ongoing such as NACOMA for Benguela current ecosystem management -ve Limited capacity for monitoring fish stocks
Manufactures	<ul style="list-style-type: none"> - Preferential treatment in textiles 	<ul style="list-style-type: none"> +ve Incentives for cleaner production in international markets -ve High use of water; groundwater contamination risk 	<ul style="list-style-type: none"> +ve EIAs mandatory and guidelines for cleaner production exist -ve Limited monitoring capacity
Energy	<ul style="list-style-type: none"> - Growing global demand - Competition against South African energy sector which is highly subsidized - Carbon market opportunities 	<ul style="list-style-type: none"> +ve Use of bush encroachment (a form of land degradation) for electrification -ve Land use conflicts -ve Reduced absorptive capacity of wooded areas 	<ul style="list-style-type: none"> +ve Existing CDM, DNA, climate change framework -ve Coal fired power plant proposal out of realm of committee authority
Tourism	<ul style="list-style-type: none"> - Low exchange rate of NAD makes Namibia competitive 	<ul style="list-style-type: none"> +ve Financing of protected areas and conservation initiatives -ve Major markets involve long-haul travel 	<ul style="list-style-type: none"> +ve Biodiversity framework, CBNRM policy, the number of gazetted protected areas and conservancies -ve Tourism policy does not reference climate change

Source: Authors' analysis; framework and guidance from Shaw et al. (2007a; 2007b)

However, this summary falls short of demonstrating the full complexity of interactions between trading regimes and the environment in Namibia. Some key issues are teased out in more detail in the next section.

5.3 Interlinkages of trade and environmental issues¹⁴

Developments in the international arena and at the national level are rapid. Combined with research and policy studies that dictate some approaches versus others, and pilots that reveal evidence for decision maker consideration, there is much to consider within this realm. Some key issues are described below, grouped around biodiversity, energy and land use, markets and technical barriers, and relevant national policies with international implications.

5.3.1 Biodiversity

Namibia has made substantial progress in natural products commercialization, bioprospecting, access and benefit sharing (ABS), organic certification, and community-owned institutions/enterprises, with strong support from the Ministry of Agriculture, Water and Forestry (MAWF) and MET. There is a need to better include biodiversity aspects into national trade-related policies and strategies. Trade-related issues often hinder access to lucrative international markets, e.g. sanitary and phytosanitary (SPS) regulations and technical barriers to trade. Some issues around trade in biodiversity

¹⁴ With special thanks to Pierre du Plessis.

are access and benefit sharing, bioprospecting, primary producers' share of value chains, and the potential of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to play a role in certification.

Access and benefit sharing and bioprospecting

One of the three fundamental objectives of the Convention on Biological Diversity (CBD) is that benefits derived from the use of biodiversity are shared equitably.¹⁵ Benefits do not always reach the traditional owners of genetic resources and associated traditional knowledge. In the past, local communities and countries of origin were often not even informed about the use of their genetic resources and associated traditional knowledge, thus limiting their bargaining power and preventing them from sharing in the benefits of their own resources. Growing concern over the monopolization of benefits led genetic-resource-providing countries to restrict access to genetic resources and associated traditional knowledge. This was part of the original impetus to negotiate the CBD. The CBD recognizes the importance of the knowledge, practices, and innovations of indigenous and local communities (art. 8(j)) and makes provision for prior informed consent to be obtained by any public or private enterprise seeking access to biodiversity resources (art. 15). An international regime on ABS is up for adoption at the CBD Conference of the Parties in 2010, with the aim of adopting an instrument or instruments to effectively implement the provisions in Articles 15 and 8(j) of the CBD and thus realize its three original objectives: conservation, sustainable use and ABS.¹⁶

Namibia is an international leader in the ABS regime negotiations, co-chairing both the working group and contact group on ABS. Continued unclear linkages with the trade regime are exploited by countries who wish to shut the space for debate and postpone an international commitment on a legal ABS regime.

Bioprospecting is the search for economically valuable genetic and biochemical resources from nature. The aim of bioprospecting is usually to generate patents or trade secrets. Access to biological and/or genetic material requires prior informed consent and mutually agreed terms between providers and users (the responsible Namibian authority is the Interim Bioprospecting Committee). ABS requirements under the CBD should not hinder biotrade. Namibia has an Interim Bioprospecting Council within the MET Division of Scientific Services. All relevant government ministries are members. Negotiating aspects around bioprospecting that need to come through the trade negotiations. Existing national processes are ongoing with important stakeholders.

Primary producers' share in value chains

Ownership and control over value chains are important for Namibia and its communities to benefit from the natural products made from its resources. Devil's claw, for example, earns around NAD 30 million (USD 3.75 million) for Namibian producers, but earns NAD 342 million (USD 42.8 million) on the European market. More than 65 percent is exported to traders who do the quality control and milling. More profit is lost on packaging and marketing. A 100–150 percent mark up could be partially or fully pulled back into the country. This is MTT's mandate, but Namibia must be pragmatic with economies of scale for Namibia.

15 Users of genetic resources may include research institutes, universities and private companies operating in various sectors such as pharmaceuticals, cosmetics, agriculture, horticulture and biotechnology. Benefits derived from genetic resources may include the result of research and development carried out on genetic resources, the transfer of technologies that make use of those resources, participation in biotechnological research activities, or monetary benefits arising from the commercialization of products based on genetic resources. One example of monetary benefits could be the sharing of royalties arising from patented products based on genetic resources.

16 Naturally, ABS has been controversial, partly as it overlaps in numerous ways with provisions in trade law. Since the entry into force of the WTO TRIPS Agreement in 1994, developing countries have called for the exploration of the relationship between the CBD and intellectual property rights. In parallel, CBD Conference of Parties decisions have stressed the need to gather information on the impact of the TRIPS Agreement on achieving the CBD's objectives. Work of the World Intellectual Property Rights Organization Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore is relevant as a forum for debate and dialogue on the relationship among intellectual property, traditional knowledge, genetic resources and traditional cultural expressions.

One feasible and pragmatic way to ‘pull back the value chain’ is for Namibian laboratories to be accredited as capable of certifying Namibian products to EU standards. Some procedures are accredited, but laboratories can struggle to maintain these accreditations (the procedures themselves are accredited, not the laboratories). A laboratory at the coast lost its accreditation to certify fish as safe for the EU market. Now, fish have to be flown to Cape Town in order to receive their necessary certification of safety.

CITES (links to livelihoods)

The MET Division of Scientific Services has been a very strong force in the CITES negotiations. At the thirteenth CITES Conference of the Parties in 2004, an amendment was agreed recognizing that implementation of CITES listing decisions should take into account potential impacts on the livelihoods of the poor. The emphasis is on how CITES listing decisions are to be implemented, rather than on whether to list species on the appendices. Listing of species in CITES Appendix II (‘trade with caution’ once avoidance of impacts can be proved) can have great impacts on livelihoods relating to the sustainable use of species. It is a way to ensure that trade is sustainable, but is not currently used as a certificate of sustainable trade. Namibia has an opportunity to innovate by using CITES Appendix II listings as an opportunity to create a type of certificate of sustainable trade.

The proposal to list devil’s claw on CITES Appendix II had a number of effects. It reduced interest from niche markets (those interested in sustainability); it limited competition by reducing the number of players, which put a downward pressure on prices; it gave impetus to cultivation efforts; and it gave impetus to certification. Devil’s claw should not have been considered for CITES listing because it is an invasive weed and there is no scientific evidence of a threat to the species, while thousands of harvesters were engaged in the trade. Hoodia is a much more suited to a CITES listing. It is slow growing in low densities, it is vulnerable to illegal harvesting and it has a high potential commercial value. Listing can help protect the resource and facilitate an increased potential contribution to the livelihoods of local harvesters (Dickson, 2006). The contribution to livelihood security of this option should not be underestimated, but there is still a need to practically demonstrate that a CITES Appendix II listing can be used as a ‘seal of sustainability’.

5.3.2 Energy and land use

Bio-energy

Opportunities in Namibia’s bush-to-energy, charcoal and biochar sectors are plentiful, but have not yet been developed to their full potential. Combating Bush Encroachment for Namibia’s Development (CBEND) – a proof of concept project to turn woody invader bush into electricity – is ongoing and is coordinated by the DRFN. The project will install one approximately 0.25 MW bush-to-electricity power-generating plant in a densely bush-encroached area of Namibia. Fuel for the power plant will be derived from harvested invader bush, using mainly bush-thinning rather than bush-clearing techniques, and the electricity produced will be supplied to the national grid. The technology considered is wood gasification. A large scale rollout of this technology offers considerable potential for job creation and the rehabilitation of bush-infested rangelands. Demonstration projects such as CBEND are very important for providing policymakers with evidence of viable bio-energy projects.

Biofuels are experiencing a growing interest in Namibia too. A private company is attempting the commercial growth of castor as a feedstock for biodiesel production, while another entrepreneur has commenced growing jatropha in the country’s northeast. Growing biofuel crops in Namibia requires a careful selection of the land, as well as sustainable land tenure arrangements and the availability of sufficient water and labour. A Namibian biofuels roadmap was compiled a few years ago, and a number of commercial and communal actors are interested in the promotion of biofuels in the country, including the Namibian Agronomic Board and others.

Carbon markets

Negotiations regarding the CDM and post-2012 carbon regime are unlikely to deliver appropriate LULUCF options, as much of the negotiations have already been carried out. Clarity on the next commitment period's requirements is needed, especially in regard to appropriate LULUCF options of interest to Namibia. A further question is, how do dryland forests, such as the areas covered by Namibian invader bush, benefit from any future agreements?

Regarding Agriculture, Forestry and Land Use, the African Climate Solution,¹⁷ there are questions around how Namibia would fit into this picture. Voluntary markets are growing extremely quickly. This is where Namibia needs to look for the future in LULUCF. These markets are flexible enough to be innovative.

5.3.3 Markets and technical barriers

Technical barriers to trade

There are many mechanisms through which Namibian products are being kept out of markets. SPS measures that are meant to address food safety are a major technical barrier to trade, as standards for 'safe' can vary widely. Namibian producers (and many others worldwide) express concern that strict health and safety regulations can be used as an excuse for protecting domestic producers. A WTO agreement on how governments can apply food safety and animal and plant health measures sets out the basic rules for SPS measures. The SPS Committee is where discussions on EU novel foods (discussed in the next paragraph) occur. In June–July 2009, Namibia established the National Committee on SPS Issues with MAWF, MTI, the Ministry of Health and other relevant agencies. The committee was formed subsequent to Namibia's participation in a WTO regional workshop on building technical capacity on technical barriers to trade.

Within the EU, novel foods are defined through regulation as a type of food that does not have a significant history of consumption within the EU prior to May 1997. Stipulations state that novel foods must not present a danger for the consumer, mislead the consumer, or differ from foods or food ingredients that they are intended to replace to such an extent that their normal consumption would be nutritionally disadvantageous to the consumer. In other words, novel food applicants have to show that their product is safe either through a history of safe human use, new laboratory trials or 'substantial equivalence' to an existing product on the market. Approval for a novel food is normally a very extensive process. The approval of baobab dried fruit pulp for sale in the EU was delayed for a year by a request for safety trials at an estimated expense of NAD 56 million (USD 7 million). Marula oil's application to become an EU novel food is ongoing. Namibia is the world's largest producer of marula oil. The second largest is South Africa, which is, however, not a member of PhytoTrade Africa, a non-profit trade association that promotes the sustainable harvesting of fairly traded natural products.

The equivalent US standard is 'generally recognized as safe' standard. An exporter of baobab dried fruit pulp is pursuing this status for its product in the US.

Branding and labelling

The Team Namibia concept was spearheaded by the Namibia Chamber of Commerce and Industry in 2003. This concept is the synergistic promotion of Namibian products, services and destinations nationally and, at a later stage, regionally and internationally. In 2004, Team Namibia launched the Naturally Namibian campaign, which aims to promote those Namibian companies, products, services and destinations that are substantially helping to build the economy and are socially responsible. The aim of the campaign is to stimulate sustainable economic growth, thereby minimizing unemployment and alleviating poverty, which in turn will lead to improved social and economic conditions.

17 See <<http://www.africacimatesolution.org>>.

But brands need to deliver on their claims. The reality of Naturally Namibian already exists through reputation in the region, but this has not really translated into a global awareness of Namibia. The country needs to be sure that it continues to deliver, e.g. a coal fired power plant and mining need to be justified within the context of Naturally Namibian branding.

Organic production and certification is a 'low-hanging fruit' for Namibia, as the country is 'organic by default', i.e. artificial fertilizers or pesticides are not used due to ecological sensitivities. Namibia could be very competitive in the international organic products markets if it can bring certification costs down.

Sustainability certification is another potential gain. Sustainability certification and scientific management are the mandates of the Ministry of Fisheries, which is generally not very open to cross-sectoral collaboration. The extent of interaction possible by stakeholders with this ministry is not clear, except on the issues of sustainability certification. Marine Stewardship Council certification has been subject to much criticism and scrutiny, but it is probably the best sustainable fisheries certification system available and is becoming the global standard. Namibia is likely to benefit in terms of EU market share if its fisheries can obtain Marine Stewardship Council certification.

5.3.4 National policy

National policies interact with a country's potential for international trade.

Frameworks for community benefits

A lot is happening within Namibia that is innovative and special in terms of CBNRM, community forestry and other forms of devolution of natural resource rights to communities. The whole approach of devolving benefits and management power is world leading. National policy development processes are moving towards an integrated ecosystem management system. The DRFN's Forums for Integrated Resource Management were an excellent demonstration of this process, and water committees are also innovative. Fishing rights could be integrated into these kinds of community structures. Community-based enterprises are not restricted to CBNRM. The Eudeufano Women's Co-operative involves 14 groups of 5,000 women in Namibia's northern regions. Much more could be made of these initiatives internationally for Namibia to reap benefits.

On the other hand, ecotourism is threatened by mining, not least in protected areas. Domestic stakeholders want a dialogue on mining in order to more explicitly consider some of the costs and benefits. A recent study (Balmford et al., 2009) indicates that many countries throughout the world are seeing continued annual increases in visitors to their conservation areas. In 15 of the 20 countries for which information was available, there was an increase in the number of visitors to their nature reserves. This has important implications for nations who are reliant on nature-related tourism to generate funds for conservation, as well as for engaging the public about the importance of conserving biodiversity. It also indicates that growth can still be expected from ecotourism, and Namibia should not threaten its share of these potential gains by permitting mining in its key tourist attractions.

Corporate social responsibility

Corporate social responsibility (CSR; also, corporate responsibility, corporate citizenship, responsible business, sustainable, responsible business or corporate social performance) is a form of corporate self-regulation integrated into a business model. It involves the deliberate inclusion of public interest into corporate decision making and the honouring of a triple bottom line: people, planet, profit. Examples of CSR in Namibia include the Nedbank Go Green fund, the Rossing Foundation and others. Regulators, industry and service providers could all play a greater role in promoting the concept of sustainable development and the private sector's role in society. Mining rehabilitation and offsets are a prime example where gains could be made. Only Rossing Uranium (which is 68.6 percent owned by Rio Tinto) is said to be paying for rehabilitation in the interim period while the provisions of the EMA take effect. Rehabilitation and biodiversity offsets are two obvious potential CSR initiatives.

Valencia Uranium is the third uranium mine to obtain a uranium mining licence in Namibia. The footprints of these mines are small for the value obtained, but mining needs to be carried out within a holistic landscape perspective. In the case of Valencia, one of the environmental challenges that faced the Valencia team who arrived on site to set up the exploration equipment was the more than 500 elephant foot plants (*Adenia pechuelii*) that lay in the middle of the exploration area. This is by far one of the biggest and most dense populations of elephant foot plants in Namibia. Further, the elephant foot plant is extremely slow growing. As Valencia is committed to ensuring minimum damage or disturbance to the environment, it was agreed that these plants would all be uprooted and replanted in a phased project approach. With special machinery, a crew of about eight and great care, 60 plants have already been replanted in an area that will allow them to continue growing without further disturbance. As the mine project progresses, so too will this project to ensure the rehabilitation of the elephant foot plant population. This is a notable (and promotable) good practice.

Namibia is engaged with this issue through the international Business and Biodiversity Offsets Programme. This group gives good guidance to such initiatives through practical manuals.¹⁸ At least one Namibian sits on the Business and Biodiversity Offsets Programme board as an international advisor.

Cleaner production

Namibia's Cleaner Production program¹⁹ has increased awareness of environmental management in the manufacturing and services industry. Cleaner production has been applied in selected manufacturing and services industries on a demonstration basis. The next step for rollout of the Cleaner Production program remains unclear. This demonstration program could lead to more environmental management system certifications, e.g. through ISO 14001, Six Sigma or The Natural Step. What is required to take this work forward into a trading advantage for Namibia is an import question for consideration.

18 See <<http://www.bbop.forest-trends.org>>.

19 See <<http://www.met.gov.na/programmes/cleaner/manage.htm>>.

Section 6: Sector Analysis

Sectors for further study with the RTEA process were selected by the NEAP based on the initial analysis of Namibia's trade and environment context. Sectors described in section 5 were presented to the NEAP for consideration. Important factors in the decision-making process were whether the analysis could make a tangible contribution to ongoing policy processes and whether it was thought that gains could be made during the time frame and constructive recommendations could result.

The following sector papers are summarized in this section:

- 'EU sanitary demands for red meat trade: Impact on sustainable development in Namibia', authored by Alexander Toto and Susanne Thalwitzer;
- 'Biochar in Namibia: Opportunities to convert bush encroachment into carbon offsets', authored by Detlof von Oertzen;
- 'Ecotourism and the informal carbon market: Is the climate right for change?', authored by Andee Davidson; and
- 'Green labelling, eco-certification and fair trade schemes: Opportunities and threats for Namibia', authored by Kudakwashe Ndhulukula and Pierre du Plessis.

These papers (Toto & Thalwitzer, 2009; Von Oertzen, 2009; Davidson, 2009; Ndhulukula & Du Plessis, 2009) are available in full through the TKN (<<http://www.tradeknowledgenetwork.net>>).

6.1 'EU sanitary demands for red meat trade: Impact on sustainable development in Namibia'

6.1.1 Summary

Harmonizing Namibia's animal health policies with the EU's sanitary requirements for the importation of fresh red meat into the EU market area has great potential to contribute towards national economic growth through increased foreign exchange earnings and household incomes. However, these policies also have the potential to have significant impacts on sustainable development in Namibia. The policies of major concern are those that are related to risk management of foot and mouth disease (FMD).

The importation of red meat into the EU is limited to clearly defined and delineated geographic zones where the veterinary authorities certify livestock as free from FMD and rinderpest. Relevant surveillance, movement controls and other biosecurity measures must be applied in accordance with the World Organization for Animal Health Terrestrial Code. Recognizing the competitive advantages of Namibia with respect to land resources, colonial settlers took a mistaken monosectoral approach to development through promoting the creation of a disease-free export zone for red meat, with disregard for wildlife ecosystems.

Namibia's rangelands are largely classified as drylands, i.e. sub-humid, semi-arid, arid and hyper-arid areas. These rangelands are extremely vulnerable ecosystems. Their unsuitable use inevitably leads to land degradation and, as a consequence, to a decline in the productive capacity of the land. Currently, most rangelands, particularly in communal areas, are in variable states of degradation as a result of very high livestock densities on patches of land that are shrinking due to the expansion of crop production.

Livestock production is the main activity in Namibia's agricultural sector, constituting approximately 85 percent of agricultural income and close to an average of 9 percent of GNP. Namibia's top priority development goals are reduced poverty and narrowing the gap between the rich and the poor. Facilitating red meat exports is considered one of the major avenues for wealth creation and raising standards of living.

The northern regions of Namibia have a significant livestock population. However, the regions face formidable obstacles in developing export oriented livestock production due to international sanitary standards and poor rangelands. Animal agriculture is the mainstay of rural economies in Namibia. Integrated sustainable land management will assure the long-term viability of this sector's role in ensuring food security, supporting development and reducing poverty. It is important to recognize the value of nature-based tourism in order to maximize benefits from wildlife resources on marginal rangelands.

Some of Namibia's current animal health policies were designed to harmonize with EU red meat sanitary requirements based largely on a monosectoral approach that has an inclination towards sacrificing wildlife in favour of developing a competitive commercial livestock sector. Based on the increasing value of nature-based tourism, this approach has little justification. Integrated sustainable land management must promote the development of both wildlife and livestock resources together (not necessarily defaulting to one or the other exclusively) as the key to the efficient utilization of land resources. Regulations developed for the EU country agricultural industry are not necessarily relevant in a drylands and rural African development context. Harmonizing local animal health standards with those of red meat export markets must be socially, culturally and politically acceptable, and economically and ecologically viable.

There is a strong need for close integration of land use planning, conservation efforts and animal health policies related to FMD control in order to maximize the benefits from diverse land use systems. Animal health policies must not be considered in isolation following the monosectoral approaches of yesteryear, but must promote the agricultural and non-agricultural development priorities set by the government. All development policies must be coherent in their contribution towards the efficient management of land resources.

Zoning for animal disease risk management as an animal health policy tool should be implemented following consideration of wider social and economic development objectives. Management of the interface between livestock and wildlife must be guided by risk assessments based on sound science.

Further research is recommended in evaluating the ecological impact of existing veterinary fences and movement restrictions on wildlife. There is also a need to evaluate the extent of social and economic benefits derived from wildlife-based land use systems on marginal rangelands compared to livestock keeping. A comprehensive assessment of the full impact of FMD control policies on land use patterns and poverty reduction in rural Namibia is required to support the transformation of current policies.

A credible animal identification system is a requirement for the verification of the residence status of an animal or a group of animals in a given geographic zone. All animals within that zone should be identified in a unique way so that their history can be verified. Animal movements into and out of the zone should be authorized and controlled by the official veterinary service. Documentation regarding such movement controls must be kept and made available for auditing when required. The identification system, movement controls and the related information system must ensure the full traceability of individuals or groups of animals.

The strategies of managing the risks of animal diseases through demarcating Namibia into animal disease risk management zones has largely worked to facilitate access to both regional and international markets, particularly the EU and South Africa. However, these strategies have not included promoting the marketing of livestock products within the country, particularly the marketing of red meat from northern regions to high value markets in towns located in Namibia's FMD-free zone. International rules that govern trade in livestock and livestock products have the potential to have a

significant impact on economic, environmental and social change in Namibia by building fair and environmentally sustainable policies and trade flows.

6.1.2 Recommendations for capacity building

Raising awareness of possible impacts of animal health policies on integrated sustainable land management within MAWF is critical. There is a need to provide training on the rapid appraisal of the potential impact of harmonizing national animal health policies with requirements of red meat export markets, however negligible the impact may seem. Furthermore, training on risk assessment of the possible introduction of trade-sensitive animal diseases from wildlife populations is needed in order to guide risk-based formulation of policies on managing the interface between livestock and the environment, particularly wildlife.

The EMA and other Namibian legislation provide for mandatory environmental assessment before any activity that has the potential to impact on the environment is undertaken. There is a need to review the enforcement strategies and the capacity for carrying out assessments and conducting monitoring activities in order to bring this legislation to full effect. This approach calls for a closer cooperation among governmental institutions.

6.2 'Biochar in Namibia: Opportunities to convert bush encroachment into carbon offsets'

6.2.1 Summary

Biochar is a solid substance containing considerable carbon residues that are firmly embedded into the organic biomass matrix. Biochar is said to prevent the rapid disintegration and release of carbon dioxide into the atmosphere when buried in the soil, and in this way sequesters carbon for many years.

Considerable proportions of Namibia's natural rangelands are encroached on by invader bush. This phenomenon, called bush encroachment, is recognized as a form of land degradation. It reduces the livestock-carrying capacity of rangelands, leads to a loss of biodiversity, reduces the penetration of rainwater into the soil and thereby reduces the recharge of underground water resources, and indirectly causes a decline of jobs and business opportunities in rural Namibia. Yet the bush resource sequesters significant amounts of carbon dioxide, which makes Namibia a net carbon sink.

Most farmers consider bush encroachment to be undesirable. Yet bush is vital for the country's browsing animals, which constitute a significant source of income for the tourism industry, game farmers and conservancies. The bush resource also offers business opportunities for firewood producers and the charcoal industry, and holds significant additional expansion potential. In addition, new but as yet undeveloped opportunities lie in the creation of carbon-sequestering and carbon offset projects in the country's agricultural and forestry sectors, as well as bush-encroached farmlands.

Under the Kyoto Protocol, Namibia is a non-Annex I country, which implies that it does not have GHG reduction commitments. It can, however, actively participate in and derive benefits from the trade in certified emission reduction certificates for carbon-saving and/or carbon-sequestering activities. Namibia's various land uses could offer new prospects for additional revenues from carbon credits: while many farmers equate invader bush to an expensive nuisance factor that needs to be eradicated, projects using this bush and its derivative products could potentially earn carbon credits and thereby introduce new economic value chains in rural Namibia. However, under the Kyoto Protocol, carbon sinks are only available for afforestation, reforestation and land use changes in areas that were deforested before 1990. New opportunities in LULUCF sectors may arise in the post-2012 commitment period, especially those that permit the use of agricultural soils as carbon sinks and those that target forest-like areas such as Namibia's bush-encroached lands. The voluntary carbon

market is likely to benefit from such opportunities too, and a trial methodology for quantifying GHG emission reductions from the production and incorporation of biochar into soils in agricultural and forest management systems has been released in July 2009.

Namibia's rural areas do not offer many formal job opportunities, despite the fact that almost one half of the country's population depends on subsistence farming and associated activities. Innovative projects are needed to create jobs and additional economic activities using the country's many natural resources without undermining the environmental sustainability of the land. Here, the production of biochar could one day offer perspectives for local job creation, while creating new opportunities for value addition from invader bush and rangeland rehabilitation.

Currently, carbon sequestering and associated trading mechanisms from improved rangeland and soil management practices, including the use of biochar, are being discussed at a variety of international forums. However, numerous research and procedural gaps remain before carbon revenues from biochar can be generated. The promise that Namibia's bush encroachment can be turned into biofuels and biochar while also earning carbon credits is a proposition that deserves prominent attention, targeted support, and ongoing research and development.

There is no Namibian policy or guideline that incentivizes or regulates the development of carbon offsets or carbon sequestering through rangeland management. While baseline and methodological guidance is available for select project types in the field of agriculture and forestry, both through the CDM and a number of voluntary carbon market guidelines, no CDM-approved methodology is as yet available for biochar. It is expected that an internationally binding post-2012 carbon trade agreement will be developed within the coming months and ratified at Copenhagen in December 2009. It is likely that additional mechanisms from the formal and informal trade in carbon from the LULUCF sectors will be agreed upon in the coming months. Biochar may be included in such future arrangements too and a biochar methodology is now being trialled in the VCM.

Namibia is well advised to develop the required institutional capacities and actively participate in international negotiations to benefit from the many as yet undeveloped opportunities that its bush resource offers, both as a carbon offset mechanism and a source of future carbon revenues.

6.2.2 Major issues

Bush encroachment affects some 26 million hectares of farmland and rangeland in Namibia, and is responsible for an annual loss in agricultural output estimated to exceed NAD 700 million (USD 87.5 million). It has a direct impact on the livelihoods of both communal and commercial farmers and their employees, and among other factors, is responsible for the reduction of the total number of livestock in Namibia from 2.5 million in 1958 to some 800,000 in 2001.

Carbon sinks in the LULUCF sectors, however, remain controversial. Concerns include:

- the permanence of the carbon sequestered in soils and forests;
- how CERs earned from LULUCF activities will drive additional deforestation and increase GHG emissions from land use changes;
- what the impacts of large scale afforestation and reforestation are, including the social and food security repercussions of such activities;
- how biodiversity will be affected by soil carbon sequestration incentives; and
- how soil and soil-enhancing carbon sinks can be effectively monitored over time.

The current interest in biochar is based on the following features:

- It is produced during biomass conversion processes that release volatile substances in the form of biofuels, such as oils and gases (depending on the temperature and speed of the process), and heat (which has an economic value).

- The biofuels produced in this way can displace conventional fossil fuels.
- The biomass conversion process also results in the production of biochar, which is a solid substance containing considerable carbon residues that are firmly embedded into the organic biomass matrix. Biochar is said to prevent the rapid disintegration and release of carbon dioxide into the atmosphere when buried in the soil, and in this way sequesters carbon for many years.
- Biochar has soil-enhancing properties and its addition to soils can reduce the requirements for fertilizers and water, which in turn improves arable land and agricultural yields.

6.3 'Ecotourism and the informal carbon market: Is the climate right for change?'

6.3.1 Summary

International tourists (especially those from Namibia's main source market, Europe) are increasingly becoming aware of issues related to climate change and global warming. More specifically, tourists are also acutely aware that long-haul travel and leisure tourism could contribute to this global dilemma.

Recent studies conducted in Namibia suggest that although tourism itself may be directly impacted by climate change, it is highly likely that there will be an indirect impact, primarily linked to the concerns of tourists regarding the contribution of their trips to global warming. Namibia must address these concerns. If no action is taken, this could result in the deterioration of the Namibian tourism economy. A decline in the number of tourists and the contribution of tourism to the national economy would make it difficult to achieve Vision 2030 and fulfil the targets of the NDP. Currently, the tourism sector in total generates 14 percent of GDP, a figure that is forecast to rise to 23 percent by 2016 – clearly a significant contribution.

It is therefore the indirect impact of climate change that needs to be addressed most urgently by all stakeholders. In order to combat the potential decline in the tourism sector, a number of actions should be taken, some of which are related to climate change and others to the sector in general.

It is widely recognized that Namibia possesses a world-beating tourism resource, both natural and cultural. However, in order to capitalize on this and create a comparative advantage over other destinations, it is important that the tourism sector ensures that it is fully aligned with emerging market demand and, in particular, with consumer concerns regarding global warming. This means that all tourism products should be able to demonstrate a high level of sustainable environmental management; make a contribution to conservation; minimize GHG emissions (or, better still, become 'carbon neutral'); and contribute towards economic development and, more specifically, poverty alleviation.

In order to achieve this, there needs to be a subtle, but important shift in the current Namibian tourism product to fully embrace these characteristics and the opportunity that comes with them. This will also require the removal of current policy constraints (particularly those related to investment and the development of tourism products in communal areas and parks).

This repositioned brand should be actively marketed by the entire sector, with a focus on the emerging market niche of tourists who are highly educated and aware of issues related to the environment, climate change and international poverty.

In the interests of the national economy, the tourism sector therefore needs to transform, and in order to do this it will require assistance. A combination of private investment and government incentives should be utilized, and these should be targeted at products that can meet international 'certification' requirements for a combination of environmental, social and climate friendly indicators. The

development of a majority of tourism products that are certified, particularly as 'carbon neutral', will not only add value to the products themselves, but also to the overall destination brand.

In addition to tourism and brand development, a number of opportunities are linked to this that fall under the general heading of 'carbon trading'. Namibia should develop a number of 'carbon offset' products that exploit the demand for sustainable, people friendly and carbon friendly tourism. These products, if developed correctly, can be marketed and sold to both discerning international tourists (especially those coming to Namibia) and larger organizations who wish to obtain carbon credits in order to demonstrate their commitment to reduced GHG emissions. The trading of carbon credits could generate additional income for natural resource management, and should start with the further development of the emerging 'community conservation Namibia' brand carbon credit, which embodies all of the key characteristics of the type of tourism product that Namibia should be developing.

To ensure that tourism products have credibility, they should obtain certification from existing and internationally recognized bodies; however, in order to ensure quality and consistency within Namibia, it is proposed that a national coalition or body be established to provide expertise and guide the development of carbon neutral and carbon offset products. This body would work cooperatively with all stakeholders, including government, the private sector and NGOs.

Namibia is at a turning point regarding the future of the tourism sector and its response to climate change. This is made more important by the current (2009) global economic downturn. If the sector decides to continue with 'business as usual', there is a real possibility that Namibia will lose its market share and the sector will decline. If, on the other hand, there is a concerted and collaborative effort to embrace change and take advantage of the opportunities presented by climate change, Namibia has the potential to develop as a world-leading tourism destination.

An analysis of tourist destinations in Namibia indicates that landscapes, nature and wildlife viewing, and a small but increasing interest in culture dominate the Namibian tourism product. In terms of contribution to the Namibian economy, a study in 2008 (NACSO, 2008) indicated that the CBNRM program and, in particular, conservancies generated NAD 39 million (USD 4.9 million) cash income in 2007 and contributed NAD 223 million (USD 27.9 million) overall to the net national income. Potentially more important than the economic benefit is the empowerment of local communities and the commitment that this program brings to long-term sustainable natural resource management.

The high carbon emissions of air travel could have a negative effect on the choice of Namibia as a destination from Europe and the US; however, the opportunity for carbon trading through developing carbon offset products in the tourism industry is great and could neutralize this to a large extent. The trading of carbon credits could also generate additional income for natural resource management, conservation and development.

Options for Namibia could include the following:

- **voluntary carbon offset credits**, i.e. the production and sale of fully certified voluntary carbon offset credits linked to the natural resource base and tourism: These would need to comply with all of the requirements of one of the recognized certifying organizations (e.g. Voluntary Gold Standard, Voluntary Carbon Standard etc.);
- **example: CBNRM community conservation Namibia:** The C-BRAND project focuses mainly on creating an umbrella-branded identity for use in marketing a wide variety of Namibian CBNRM products, including eco-/responsible/sustainable tourism. It also includes the development of 'blue chip' carbon credits linked to biodiversity conservation and poverty alleviation. The market for these will be the top end of voluntary/personal offsets and CSR portfolio diversification niches;

- **voluntary carbon offsetting of flights** to and from Namibia in order to create a more direct link among flights to Namibia, their carbon emissions and the tourism resource itself: This requires that the total carbon emissions of the flight be 'offset' by an equivalent carbon reduction or carbon sequestration in Namibia and will need to be certified as such. (A project involving Air Namibia, NNF and the Directorate of Forestry currently exists in this category, but could be extended to include other airlines.); and
- **large scale CDM projects** based on a natural-resource-enabled tourism: This would need to be done on a large scale and would probably focus on biological sinks or renewable energy. The process of compliance is very complicated and the transaction costs generally very high, but the returns can also be expected to be large. CDM projects related to tourism could emerge, but this should not be a policy focus.

Very few new tourism products have been developed in Namibia in recent years and there appears to be an attitude among many operators to practise 'business as usual' without addressing issues of environmental sustainability or community involvement and empowerment. A change in attitude and encouragement is necessary to develop products that could be classified as carbon neutral or carbon reducing, and this would need incentives and support from government.

6.3.2 Carbon neutral certification

Carbon neutral certification is not the same as a carbon credit or carbon offsetting, as it is something that cannot be traded or sold.

- **Country-level carbon neutral certification:** Provided it was possible from a scientific point of view, certification of Namibia as a carbon neutral country may add some value to it as an eco-/responsible/sustainable tourism destination and give it a comparative advantage over its competitors. At this stage, no country has yet achieved this status and there are emerging doubts related to its credibility.
- **Product- or organization-level carbon neutral certification:** This can be done relatively easily and should create a comparative advantage for a tourism product or company in the market. The cost of certification can be passed on to the customer as a 'carbon levy or tax'. This should be included as a major component of tourism sector transformation, as it is expected to add value to the product and appeal to emerging consumer demand for carbon neutral certification.

If Namibia is serious about maximizing the potential of tourism as a key economic sector and wants to reposition itself as a 'fair trade', 'sustainable tourism' or 'carbon neutral' destination, the broad raft of policies that currently impact on tourism need to be addressed concurrently. Namibia has the potential to offer products that are certified carbon neutral, adding to the perceived value of the tourism product on offer. In addition, Namibia can also generate further value from the natural resource base on which the tourism industry relies by developing high quality carbon credit products that build not only on the scientific potential for carbon sequestration, but also on the values embodied in sustainable resource management and in particular the link with communities and the benefits that they earn from this resource. By building all of these components into the tourism 'destination brand', Namibia has an excellent opportunity to position itself as a leading sustainable tourism destination.

6.4 'Green labelling, eco-certification and fair trade schemes: Opportunities and threats for Namibia'

6.4.1 Summary

This is a cross-cutting issue. In recent decades, rising global concerns about environmental destruction, human rights abuses, socioeconomic inequalities, unsustainable agricultural production meth-

ods, pollution and animal cruelty, among other issues, have given rise to a bewildering range of 'green' and/or 'ethical' standards and certification schemes. Namibia has opportunities to use these standards to target niche markets for its products, but also faces potential threats, if and when these schemes function as barriers to trade that keep Namibian products out of markets.

Namibia's vast unpolluted environment and sound conservation achievements, including a world-leading CBNRM program, provide a competitive edge in markets where green labelling, eco-certification and fair trade schemes are being applied. These instruments become double edged swords, however, when they become requirements for market entry. The cost of obtaining certification can result in Namibian goods becoming uncompetitive.

Mining and mineral products, fish and fish products, and meat and meat products have long been the backbone of Namibia's economy in terms of their contribution to GDP and direct employment. Tourism is increasingly important, while other sectors such as charcoal production, horticulture, the leather industry and indigenous natural products are also growing. Eco-certification is already being used to some extent in these sectors in Namibia, largely because of export market requirements. The country nevertheless lacks a systematic approach to this increasingly important aspect of international trade.

Commercial operators driving the green and ethical trend respond to market demands from (mainly Western) consumers, who are in turn influenced by environmental campaigners, NGOs and the media. This is not easily addressed at the level of international trade negotiations, especially when voters in a democracy support it. Namibia should therefore not rely exclusively or primarily on trade diplomacy to address this issue, but instead recognize it as a commercial reality and seek to exploit it to the country's best advantage.

To make the most of the opportunities offered and effectively manage the threats, Namibia must develop leadership and competence in these areas, so that its products remain competitive and keep up with trends in rapidly evolving export markets.

Developing certification capacity in local institutions may lower the costs and complications associated with current eco-certification schemes. However, 'self certification' schemes from developing countries have not had very much success commercially, because consumers do not trust them to be independent or objective.

Namibia must therefore strive to understand the power of specific certification schemes in specific niche markets, make full use of those that have the best 'brand name recognition' in the target market, and seek to lower the cost of independently verified and accredited certification through, among other things, enhanced collaboration and cost sharing among producers.

6.4.2 General benefits of ecolabelling

Ecolabelling schemes are perceived to provide:

- economic incentives for better long-term custodianship and availability of natural resources vital for economic welfare;
- competitive and comparative advantage of export products through product differentiation realized through price premiums, long-term contracts and market access;
- a platform for innovation with the use of more environmentally friendly products such as lighting or refrigeration, with knock on benefits in other parts of the economy; and
- assistance to countries to fulfil commitments made under environmental agreements such as those related to biodiversity.

6.4.3 General challenges of ecolabelling

Ecolabelling schemes also come with threats and challenges, such as:

- the apparent lack of distinction between SPS and ecolabels;
- the methodology, criteria setting and conformity assessment in some ecolabelling schemes, which are very subjective and lack uniformity, making their attainment an impossible challenge;
- discriminatory effects, where the focus on ecolabels is on the importer more than the producer, who may face different environmental laws and infrastructure;
- the costs of certification, which are very high for smaller economies such as that of Namibia and its small scale producers; and
- the lack of capacity to attain the ecolabels in terms of the setting up of regulatory agencies or acquiring the finance to access environmentally friendly technology.

A study conducted by MAWF in 2005 (MAWF, 2005) estimated that indigenous natural products contributed around NAD 100 million (USD 12.5 million) to the Namibian economy, mainly in household consumption and informal trade, and that this figure had the potential in the medium term to grow to approximately NAD 400 million (USD 50 million) a year. Exports of these products (excluding devil's claw) amounted to about NAD 2.5 million (USD 312,500) in 2008, with devil's claw adding another NAD 20–25 million (USD 2.5–3.2 million). The rural and economic development potential of the indigenous natural products sector has been recognized by the MCA, which plans to invest around NAD 56 million (USD 7 million) in its expansion over the next five years.

Potential benefits of labelling schemes by sector are reviewed in Table 3.

Table 3: Potential benefits of environmental labelling in the Namibian economic sectors

Economic sector	Existing	Potential benefits
Mining	At present, no labelling is available	- The adoption of environmental management standards - Fair trade certification for semiprecious stones - A business and biodiversity offsets program
Agriculture	Horticulture Existing ecolabels include fair trade certification, organic labelling, GLOBAL GAP and Naturland. Fish and fish products Existing ecolabelling includes fair trade certification, Marine Stewardship Council, Naturland Meat and meat products Existing ecolabelling includes IFOAM labels, carbon reduction label and Naturland.	Horticulture - Limited land use; use of best management practices - Namibian identity for organic products Fish and fish products - Identification of more best practices - EU support in tracing illegal vessels Meat and meat products - Competitive advantage for Namibian products - Marketing organic products (game/free-range livestock) to the EU and US, where guidelines already exist
Charcoal	Forestry Stewardship Council certification is in place	- Carbon offsets from forestry and agriculture sectors
Leather and skins	Existing ecolabels include fair trade certification, Euro Flower and the carbon reduction label	- Express linkage of the environment to an ecoleather label
Tourism	Existing ecolabels include the eco-award, heritage label and Blue Flag	- Ecomarketing - Blue Flag beaches to attract European tourists - Potentially increased (and cheaper) certification for CBNRM through the local eco-award label
Indigenous natural products	Existing ecolabelling includes fair trade certification, Euro Flower and Naturland	- Promotion of the use of indigenous products - Ubuntu Natural hybrid standard
Other products	Existing ecolabelling includes fair trade certification and the carbon reduction label	- Turning the Team Namibia label into a green label

Section 7: Findings, Recommendations and the Way Forward

Namibia can achieve its Vision 2030 wealth and wellbeing objectives if policymakers and decision makers do not expect Namibia's development to look like the Western, Asian or South African industrialization and bulk export model. Geography, low population, and unique, sensitive landscapes mean that Namibia should not necessarily aim to be a major exporter of commodities and manufactured products. A proven 'smarter' strategy is to capitalize on its demonstrated strengths in high value niche sectors for specialized products and services based on Namibia's comparative advantages.

Many promising initiatives on, for example, ecotourism and natural products development are already under way. The MCA is notable for capitalizing on Namibia's advantages for poverty reduction. Its projects are focused as 'investments' expected to yield returns rather than donor grants. While this approach is not suitable in all cases, it is certainly useful for the sectors selected.

Namibia continues to forego many opportunities in the (formal and informal) carbon market. The country has not sufficiently capitalized on the CDM offered through the Kyoto Protocol and may now have largely missed that window.

Given the vast and rapidly growing proliferation of green labels, certification and fair trade schemes, it is no wonder that Namibia would have difficulty keeping pace with all of the relevant initiatives that can find their way into international practice (even law) and potentially serve to disadvantage Namibian products. Namibia would benefit from appointing a technical body and/or champion (e.g. in the Namibian Standards Institute) who monitors international market and labelling developments and communicates updates to relevant stakeholders, including the private sector.

Conflict among the rural development imperative, sustainable land management and commercial meat exports need to be addressed through harmonized policies. A multistakeholder umbrella project on land (the Country Pilot Partnership) is well placed to better integrate trade considerations into discussions about land policies and rural development.

There is a general need for better coordination among the government agencies negotiating international policies that can negate one another's efforts. There is no regularized mechanism for sharing information about potentially relevant policies and initiatives, not only at the domestic level, but for international concerns as well. This could be partly addressed through the existing Namibia Trade Forum, which advises government on trade policy, but also through an intragovernmental mechanism.

The entire realm of trade and environment interlinkages is highly dynamic, both nationally and internationally. The main trade agreements and three Rio Conventions alone have numerous meetings at different levels with different emphases all year long. In some cases, strategies and platforms need to be developed and refined, with allegiances generated, years before the meeting where the actual decision is made occurs. It is much too challenging for a small country such as Namibia to send delegates to every critical forum. Thus, regional alliances are very important for Namibia to be able to achieve its aims in the international arena. Nationally, there is much activity in rural development, environmental management, national economic strategy, budgeting, priority setting, restructuring, political priority shifts, and so on that affect the overall picture. Priorities can only really be set at six month increments, with a longer-term vision in mind.

An issue of immediate concern for debate is the level of coherence among national development policies. The role of trade and the environment needs to come across clearly. NDP3 says too little on biotrade; Vision 2030 is silent on biodiversity; the tourism policy is silent on climate change. A lot of

linkages exist in these areas and these need to be addressed. A lot of knowledge exists in Namibia, but it is held in 'silos'. Better information sharing especially with the private sector could address some bottlenecks. Negotiations should show Namibia speaking with one voice. This requires both capacity building and the internal coordination of positions to achieve a coherent approach in different forums.

7.1 Preliminary recommendations

According to the RTEA findings, Namibia can better position itself to be a leader on trade and environmental issues in order to meet its development objectives by 2030. The country is well placed in terms of expanding sectors like ecotourism, natural products and carbon market opportunities in land use change, which have continued to grow despite the global economic slowdown. As a dryland country with very low population density, Namibia's 'economies of scale' for manufacturing are not attractive.

The way forward is to develop a strategy and action plan based on national priorities in six month increments, but also to retain flexibility and capacity to respond rapidly to changes. A national body dealing with trade and environment linkages would need to ensure that resources are quickly available when needed.

1. Policymakers need to look at creating **incentives for markets in unique, specialized products**. The country cannot possibly compete against neighbouring South Africa (or Asia) for the export of manufactured goods. However, depending on how policymakers plan ahead, Namibia can become better at some small, yet high value and dynamic sectors.
2. Namibia should establish a **national forum on trade and environment issues** to continue work in areas highlighted by the assessment. This body could sit within the existing Namibia Trade Forum, which is a platform for government and relevant stakeholders providing advice on trade-related concerns. This forum has already established a body dealing specifically with agricultural trade. It is important that existing budgetary and decision-making processes be informed and can act on new developments. The forum should continue to monitor and communicate issues and developments to key stakeholders, and especially to relevant negotiating teams, so that the various arms of law and policymaking do not undermine one another's objectives.
3. Namibia needs more appropriate carbon market mechanisms that support sustainable land management and rural development (so called 'co-benefits'). A **working group on carbon-related issues** could deliver appropriate advice on potential investments and any barriers to successful carbon market participation. This working group could be a joint initiative with the existing Namibia Climate Change Committee, if staff time and other support were to be allocated. Namibia should pursue an assertive position and build strategic alliances to negotiate at climate summits.
4. The government should commit resources to **preparing and training Namibian negotiators** attending international forums on the diversity of relevant domestic policy considerations.
5. Investment in **national cross-sectoral information sharing and internal policy coherence** is necessary for Namibia to make gains in international arenas.

7.2 Sector-specific policy recommendations

Specific recommendations came out of the sector analyzes that are important for further consideration.

7.2.1 Combating technical barriers to sustainable red meat production and trade

- There is a strong need for close integration of land use planning, conservation efforts and animal health policies related to FMD control in order to maximize the benefits from diverse land use systems. Animal health policies must not be considered in isolation following the monosectoral approaches of yesteryear, but must promote agricultural and non-agricultural development priorities set by the government. All development policies must be coherent in their contribution towards the efficient management of land resources.
- **Holistic outlook:** Policies and strategies to promote red meat exports must not be fixated on creating diseases-free zones in a manner that sacrifices other opportunistic livelihoods based on the utilization of wildlife resources. Zoning for animal disease risk management as an animal health policy tool must be implemented following consideration of wider social and economic development objectives. Harmonizing local animal health standards with those of red meat export markets must be socially, culturally and politically acceptable, and economically and ecologically viable.
- Due to poor rangelands in the northern regions, utilizing transboundary grazing resources may continue to be one of the main strategies to sustain the livestock densities in these areas for the foreseeable future. As a consequence, consideration must be given to developing a transboundary animal disease risk management zone, straddling the Angola–Namibia border. This challenge does not only lie in convincing red meat export markets of the integrity of such a zone, but also in the possible lack of convergence of priorities with neighbouring countries.
- **Marketing:** Efforts must be made to broaden marketing opportunities for livestock farmers in the northern regions by the harmonization of sanitary measures with import requirements of lucrative red meat export markets. Most of these markets require a product of certain specifications that may be a challenge to produce in those poor rangelands. In order for the meat quality to meet market requirements, the partial intensification of livestock production in some areas through promoting feedlots where they are viable has the potential to reduce pressure on rangelands. This would see the establishment of feedlots to encourage a shift from a low offtake oxen production system to a high offtake weaner and feedlot system that would help to increase the supply of high quality cattle to export abattoirs.
- The management of the interface between livestock and wildlife must be guided by **risk assessments based on sound science**. Efforts should be made to promote integrated sustainable land management wherever there is room for livestock production, wildlife ranching and other land use systems. There may be a need to review the movement restrictions on wildlife in view of the growing nature-based industry that has the potential to utilize marginal rangelands where livestock production is not viable. The importation of FMD-free buffalo onto game ranches in the FMD-free zone must be reconsidered in view of the technological advances in diagnostic sciences related to the determination of the presence of or exposure to the FMD virus. The current precautions are understandable, but must be guided by sound science.
- **International policy:** Namibia, singly or as part of the regional bloc, should actively participate in the formulation of international animal health standards, particularly those related to international trade in fresh and frozen meat.

7.2.2 Realizing opportunities in LULUCF and biochar

- **Strengthen institutional capacity:** Local institutions dealing with carbon projects, including the future CDM office at MTI and the existing DNA office at MET, need to be adequately staffed and resourced to be able to deal with the rapidly developing opportunities and the associated risks introduced through international carbon trade.
- **Prepare and train Namibian negotiators attending international forums:** It is essential that Namibian representatives and negotiators attending Conference of Parties and related UN climate meetings are knowledgeable about the issues at stake, and can effectively communicate Namibia's position and preferences. The required preparation and training of such representatives require a commitment of resources.
- **Enhance feedback from international forums:** Improved feedback mechanisms are required to spread the insights gained from attendance at international forums through improved communications between government ministries, on the one hand, and government and the multitude of private sector stakeholders, on the other, through regular press releases, and regularly updated websites and other publications.
- **Involve private sector specialists and stakeholders:** Local specialists and specialist organizations can significantly contribute to existing and new government functions if they are provided with a mandate to do so through short-term appointments and contracts. Greater involvement of private sector specialists also broadens the national pool of expertise, and is often more cost effective than training existing government employees.
- **Support research and specialist studies:** Specialist studies need to be commissioned to identify the most viable options for Namibia's future participation in LULUCF-related carbon trade activities. In addition, further research is required to assess the viability and sustainability of different bush utilization methods, including the large scale production and use of biochar. Identifying a dedicated national bush promotion champion, e.g. MAWF or MET, would support the goal-oriented identification of sustainable bush utilization measures. It is advisable that private sector specialists are recruited to participate in this important national debate and associated research activities.
- **Devise a bush utilization and beneficiation framework:** Specific LULUCF-related targets should be cross-sectorally assessed to draw up a Namibian bush utilization and beneficiation framework that identifies and quantifies the business and carbon-reducing/-sequestering opportunities, as well as the carbon offset opportunities in the country's LULUCF sectors.
- **Provide seed funds to stimulate carbon project development:** Seed funds are required to scope, investigate, identify and draft project identification notes and project development documents that are to be submitted to the CDM executive board for Namibia's participation in future carbon-related trade activities.
- **Assess the costs and benefits of charcoal use in Namibia:** The potential of charcoal production and the use of biochar needs to be further assessed. Charcoal production strengths and viability need to be investigated and further research into biochar and its role as a soil additive needs to be conducted.

7.2.3 Leveraging benefits for ecotourism from the carbon market

- **Create a national policy on climate change and tourism** to provide a framework and direction for addressing climate change issues related to tourism, and this includes guidelines related to voluntary carbon offset products.

- **Strengthen national policy on tourism** to promote comparative advantages and to emphasize:
 - nature, including wildlife, biodiversity, carbon emission reductions and carbon neutral status;
 - sustainable resource management, including CBNRM, parks, freehold, conservation and outcomes; and
 - community benefits, including CBNRM, empowerment and capacity building.

Then develop a stronger Namibian tourism destination brand incorporating more emphasis on the above.

- **Include tourism-related climate change issues in existing policies** (tourism policy, the Namibia Tourism Board [NTB], EMA, NDPs):
 - The definition of sustainable tourism needs to include recommendations for carbon emissions reduction and carbon neutral status.
 - The NTB should strengthen environmental criteria as part of the registration/quality control process and include carbon emissions/carbon neutral status.
 - Environmental management plans should include a carbon emissions component and an indication of how reductions will be made in future, leading towards carbon neutrality.
 - NDPs need to include emphasis on carbon emissions mitigation related to tourism development.
- **Create a conducive investment environment** that encourages investment in communal areas, and in particular partnerships with conservancies/communities with an emphasis on appropriate technologies, especially those that conserve water and lead to a reduction in carbon emissions. MTT's Namibia Investment Centre should encourage and incentivize investment in genuine, certified sustainable tourism products (including carbon neutral status) and MTT/MET should provide incentives and financial support to encourage the adaptation of existing tourism products to address carbon emissions/carbon neutral status.
- **Actively promote appropriate technology** and in particular carbon emissions reduction, and encourage the private sector to introduce appropriate technology/carbon emissions reduction.
- **Actively raise awareness** of climate change implications for tourism. Develop and implement a tourism and climate change awareness campaign, particularly among the private sector and decision makers.
- **Highlight the need for the accuracy** of tourism growth targets in light of climate change implications. Provide input to tourism satellite accounts to reflect the potential changes in revenue and employment due to climate change.
- **Establish a national body/coalition/reference group** to provide expertise and guidance to oversee the quality control of carbon neutral and carbon offset product development.

7.2.4 Maximizing gains from green labelling, eco-certification and fair trade initiatives

- **Adopt credible ecolabels** that conform to new and impending market requirements. Such a policy should encourage and replicate proactive approaches, encourage energy efficiency labelling schemes and encourage the use of ecolabels by making them part of tender-awarding criteria. It should focus on those industries and sectors where ecolabelling has the highest potential to add value, such as agriculture, fisheries, ecotourism, the built environment and indigenous natural products.
- **Capacity building:** Explore capacity-building opportunities in ecolabelling by making full use of international opportunities.

- **Development of local ecolabels:** Support initiatives by the private sector such as the Namibian Organic Association to set local ecolabels, explore possibilities for creating and adopting a national ecolabel and make provision for promoting the label in target markets.
- **Education and awareness:** Education and public awareness should always be a priority for any policy initiative to be accepted and adopted. Treat ecolabels as a communication tool for environmental and business competitiveness messages. Disseminate information on ecolabels. Make producers aware of the threats and benefits of certification. Provide information and technical support to small producers on environmental concerns associated with their practices and the potential negative impacts in terms of trade barriers. Create platforms for information exchange.
- **Research:** Government needs to initiate and support further research into who would benefit economically from ecolabel schemes and to what extent in order to use the information to identify appropriate schemes. It would be necessary to develop mechanisms to monitor the environmental and economic effectiveness of ecolabels.
- **Mainstreaming SMMEs:** Take steps to reduce the cost of certification. Encourage producers to form cooperatives or otherwise pool resources for certification. Develop mechanisms that can be used to bring SMMEs into such schemes without compromising the standards.
- **Geographic indications:** Explore branding strategies under geographic indications for Namibian indigenous natural products such as !nara oil, devil's claw and karakul pelts. This could be done in the regional context, given that some of these products are also found in neighbouring countries.

7.3 Conclusions

The RTEA was a successful pilot of a new assessment approach for Namibia and the first instance of the use of this method in Africa. The result has been to bring together policymakers from different sectors with key stakeholders to think about joint issues for mutual benefit. The four sector papers produced through the assessment are useful stand alone documents in their respective areas of emphasis. Going forward, Namibia can pursue a more integrated, dynamic and responsive policy dialogue on trade and environmental issues.

- In view of Namibia's lower agricultural potential and low population, more emphasis should be put on exploring high value niche markets based on the country's biodiversity assets and comparative advantages.
- Namibia has made substantial progress in natural products commercialization, bioprospecting/ABS, organic certification and community-owned institutions/enterprises, with strong support from MAWF and MET.
- There is a need to better include biodiversity aspects into national trade-related policies and strategies.
- Trade-related issues often hinder access to lucrative international markets (e.g. SPS regulations and technical barriers to trade).
- There is a need for the national coordination of Namibia's international negotiating positions as they relate to the environmental aspects of trade
- Creating trade channels for new products requires considerable investment in research and development and marketing. MTI has an important role in supporting industry development (local value adding) and private sector investment.
- Primary producers need support in developing business capacities, and optimizing supply chains and sustainable harvesting practices

7.4 The way forward

A new project with support from the GTZ Monterrey Fund can enact the most pressing of these recommendations. Efforts are already under way since the National Stakeholder Workshop on Trade and Environment (29–30 July 2009) to establish a Namibia Environment and Trade (NEAT) Forum within the existing Namibia Trade Forum. The workshop participants took forward this recommendation by appointing a working group to establish the forum. Representatives from MTI, MET, MAWF, the Namibia Trade Forum, and CRIAA SA-DC (for technical support) are driving the effort.

NEAT membership will build from the membership of the RTEA's expert advisory panels. It should also be flexible enough to take on members or advisors at various points who can complement the core group when there is a need for:

- stakeholders;
- champions;
- expertise; and
- capacity.

As a highly dynamic issue, some aspects (such as carbon, energy, biotrade or land use) might become more or less important in different phases. The NEAT Forum should anticipate a fluid structure to ensure that it can meet its mandate. The current proposal is for MTI to chair the NEAT Forum and provide secretarial services. Technical assistance would be forthcoming from CRIAA SA-DC (with funding available from now until December 2010). Funds are available for the position of a junior professional officer who could be seconded into or shared with the NEAT Forum to provide closer support. The forum would develop its own strategy and action plan, building from the priorities identified in the RTEA.

Some of the immediate priorities identified for urgent consideration may require working groups, i.e.:

- carbon trade;
- branding and labelling;
- technical barriers to trade; and
- negotiations (coordinated strategy and capacity building).

Cross-cutting issues within these groups are policy, communications, and investment in knowledge and capacity.

Healthy debate among policymakers is encouraged. This could start with discussion of some important questions that arise from the RTEA's findings.

Governance and law

- Should legislation on strategic environmental assessments apply to trade agreements or even all major international agreements that the government engages? What technical guidance would be required?
- Should a pre- and post-international meeting or negotiation consultation always occur?

Economic and development strategy

- Are the priorities identified in the RTEA in fact discouraging Namibia from a development path that Western countries have evidently benefitted from? Or is another path necessary due to evident global changes?
- What more can Namibia do to sustainably capitalize on its comparative advantages in environments like rangelands, biodiversity and natural landscapes?
- How can private sector investment and expertise be drawn in more readily?

Knowledge and capacity

- How should trade and environmental research and capacity development priorities be set? How should research be funded? Which of these gaps can be supported from core funds and where might fundraising be required? How can private sector expertise and funding be won?
- How can talented young Namibians be stimulated to stay in the country and engage in innovative, entrepreneurial areas of work?

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Annex I:

Members and Terms of Reference of the National Expert Advisory Panel

The NEAP guides the RTEA process. The NEAP is responsible for prioritizing the main sectors with trade and environmental impacts and obtaining ‘buy in’ to support the implementation of recommendations.

To this end, the duties fulfilled by Namibia’s NEAP members were:

- supplying input to the initial concept, approach, list of stakeholders and proposed scenarios through attendance at the inception meeting;
- reviewing and providing input on terms of reference/areas for specific attention for sector papers relevant to their area(s) of work and submissions from consultants;
- providing input on initial conclusions and policy recommendations prior to the national workshop;
- attending a second NEAP meeting to comment on the initial conclusions and then participating (via deputies) in the national workshop;
- if necessary, attending a follow up workshop to discuss the dissemination of the project findings; and
- generating buy in from their departments/organizations throughout the process and especially on final policy recommendations.

The NEAP was composed of experts and authorities from various key sectors and with specific knowledge of international trade and/or the environmental sector in Namibia. Panel members are individuals representing their own opinions based on their personal expertise and professional backgrounds. As such, the panel members do not necessarily need to deputise their participation to a colleague in their own organization; another individual from the same sector is also a suitable deputy.

NEAP members for Namibia’s RTEA were:

- Chair: Malan Lindeque
- Permanent secretary, MTE
- Antonia Baker, MTE/NNF
- Rejoice Karita
- Saarah Hamunyels, MTI
- Diana Tjiposa, MTI
- Sem Shikongo, MET
- Kirsten Probst/Daniel Kehrer, GTZ support program/MET
- Klaus Schade, NEPRU
- Pierre du Plessis, CRIAA SA-DC
- Sheila Kiratu, SAIIA/TKN

- Robert Schultz, DRFN
- Jurgen Hoffman, Agricultural Trade Forum
- Kudakwashe Ndhlukula, Polytechnic of Namibia
- Henoch Ramakhutla, MTI

Institutional affiliations are provided for reference purposes only and do not constitute endorsement of the NEAP by the institutions mentioned.

Annex II: The RTEA Method

The methodology for undertaking the RTEA comprises the following six steps. They are given in generalized terms and could apply to any country.

Two indispensable prerequisites are:

- a dedicated project leader on the ground (in the country or region); and
- an in-country lead partner – preferably an institution with knowledge of trade and environment dynamics – and solid contacts with all the relevant stakeholders, particularly in government.

Step I: Partnership building and establishing an expert advisory panel (EAP)

- Contact the ministries of trade/commerce and environment to inform them of the project and requesting their assistance in establishing the EAP.
- Contact the chamber of commerce to inform them of the exercise and seek private sector input and expertise from the outset of the project.
- Establish an EAP composed of a representation of key stakeholders (governmental and non-governmental, as well as private sector representatives).
- Describe the time line, process and objectives of the RTEA, and the nature of trade and environmental linkages.
- Seek input on the methodology, advice on how it could usefully be adapted to the domestic context and advice on which stakeholders should be interviewed.

Step II: Setting the context

Given the large range of interactions among trade liberalization scenarios and potential economic and environmental impacts, the focus of the assessment needs to be on those areas of particular environmental importance. The context-setting phase of the methodology is vital in order to distil a selection of key sectors for analysis from all potential interactions.

The role of the EAP is essential to guide the initial scoping exercise based on a solid appreciation of the domestic trade and investment context and the potential environmental consequences of liberalization initiatives.

- To set the context, undertake statistical and empirical research in order to prepare:
 - a brief economic profile of the country, including main exports, fastest growing exports and FDI recipients, growth potential and challenges; and
 - a brief environmental profile of the country, including the status of natural resources and major environmental challenges.

Statistical research:

- Identify the top ten exports, the top ten fastest growing exports and the top ten sectors for FDI.

Empirical research:

- What agreements is the country currently party to?
- What commitments are scheduled as a result of these agreements (tariff reductions; commitments on investment, services and intellectual property rights)?
- What trade/investment agreements are currently being negotiated or planned? If possible, list the sectors of interest in these agreements.
- What is the current legal investment framework? (What is the governing domestic investment law; what bilateral and regional agreements have been signed; what commitments do they contain on national/MFN treatment, rights of establishment, expropriation and minimum standards of treatment?)
- In those agreements under negotiation or planned, what investment commitments are likely?

Step III: Expert input: Stakeholder interviews and literature review

Carry out a literature review:

- What published sources have been written concerning the prospects for economic growth in this country? What are the challenges? What are the key points made in the literature? Have any studies been undertaken on the possible economic scenarios resulting from trade liberalization? Have any studies been commissioned by the ministry of commerce/trade or the chamber of commerce?
- What published sources can help determine the key environmental challenges in this country?
- What recommendations do they offer? Have any studies or assessments been undertaken by the ministry of environment/natural resources or key environmental NGOs or research institutes?

Based on guidance from partner organizations and input from the EAP, conduct interviews based on the relevant set of questions given below with all the relevant stakeholders (government, non-governmental and private sector representatives, including representatives of government ministries; and trade experts, including academia and research institutes and the business community.

- What sectors are likely to see large import or export growth as a result of commitments in trade agreements or likely commitments in ongoing negotiations?
- In those agreements under negotiation or planned, what investment commitments are likely or possible?
- What types of investments are likely as a result of investment commitments? What sectors, investment volumes and host countries are involved?

- What export sectors might be ripe for the pursuit of green niche markets? What magnitude of potential is there? What obstacles would have to be overcome to achieve that success?

Specific environmental questions include the following:

- What are the key hotspots for environmental threats in the country at present (locations; type of threats)?
- What economic activities, social conditions and institutional failures might be driving these threats?
- What are the key threats for the future? What trends can be identified?
- What export sectors might be ripe for the pursuit of green niche markets? What obstacles would have to be overcome to achieve that success? What would be the environmental costs and benefits?
- Are there any noteworthy success stories in environmental protection? How did they come about?

Step IV: Scenario building

Sector selection:

- From the top ten lists identified in the statistical background work, identify environmentally sensitive export sectors based on an environmental filter adapted from the Toxic Release Inventory of industrial pollution intensity (USEPA, 1994). This brings the current major sectors into the scope of the analysis.
- Based on the stakeholder interview process and the context of ongoing economic integration (see 'empirical research', above), identify any sectors that are not currently important, but are likely to become key exports/imports/recipients of investment in the future. This brings prospective sectors into the scope of the analysis. This addition also allows for the inclusion of illegally traded sectors.
- Identify, as part of a separate list, any significant potential green niche export markets. This selection should be based on stakeholder interviews and the literature survey.

Scenario development:

- For the list of sectors identified, what are the likely trends in growth? Will planned or likely trade and/or investment liberalization increase or decrease activity in the sector? Have any studies been undertaken to assess the potential impacts of trade and investment liberalization? Will other trends be important? What institutional structure is in place (e.g. the infrastructure necessary to increase exports)? This step should reveal the potential future importance of the sector, i.e. the sector's scenario.

At this stage, a clear picture should be emerging of the major sectors of environmental and economic importance, as well as their future growth paths. Check these results with and ask for input from the EAP.

Step V: Analysis of the impact of the scenario-building process

- For each chosen sector, identify the environmental implications of the scenario identified in the previous step.
- Ideally, this will involve the preparation of a background paper for each sector by an in-country consultant, including the previous economic analysis and the follow on environmental implications.

- Analyze the nature of planned or likely investment regime commitments, and run them against the known risk areas, based on IISD's experience with international investment agreements and sustainable development.

Step VI: Preliminary conclusions and recommendations

Conclusions:

As a result of the work and the input of the EAP on the draft results, compile conclusions by answering the following questions:

- In what traded sectors are there possible significant environmental impacts? Describe the nature and extent of these impacts, specifying in detail the conditions on which the conclusions depend (e.g. institutional factors, such as the stringency of the environmental regulatory regime).
- What environmental or social problems might result from the characteristics of the planned or likely investment legal regime?
- What niche green market opportunities exist in the country?

Strategic policy recommendations:

As a result of the analysis, and primarily based on input from the EAP, compile recommendations by answering the following questions:

- What sorts of policy measures or institutional strengthening might be employed to avoid or mitigate any identified environmental problems?
- What sorts of policy measures or institutional strengthening might be undertaken to help exploit any opportunities that have been identified?
- In which areas is there a need for additional research to help quantify the risks or opportunities identified?

Convene a meeting of high level stakeholders to contribute to discussions on trade/investment and environment, e.g. a national workshop. The draft national report circulated in advance of the meeting should be essentially complete. The purpose of the meeting is to solicit comments on the draft national report, but, more importantly, to present the background research papers and the results of the project and to raise awareness of and stimulate debate and discussion on the main emerging trade and environmental issues.

Annex III: Observations and Lessons Learned from the RTEA Process

The Namibian RTEA was the first instance of this method being used in Africa. This description of how the method was adapted to Namibian circumstances and lessons learnt that are of relevance to other African countries using the method are considered in this section.

The Namibian RTEA invested a lot of effort into ensuring government acceptance of and leadership for the assessment. This was critical to eventual buy in for the recommendations and carrying the recommendations into action. It was also more important from the perspective of the RTEA to integrate MTI into the process, as much of the capacity to enact recommendations laid with its negotiating and economic force. Having a high level (permanent secretary) chair of the NEAP provided by MTI and strong MET and MAWF participation in the NEAP ensured that recommendations made through the RTEA process were internalized into ongoing policy discussions. Immense contributions to the technical aspects of the RTEA by the country's chief trade policy advisor are recognized, including through a co-authorship of this national report.

Another area of emphasis for the Namibian RTEA was actively seeking opportunities for poverty alleviation and rural development through the sectoral studies. The focus of the pilot RTEAs was more clearly on the threats of trade liberalization. Given such a small domestic market, Namibia is already heavily liberalized – exports and imports together have accounted for roughly 100 percent of GDP over the last ten years. Threats from technical barriers to trade in agricultural sectors and the growth of voluntary labelling schemes were examined, but in the latter case the emphasis was on how to position Namibia within such a landscape.

The Namibian RTEA was explicitly directed to add value to ongoing policy processes. The assessment team gave significant consideration to where gains could be made in a short period of time and cooperation could be fostered. Some topics that might have been interesting to explore would have been too divisive to make progress on. Recommendations in all areas of the RTEA are workable enough to take forward through a trade and environmental forum, given existing resources and national frameworks. Taking on some of the larger sectors such as mining and fisheries probably would not have been able to yield these kind of benefits through a rapid assessment, given ongoing legislation, strategic environmental assessments/EIAs, pending ecological research, and other initiatives already under way on these themes. By the same token, the RTEA avoided duplicating ongoing policy work and linked to ongoing initiatives such as GTZ's support program in MET on biotrade.

All of the above are areas where the Namibian RTEA felt that it added to the stock of knowledge in this method and constitute good practices for subsequent RTEAs.

Namibia's RTEA had weaknesses, and consideration of these could benefit subsequent assessments. Explicit focus was made through the sectoral studies on the capacity to carry out recommendations (in addition to carrying out the policy analysis itself). This aspect could have been explored in more detail, and a recommendation is for 18 month priorities to be set, given the enormous scope of potential investments in capacity. The assessment team could have done more to bring the gender differentiation of impacts on board, which are well examined in the natural products sector, but not addressed elsewhere. Similarly, impacts on pastoral populations and ecological considerations specific to drylands could have been further examined. This was to some degree an oversight. The funding available to actually conduct the RTEA, and in particular to dedicate enough time to consultation, could have been increased through the assessment team's seeking co-financing. Consultative inter-

views, in addition to the planned technical or substantive interviews, required much more time than anticipated in the initial time budget estimates. Linking the RTEA to an existing consultative process would address this need.

RTEA could link more explicitly to ecosystem services frameworks. Shackleton, Schackleton and Gambiza (2008) and Ash and Jenkins (2007) touch on the issue of globalization in general, and trade agreements in particular, as a major force for change in ecosystem services. Some very interesting work on the dynamics of globalization and poverty is apparent. The Consortium on Ecosystems and Poverty in Sub-Saharan Africa describes a dynamic whereby globalization (represented by trade liberalization) incentivizes producers to try to maximize short-term gains, usually leading to an accelerated rates of environmental degradation and putting communities in the position where they have neither the capacity to produce commodities nor the local resource base on which to fall back (Shackleton, Schackleton & Gambiza, 2008: 86). Ash and Jenkins (2007) reveal how important ecosystem services are to the resource basis for trade and economic development. Links between trade and ecosystem services are, firstly, an important dynamic for further research, and, secondly, an area where further refinement of tools such as RTEAs and ecosystem assessment should continue to be pursued. The UN Environment Programme's forthcoming 'building blocks' integrated assessment manual and manual for the integrated assessment of trade agreements in the agricultural sector warrant consideration within future RTEAs.

On the whole, the Namibian assessment team feel that the project was very successful in getting trade and environmental interlinkages onto Namibia's policy agenda. A major benefit was to bring together policymakers from the often disparate sectors of trade, tourism, the environment, agriculture, health, water, energy, carbon markets, land use planning and others. It was notable in a small country to introduce new faces in meetings, and the realization by many that their work influences other domains of government was also significant. This kind of joined up thinking is new and holds countless exciting prospects.

