Issues and Threats to Sustainable Development in Namibia
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What is sustainable development?

In the past, governments all over the world were largely unaware of the damaging impacts of poorly planned development. Natural resources were overused and industrial activities were pursued without any thought, either to the build up of harmful pollutants, or to the resource needs of future generations. By the 1970s worrying signs began to appear. Global fish stocks started to collapse and the rivers, land and atmosphere in some regions became so polluted that agriculture and human health began to suffer. In addition, many countries discovered that the financial costs of trying to clean up the effects of serious pollution and other environmental impacts are 10 - 100 times higher than the cost if precautions had been taken to begin with.

In response, most governments have become increasingly aware that it is impossible to separate economic and social development issues from environmental issues. This realisation has given rise to the concept of sustainable development, which is most often defined as "development that meets the needs of the present, without limiting the ability of future generations to meet their own needs."

Sustainable development does not mean no development. It means development with the minimum amount of damaging impacts.
In order to pursue sustainable development, strategies that create a balance between the country's social, economic and ecological needs must be adopted.
What threatens sustainable development in Namibia?

Developing countries like Namibia are in an excellent position to avoid the damaging impacts of development that other nations have suffered in the past. In order to do this, several issues need to be addressed through policy development and implementation. By addressing these issues we will be in a better position to create a safer, healthier and more prosperous future for all Namibians.

The issues that threaten sustainable development in Namibia include:

- Poorly planned development and rapid industrialisation
- Limited water resources
- The loss of biodiversity
- A lack of human resources
- The need for a stable macro-economic environment
- The adverse impacts of global atmospheric change
- Population growth and settlement patterns
- Land issues
- Poverty and inequality
- Poor governance
- Increasing competition for shared resources
- The need to improve access to existing knowledge and to generate new knowledge regarding issues that affect sustainable development

Each of these issues is discussed in more detail in the following pages of this booklet.

Source: Krugman 2000
**Namibia's climate and sustainable development**

In addition to the major issues listed on the previous page, Namibia's harsh climatic conditions, poor soils, limited natural resource base and fragile environment, also limit sustainable development.

High rainfall variability, regular drought and high temperatures increase vulnerability to land degradation and water resource depletion. These conditions restrict development activities in Namibia and need to be carefully considered before any policy, programme or project is initiated.
Threat 1. Poorly planned development and rapid industrialisation

- The mining, marine fisheries, and agricultural sectors currently drive Namibia's economy. In the absence of careful management and economic diversification, strong economic growth within these sectors is likely to threaten sustainable development through:
  - The rapid depletion of Namibia's non-renewable mineral resources; and
  - The over-exploitation of the limited renewable natural resource base (water, soil and fish stocks) upon which the fisheries and agriculture sectors depend. Overexploitation can threaten future economic performance and livelihoods by causing soil erosion and desertification, a decline in water resources and the depletion of fish stocks.

- Expanded industrial and agricultural activity generate increasing volumes of waste. In the absence of careful planning, adequate management and pollution control, the accumulation of industrial and agricultural waste in the environment will:
  - Contaminate Namibia's air, water and soil resources; and
  - Threaten livelihoods, human health and future economic performance.
Threat 2. Poverty and inequality

- Namibia has one of the most highly skewed income distributions in the world. This means that there is significant poverty and inequality in the country. These circumstances need to be addressed as both poverty and wealth can threaten sustainable development.

➤ In the absence of education, skills, credit or employment, poor communities have no choice but to rely heavily on natural resources (woodfuel, arable land and wild plants and animals) for their livelihoods. This can lead to increasing rates of soil erosion, deforestation and biodiversity loss.

➤ The wealthier people become the more goods they demand. Wealthy communities have high rates of energy and raw material consumption. In addition, these resource intensive lifestyles are responsible for producing large amounts of polluting waste.

- Gender inequality is prevalent in Namibia. Although women usually have fewer rights regarding access to or use of land, finance, decision-making processes and education than men, they are often forced to shoulder greater responsibilities regarding production and reproduction. This threatens sustainable development because:-

➤ Imbalances in rights, resources and responsibilities can negatively affect natural resource management, household productivity and socio-economic advancement.
Threat 3. Limited water resources

Water is essential for industry, agriculture and human survival. It is also fundamental for the maintenance of the natural environment. Namibia's limited freshwater resources are under increasing stress because of high population growth, rapid urbanisation and the expanding national economy. Water subsidies ensure that users do not pay the full value of the water they use. This encourages water wastage and inappropriate use. Increasing water demand and growing water scarcity threatens sustainable development in Namibia in several ways (Figure 1).

Figure 1. Rising water demand and threats to sustainable development
Land in Namibia is unevenly distributed. 65% of the population live in the communal areas on 40% of the land, while less than 10% of the people live and work on privately owned farms which comprises 45% of the land. Such inequality in access to land has considerable conflict potential and is not compatible with sustainable development.

The grassland savannahs of Namibia experience seasonal fluctuations in rainfall and availability of pasture. In addition, most of the country’s dryland soils are fragile and easily eroded. These natural limiting factors combined with inappropriate policies, poor land use planning and management practices severely threaten sustainable development.

- Water subsidies in Namibia still encourage the irrigation of low value crops, often on unsuitable soils. This accounts for large amounts of water wastage and has reduced soil fertility through waterlogging and salinisation.
- Drought relief activities (for example, the establishment of large numbers of artificial water points) and subsidies for water and livestock have encouraged overstocking and overgrazing. This has resulted in a loss of rangeland productivity through soil erosion, desertification and bush encroachment.

The lack of land tenure, in particular inadequate systems of group tenure rights, threatens sustainable development because it does not provide incentives for people to care for the land and invest in its improvement.

- A lack of appropriate tenure over all land resources (water, grazing, trees, wildlife and soil) encourages the overexploitation of these resources, causes land degradation and threatens livelihoods.
Threat 5. Biodiversity loss

Biological diversity (the variety and variability among living things and the natural environments in which they occur) provides a foundation for human existence and livelihoods (see Box below). In addition, Namibia's rapidly expanding wildlife-based tourism industry is dependent on areas of natural beauty and on the health of the country's rich wildlife populations. However, as a result of increasing human impacts (Figure 2), threats to biodiversity are increasing dramatically.

Life sustaining services and other resources provided by wildlife and natural ecosystems

**Essential genetic material.** Today, most of the world's food supply comes from domesticated crops and animals. Despite this, wild plants and animals provide a vital genetic resource that is regularly required to help improve resistance to pests and diseases, tolerance to drought and other characteristics in domestic crops and animals.

**Modern medicine.** The Earth's species of wild plants and animals contain chemical compounds, many of which have important medicinal properties that can be used in modern medicines.

**The provision of essential life sustaining services.** Natural ecosystems are responsible for supporting all the processes that are essential for basic human survival. These include the provision of oxygen and freshwater, the breakdown of animal waste and the recycling of dead animal and plant matter.
Although some animals and plants provide humans with food, fibres and medicine, most species seem to have no direct value for mankind at all. Consequently, their loss should not matter. Unfortunately this is far from true and the loss of biodiversity poses a serious threat to sustainable development.

- Not all species are equally vulnerable to extinction due to human impacts. Microbes and many types of insects, rodents and weedy plants are able to adapt quickly to environmental changes created by humans. Unfortunately many of these species cause disease and pestilence and have a low economic value.

- The loss of only one species can cause other species to face extinction. If too many species are permanently lost from an ecosystem, it loses complexity. Outbreaks of pests and disease become prevalent and essential ecological functions such as the control of soil erosion and floods, the assimilation of wastes and the purification of water are disrupted. In turn, these impacts threaten human health, food supplies and sources of wood and medicine.
Threat 6. Population growth and settlement patterns

Namibia's population is very small in relation to the country's physical size. However, the harsh climatic conditions and limited resources (water, soils and finances) ensure that the country has a low human carrying capacity. During drought years it becomes increasingly difficult for the land in communal areas to support subsistence farming communities. Consequently, Namibia's towns and cities have experienced rapid rates of urbanisation in recent years. This has resulted in the spread of poorly serviced informal settlements.

The cumulative effects of Namibia's fairly high population growth rate, uneven population distribution and rapid rates of urbanisation pose severe threats to sustainable development. Some of these threats are depicted in Figure 3.
Figure 3. Some of the threats that are interlinked with Namibia's high population growth rate, rapid urbanisation and harsh climatic conditions.
Threat 7. The lack of human resources

- Social, gender and regional inequalities in education levels, skills training and capacity building still exist in Namibia, despite considerable efforts to redress past inequalities. These unfavourable conditions threaten sustainable development because:
  - **The resulting lack of skilled labour and limited human resources restricts private sector development and public sector capacity.**

- Gender inequality is prevalent in Namibia. Although women usually have fewer rights regarding access to or use of land, finance, decision-making processes and education than men, they are often forced to shoulder greater responsibilities regarding production and reproduction. This threatens sustainable development because:
  - **Imbalances in rights, resources and responsibilities can negatively affect natural resource management, household productivity and socio-economic advancement.**

- Access to primary health care continues to improve in Namibia. However, malaria and diseases linked to poor living conditions still threaten the survival of small children and people living in inadequately serviced rural and informal urban areas. In addition AIDS has become a major threat to human resource development throughout the country. Poor human health and the spread of critical diseases threaten sustainable development because they:
  - **Undermine human wellbeing and economic prosperity by reducing the quantity and quality of the labour force.**
  - **Wipe out past investments in education and training.**
  - **Overburden the local and national health care system, and place a strain on communities and households that need to care for orphaned children, the sick and dying.**
Threat 8. Poor governance

• Governance affects efficiency within the civil service, political stability, democracy and equity.
  ➢ Regional conflicts, crime and domestic violence currently drain Namibia’s human and financial resources, create uncertainty amongst foreign investors and contribute to social insecurity.

• Governance determines the institutional and policy approaches that are adopted regarding resource management.
  ➢ It is recognised that decentralization and democratization of decision-making and administration is necessary for more effective regional and local development. Despite this, decentralisation is being adopted very slowly in Namibia.
  ➢ Many of the issues that threaten sustainable development are closely interlinked. One of the major stumbling blocks to sustainable development is the lack of intersectoral planning and co-ordination between line ministries and all other stakeholders at the policy and planning level.
  ➢ Effective policy development requires the active participation of civil society and the private sector. In Namibia there is a strong need for people to become more pro-active regarding legislation and policy development.

Threat 9. The need for a stable macro-economic environment

• A stable macro-economic environment is vital for economic growth, poverty reduction, and sustainable development.
  ➢ Currently Namibia does not enjoy a stable macro-economic environment. There is uncertainty regarding foreign investment in the country, growing trade imbalances and an increasing government budget deficit.
Threat 10. Increasing competition for shared natural resources

- All of Namibia's perennial rivers originate in neighbouring countries. Increasing demand for water and hydroelectric power throughout southern Africa is inevitable due to population growth and expanding economic activity. In turn, Namibia (the end user of the Kunene and Orange Rivers) is likely to suffer from a reduction in water quality and quantity as a result of the economic activities of her neighbours. This will create additional stress on the water resource sector and severely threaten sustainable development.
  - Sustained co-operation and co-ordination regarding water use policies and policy implementation is essential to avoid future inequitable use transboundary pollution and conflict.

- Namibia shares the highly productive Benguela marine ecosystem with South Africa and Angola and does not have exclusive control over the migratory fish stocks that sustain the country's important marine fisheries sector.
  - Any local efforts at fish stock rebuilding and conservation will be wasted unless there is sustained communication, information exchange and joint research between Namibia, Angola and South Africa regarding the migratory fish stocks of the Benguela.

- The abundant wildlife herds encountered in northeastern Namibia migrate seasonally into northern Botswana, Zimbabwe, southern Zambia and Angola.
  - These wild animals must be considered as valuable shared resources. Their loss will threaten sustainable development by limiting livelihood options and impacting negatively upon the region's booming tourist industry.
Threat 11. The adverse impacts of global atmospheric change

In addition to the local effects on human health, airborne pollutants can be carried long distances and are capable of altering the functioning of the atmosphere. Stratospheric ozone depletion, acid rain and global warming are the three major consequences of atmospheric changes resulting from air pollution. Of these, global warming poses the biggest threat to sustainable development in Namibia.

Since the beginning of the industrial revolution, polluting gases (largely generated from the burning of coal and petroleum) have accumulated in the atmosphere. Rapid rates of deforestation have helped to concentrate these gases which have begun to cause a noticeable increase in the Earth's atmospheric temperature. This increase in temperature is referred to as global warming. Global warming has the ability to cause other large scale, long term changes to the earth's climate. These changes are collectively called global climate change.

Although industrialised countries in the Northern Hemisphere are the main emitters of polluting gases, the entire world will be affected by climate change. In the medium to long term, there is a possibility that climate change will cause conditions in most parts of Namibia to become hotter and drier with increased variability and more frequent and prolonged periods of drought.

These adverse conditions will threaten sustainable development by causing current problems regarding water management, food production and human health (particularly with respect to the spread of vector borne diseases like malaria) to worsen.
Threat 12. The need to improve access to existing knowledge and generate new knowledge

- Knowledge, including local (indigenous) knowledge, of Namibia’s natural and socio-economic environments is essential for sustainable development as it can help guide community development, environmental conservation and the sustainable use of natural resources. In addition, there is a growing global demand for many traditional medicines and other products. Consequently, local communities can use their knowledge to stimulate investment and encourage private sector development and economic growth.

  ➢ Much of the relevant knowledge that exists in Namibia is not shared widely nor is it easily accessible. In addition, rapid modernisation threatens the survival of valuable indigenous knowledge.

  ➢ In the absence of intellectual property protection (through legislation and international agreements), valuable indigenous knowledge can easily be exploited by others, without providing benefits to the local communities involved.

- Modern computer-based information and communication technologies (ICTs) enhance information sharing, partnership building and can improve coordination planning, monitoring and decision-making within a decentralising government. Consequently, they can contribute to sustainable development and the democratisation of political structures by providing a greater range of people an organisations with equal access to information.

  ➢ The absence of policies that promote the use of ICTS in urban and rural areas will marginalise Namibia and slow down efforts to achieve sustainable development.

- Even though a lot of useful information currently exists, there are significant gaps in our knowledge regarding human livelihood strategies, climate, soils and biodiversity. These gaps need to be filled in order to achieve sustainable development.
Efforts to mitigate the 12 issues that threaten sustainable development

Although the 12 issues mentioned in this booklet pose a major threat to sustainable development in Namibia, much is currently being done to try and address them. At the international level Namibia is party to several global conventions. These include the Framework Convention on Climate Change, the Convention on Biodiversity and the Convention to Combat Desertification. Some of the local initiatives that are helping to move Namibia towards a more sustainable future include:

1. **Diversification and Affirmative Action** which strive to reduce poverty by including all sectors of society in the economy and in decision making, diversifying economic activities and encouraging value-adding.

2. **Namibia’s CBNRM (Community Based Natural Resource Management) programme** which has developed collaborative conservation efforts on communal land, including the formation of conservancies. CBNRM approaches have been introduced in the wildlife, forestry and water sectors, giving local communities rights over resources and responsibilities for managing them. This encourages the sustainable use of natural resources and helps to combat poverty.

3. **Namibia’s Biodiversity Programme** which, through a participatory strategy and action plan, addresses biodiversity issues. Activities include monitoring, strategic analysis and research, promoting community involvement and harnessing traditional knowledge.

4. **Namibia’s NRA (Natural Resource Accounting) programme** which investigates the natural resource demands of the different sectors of the economy and allows policy makers to plan for economic growth within the context of Namibia’s natural resource constraints. This programme provides an excellent tool to help design development strategies that are both economically and environmentally sustainable.

5. **Namibia’s EMA (Environmental Management Act)** which provides a framework for considering the likely financial, social and environmental impacts of a proposed policy, plan, programme or project as early as possible in the decision making cycle.

6. **NAPCOD (Namibia’s Programme to Combat Desertification)** which aims to improve the ability of rural communities to improve the management of their land and natural resources and reduce vulnerability to land degradation and climatic variability.
Conclusion

Since Independence in 1990, Namibia has attained progress in creating a more unified nation. However, much remains to be done if the country is to move away from being culturally, socially and economically fragmented. Above all else, we need shared values and a shared vision.

A shared vision for sustainable development demands agreement on common values and attitudes regarding equity and environment. These values include:

- Maintaining cultural diversity in Namibia but developing respect and open mindedness toward other people and cultures.
- Maintaining human rights, democracy, social and gender equality and justice.
- Preserving biodiversity and wildlife for sustainable use.
- Avoiding the wasteful use of natural resources and resource-intensive lifestyles.
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