



Biodiversity and the 2030 Agenda for Sustainable Development

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AGENDA 2030- LOOKING AHEAD

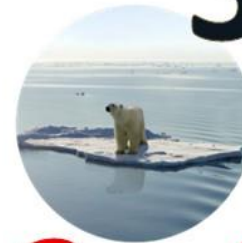
Introduction

- The 2030 Agenda for Sustainable Development sets out an ambitious framework of goals and targets to address a range of global societal challenges.
- The importance of biodiversity and ecosystem is reflected in many of the SDGs and targets.
- Biodiversity and ecosystems essential as countries embark on the domestication and implementation of key national priorities for sustainable development.
 - Biodiversity and ecosystem services contribute directly to human well- beings and development priorities.
 - Biodiversity is at the centre of many economic activities particularly those related to crop and livestock, agriculture, forestry and fisheries.
 - Nearly half of the human population is directly dependent on natural resources for their livelihood.
 - 2.6 billion people draw their livelihoods either partially or fully from agriculture,
 - ❑ 1.6 billion from forests, and
 - ❑ 250 million from fisheries.

Is our world in a sustainable path?

60% of ecosystems damaged

3°C +



+2 - 3



billion
middle class
consumers-2040



140 billion
tons

of global extraction of natural resources **per year** if consumption stays at current developed country rates

Contributions of the Implementation of the Strategic Plan for Biodiversity 2011-2020 in Achieving SDGs

- The Strategic Plan for Biodiversity 2011-2020 and its twenty Aichi Biodiversity Targets adopted under the Convention on Biological Diversity provides a globally framework for:
 - Priority actions on conservation
 - Sustainable use of biodiversity
 - Fair and equitable sharing of the benefits arising out of the utilization of genetic resources.
- The strategic plan is consistent with the 2030 agenda and the SDGs

Rethink and Refocus



Sustainability as a
concept and our
systems



Efforts to deliver
results with a
comprehensive
agenda

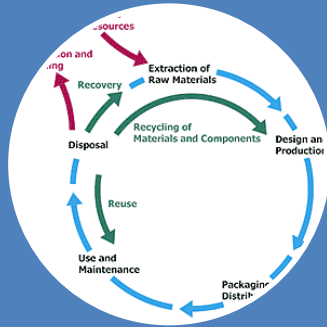
Rethink 1: Better understanding

Understanding **inter-linkages** and **systems** in which we live/work and then making **right decisions**

Individuals and organisations make decisions about products and services delivered by governments, Industry and value chains; influenced by socio-economic circumstances and individual preferences

Decisions are made constantly that impact the lives and decisions of citizens, 70% of whom by 2050 will be living in urban environments

Rethink 2: Choices



Value chains

- Resources
- Markets
- Lifecycle



Lifestyles

- What and how
- Impact
- Information



Human settlements

- Physical space
- Institutional platform
- Hierarchies and networks



Rethink 3: Resilience



Resilience is how “entities” manage shocks caused by the evolution of the development process

Source. Productive local economies: creating resilient places; Neil McInroy and Sarah Longlands; Centre for Local Economic Strategies; December 2010

Rethink 4: Space

The resilience of “places” to withstand the impacts of natural, economic and social evolution and change, depends predominantly on the flow and efficient management of resources

Refocus: What?

Inspire a global socio-economic evolution towards sustainable use of resources, with the participation of people and institutions

- **Decouple, Wellbeing, Poverty**

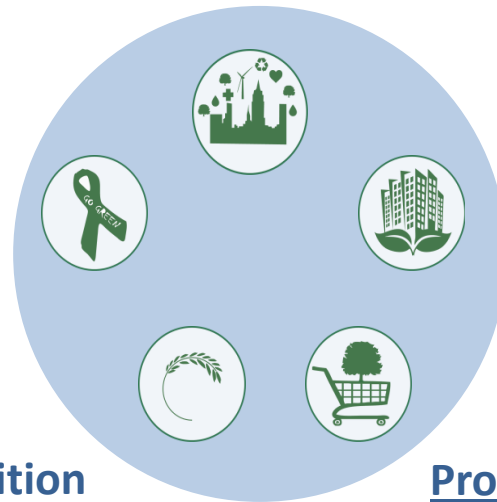
Refocus: Which areas?

Develop and deliver integrated solutions and pathways to:

Manage economies in a way that decouples economic growth from resource use while creating major financial savings

Create an understanding on what constitutes sustainable lifestyles, promote them and inspire global change of consumption patterns




Helping to fulfil our nutrition needs through a food systems approach enhancing environment, human health and economic outcomes



Make buildings the places we can experience resource efficient and cost effective life and work

Procure products and services that represent the best possible value that money can buy and produce benefits for the environment and society

Roles of Biodiversity in Achieving the 2030 Agenda for Sustainable Development

<p>Goal 1 – End Poverty in all its forms everywhere</p>  <p>The icon for Goal 1, 'No Poverty', features a red square with the number '1' and the text 'NO POVERTY' at the top. Below this, there are white silhouettes of a family consisting of two adults and two children.</p>	<ul style="list-style-type: none">• Biodiversity provides resources and income,• Biodiversity also underpins millions of jobs and generate significant employment.• fisheries and aquaculture• Ecotourism is a fast-growing sector worth around US\$100 billion per year
<p>Goal 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p>  <p>The icon for Goal 2, 'Zero Hunger', features a yellow square with the number '2' and the text 'ZERO HUNGER' at the top. Below this, there are white silhouettes of a bowl with three wavy lines above it, representing steam or food.</p>	<ul style="list-style-type: none">• Biodiversity is a key element of food security and a means of improving nutrition• Biodiversity also underpins ecosystem functions which are central to agricultural productivity<ul style="list-style-type: none">– pollination and the maintenance of soil fertility– water quality• Maintaining genetic and ecosystem diversity in agricultural practices (agro-biodiversity) can reduce farmers' vulnerability to climate change and to market variability
<p>Goal 3 - Ensure healthy lives and promote well-being for all at all ages</p>  <p>The icon for Goal 3, 'Good Health and Well-being', features a green square with the number '3' and the text 'GOOD HEALTH AND WELL-BEING' at the top. Below this, there are white silhouettes of a heart rate line and a heart.</p>	<ul style="list-style-type: none">• Nearly 1 in 4 deaths globally is attributed to environmental risk factors.• Healthy ecosystems help to mitigate the spread and impact of pollution• Agricultural biodiversity contributes to<ul style="list-style-type: none">– increased sustainable production,– reducing the need for pesticides and other chemical inputs,– resulting in benefits to human health– a substantial proportion of the world's population depends on traditional medicines derived from biodiversity for their health care needs.

Roles of Biodiversity in Achieving the 2030 Agenda for Sustainable Development

Goal 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



- Raising awareness of the importance of biodiversity through education systems
- Traditional and indigenous knowledge are crucial to the conservation and can be harnessed through educational initiatives such as agricultural extension services

Goal 5 - Achieve gender equality and empower all women and girls



- Women play a vital role in agriculture, nutrition and the well-being of families and communities. Recognizing women's roles as key land and natural resource managers is central to sustainable development.
- loss of biodiversity and associated ecosystem services can perpetuate gender inequalities by increasing the time spent by women and children in performing certain tasks, such as collecting valuable resources, including fuel, food and water

Goal 6 - Ensure the availability and sustainable management of water and sanitation for all



- Ecosystems help maintain water supply and quality, and guard against water-related hazards and disasters
 - wetlands play a role in surface, subsurface and ground water storage, and reduce the risk of flooding. They also help to capture, process and dilute pollutants
- Managing ecosystems to maintain these types of services is generally more cost-effective than employing built technologies. It also helps prolong the lifetime and productivity of water infrastructure such as reservoirs, water supply facilities, irrigation networks and dams

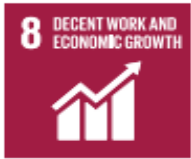
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Goal 7 - Ensure access to affordable, reliable, sustainable and modern energy for all



- Globally, 3 billion people rely on biological resources including wood, coal or animal waste for cooking and heating.
- Bio-energy produced from renewable biomass such as forestry and agricultural residues and hydropower systems can provide major opportunities for supplying cleaner and affordable energy.
- Ecosystem-based approaches to food production reduce dependency on fossil fuels and external synthetic inputs

Goal 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all






- Biodiversity and ecosystems underpin many national and global economic activities, including those related to agriculture, forestry, fisheries and aquaculture, energy, tourism, transport and trade.
- Biodiversity conservation and sustainable use can lead to higher productivity, more efficient resource use, and long-term viability of resources.

Goal 9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation






- Biodiversity and healthy ecosystems can provide reliable and cost-effective natural infrastructure. For example, coral reefs and mangrove forests protect coasts against flooding that are expected to increase with climate change.
- Natural infrastructure such as vegetation in cities can reduce the run-off of pollution into water bodies. Such green infrastructure can offer multiple benefits and are often more effective than built infrastructure in terms of cost, longevity and effectiveness.

Roles of Biodiversity in Achieving the 2030 Agenda for Sustainable Development

<p>Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable</p>  <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<ul style="list-style-type: none">• Ecosystems and biodiversity underpin the day-to-day functioning of human settlements by delivering the basic services and conditions that enable, support and protect human production, consumption and habitation.• Biological resources provide many of the foods, building materials, energy, and medicines that are consumed in urban centres.• Urban planning that integrates biodiversity consideration can contribute to more sustainable, cost-effective and healthy human settlements.
<p>Goal 12 – Ensure sustainable consumption and production patterns</p>  <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>	<ul style="list-style-type: none">• Consumption and production of all goods and services require the transformation of many natural resources, which in turn impacts biodiversity.• Current unsustainable consumption and production patterns can undermine the ability of ecosystems to provide services for industries and communities that rely upon them.• Utilizing cleaner and more resource-efficient approaches that minimize wastes and pollutants• Economic opportunities and better quality of life as well as benefitting biodiversity
<p>Goal 13 - Take urgent action to combat climate change and its impacts</p>  <p>13 CLIMATE ACTION</p>	<ul style="list-style-type: none">• Forests, peatlands, wetlands, ocean and coastal ecosystems represent globally significant carbon stores, and their conservation and sustainable use is a critical element for avoiding dangerous changes to the Earth’s atmospheric temperature and climate system.• Efforts to protect and restore habitats offer cost-effective and proven ways to mitigate climate change. Such• Ecosystems can also serve as natural buffers against climate extremes and other disasters, and strengthen adaptation to climate change.

Roles of Biodiversity in Achieving the 2030 Agenda for Sustainable Development

<p>Goal 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> 	<ul style="list-style-type: none">• The conservation and sustainable use of biodiversity in marine and coastal ecosystems is a key aspect of sustainable development.• Biodiversity underpins all fishing and aquaculture activities, as well as other species harvested for foods and medicines.• Conservation and sustainable use of marine and coastal biodiversity is essential to ensure that the world's oceans, seas and marine resources remain vital for current and future generations.
<p>Goal 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss</p> 	<ul style="list-style-type: none">• The conservation, restoration and sustainable use of terrestrial ecosystems is essential for sustainable development and for achieving other SDGs.• Targets under this goal include a call to integrate ecosystem and biodiversity values into national and local development planning, poverty reduction strategies and accounts• Other targets highlight the importance of particular ecosystems, including freshwater, forests, deserts and degraded lands and mountain ecosystems.
<p>Goal 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p> 	<ul style="list-style-type: none">• Conflicts over natural resources, environmental degradation and contamination can be one of the factors leading to social insecurity and violence which affect vulnerable people the most• Strengthening the rights of communities over natural resources management, combating illegal exploitation and corruption• Ensuring transparent decision-making on social and environmental issues constitute an important process toward building an inclusive society based on justice

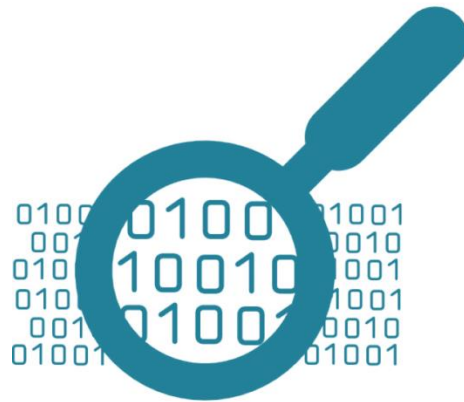
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Goal 17 - Strengthen the means of implementation and revitalize the global partnership for sustainable development



- The Strategic Plan for Biodiversity 2011-2020 provide opportunities for
 - Strengthening global partnership on science, technology and innovation,
 - Dissemination of environmentally sound technologies
 - Building national capacity for monitoring the progress of the 2030 Agenda for Sustainable Development
- At the national level, National Biodiversity Strategies and Action Plans (NBSAPs) are adopted as policy instrument for achieving Strategic Plan for Biodiversity.

Big Data presents an exciting opportunity (& Challenge) for the SDGs and the future



Source: Stats-SA, 2015



CONCLUSION

- Take action...



Thank you !



Special Thanks:

UN Environment would like to thank Professor Godwell Nhamo for all the work put into making this presentation very informative .

