

# Promoting coherent implementation of the Rio Conventions in order to better address the interrelated challenges of climate change, land degradation and biodiversity loss

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## Global Environmental Challenges

Adapting to climate change and enhancing our resilience to natural disasters.

- Protecting biodiversity and ecosystems, providing food to more than 8 billion people.
- Increasing our water and air quality, tackling socio-economic inequality.
- Dealing with a rapidly expanding urban population.



## These challenges still represent global crises and threats:

- Climate change.
- Biodiversity loss.
- Land and ecosystems degradation.



## Climate change

People, ecosystems and species are suffering its effects globally, whether it is through super storms and hurricanes in the Caribbean, severe prolonged droughts in Africa, sea-level rise in the Pacific Islands, or record-breaking temperatures worldwide. They increased in the past 50 years.



Many places have seen changes in rainfall, resulting in more floods or intense rain or more droughts as well as more frequent and severe heat waves.



The planet's oceans and glaciers have also experienced some big changes - oceans are warming and becoming more acidic, ice caps are melting, and sea levels are rising.



# Loss of Biological Diversity

- Human exploitation and degradation of ecosystems is causing a widespread loss of biodiversity and decline in ecosystem conditions leading to reduced provision of ecosystem services.



## Land and Ecosystems Degradation



## How the three challenges are addressed



Convention on Climate Change



Convention on Biological Diversity



Convention on Desertification

Each has its scientific body

Each has a national focal point

Each has its governing body

But: same Parties

## Why the need for further promoting coherent implementation of the Rio Conventions?

- Science – based findings are alarming.
- The Interlinkages: clear but ignored.
- The 2030 SDGs: will not be achieved as long as we are facing these problems.
- Biodiversity conservation and use/misuse takes place at home (at domestic level).

# **Science – based findings are alarming**

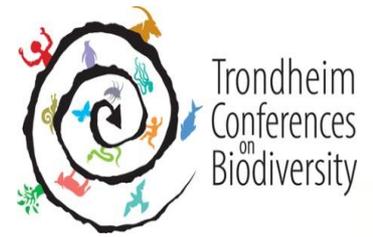
Key issues from recent scientific assessments

## Climate Change:

- Even in the most optimistic greenhouse gas emission (GHG) scenarios, mean planet temperature is likely to increase at least by 2°C until the year 2100.
- For global warming of 1.5°C to 2°C, the majority of terrestrial species ranges are projected to shrink profoundly. Changes in ranges can adversely affect the capacity of terrestrial protected areas to conserve species, greatly increase local species turnover and substantially increase the risk of global extinctions.

## Biological Diversity

- Species extinction rate up to 1,000 times the natural rate due to multiple drivers and stressors, including climate, water scarcity and pollution. This reduces the resilience of ecosystems to climate change.
- Of an estimated 8 million animal and plant species (75% of which are insects), around 1 million are threatened with extinction.
- Human actions have already driven at least 680 vertebrate species to extinction since 1500.
- The proportion of species currently threatened with extinction according to the IUCN Red List criteria averages around 25 per cent across the many terrestrial, freshwater and marine vertebrate, invertebrate and plant groups that have been studied.



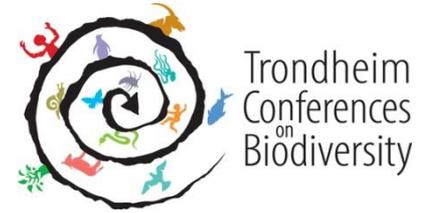
Just a Few of the Many Endangered Species!!



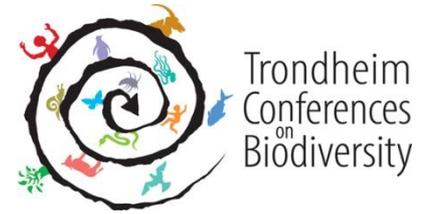
- Over 40% of ocean area was strongly affected by multiple drivers in 2008, and 66% was experiencing increasing cumulative impacts in 2014.
- Live coral cover on reefs has nearly halved in the past 150 years, the decline dramatically accelerating over the past 2-3 decades due to increased water temperature and ocean acidification.
- Ecosystem degradation and biodiversity loss reduce the resilience of communities, and society, and increases their vulnerability to the impacts of climate change.

## Land and ecosystems degradation

- Degradation of terrestrial and marine ecosystems has already had a pronounced impact on ecosystem functions worldwide and the rates of ecosystem degradation and biodiversity loss are increasing.
- Degradation of the Earth's land surface is pushing the planet towards a sixth mass species extinction, and costing more than 10 per cent of the annual global gross product in loss of biodiversity and ecosystem services.



- Currently, degradation of the Earth's land surface through human activities is negatively impacting the well-being of at least 3.2 billion people.
- While the cost of land degradation reaches globally about US\$490 billion per year, they are much higher than the cost of action to prevent it.
- Investing in avoiding land degradation and the restoration of degraded land makes sound economic sense; the benefits generally by far exceed the cost.



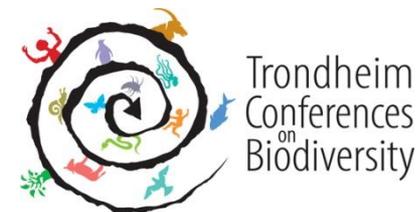
# The Interlinkages

## UNEP (2015):

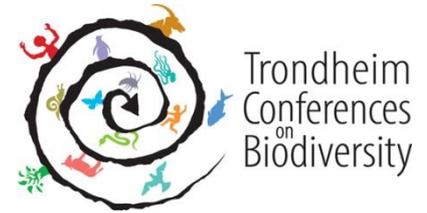
- Land restoration can be an effective solution for climate adaptation and mitigation by improving CO<sub>2</sub> sequestration and hydrological cycle. This is particularly important in fragile ecosystems where land restoration can contribute to landslide prevention and reductions in damage from climate change and extreme events.

## Workshop on “Biodiversity and climate change: integrated science for coherent policy” (SCBD, in cooperation with IPBES and IPCC, UNFCCC, UNESCO 2018:

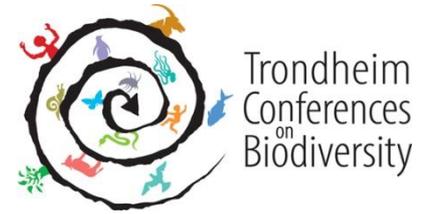
- Climate change and biodiversity loss are inseparable threats to humankind and must be addressed together. Biodiversity and climate are interconnected in many ways.
- On the one hand, biodiversity is strongly affected by climate change, with negative consequences for human well-being and the long-term stability of critical ecosystems. On the other hand, the conservation of biodiversity, through the ecosystem services it supports, makes an indispensable contribution to addressing climate change.



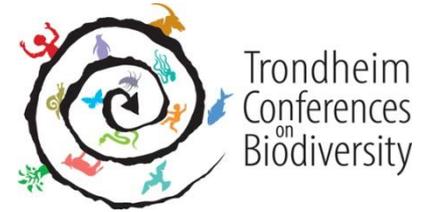
- Limiting the global average temperature increase to 1.5°C above pre-industrial levels, as compared to a 2°C rise or higher, would reduce risks to biodiversity, ecosystems, food systems, water, and human livelihoods.
- In order to limit global warming to well below 2°C, and closer to 1.5°C above pre-industrial levels, strong actions are needed to reduce greenhouse gas emissions from fossil fuel use and cement production, as well as to protect and enhance carbon sinks on land and in the oceans through ecosystem-based approaches.
- Restoration practices may no longer be viable in the face of climate change.



- Simultaneous investment in ecosystem restoration, the rehabilitation of degraded agricultural and pasture lands, and ways to sustainably enhance agricultural productivity can contribute to combating climate change and biodiversity loss and enhance food security at the same time.



# Role of biodiversity in achieving 2030 SDGs



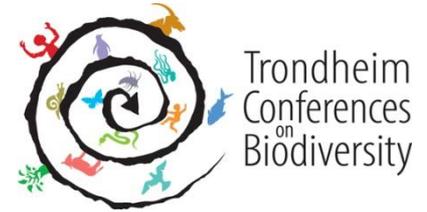
## Achievement of UN 2030 SDGs

### IPBES assessments:

- The loss of biodiversity is already impacting climate, and affecting people and livelihoods all around the world.
- Limiting the loss of biodiversity and degradation of ecosystems can contribute to mitigating and adapting to climate change and is essential to the achievement of many of the UN 2030 SDGs.

### UNCCD (2016):

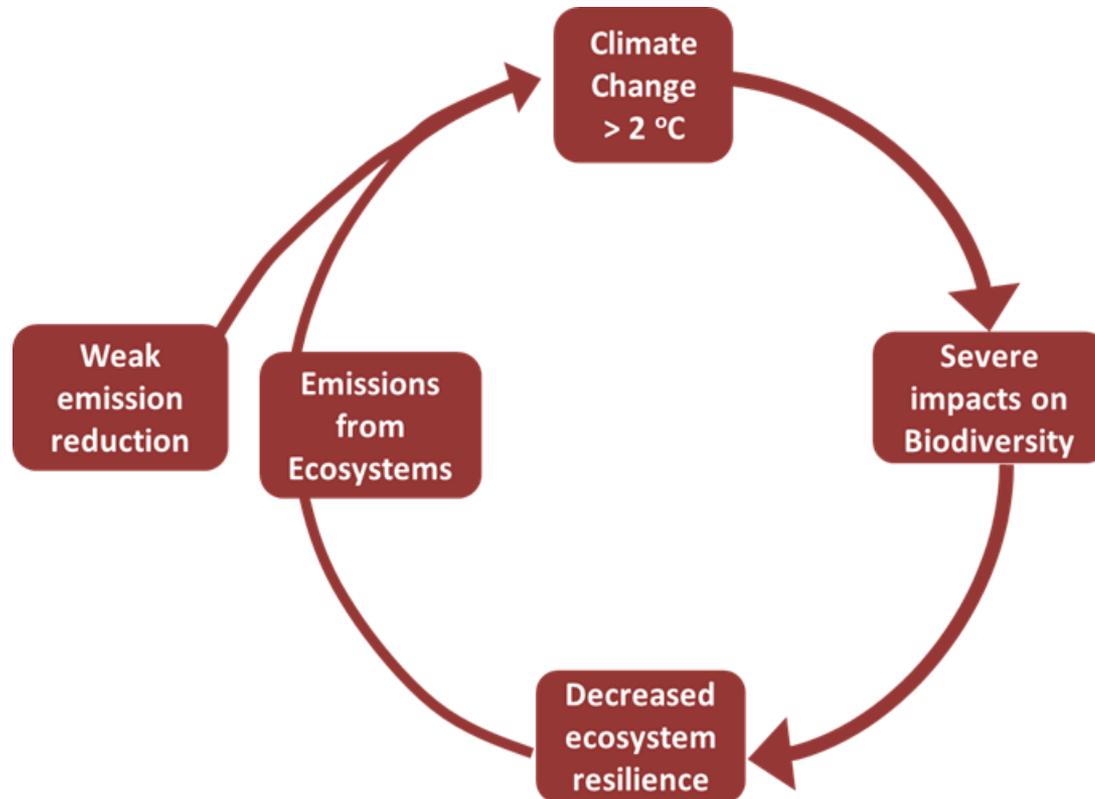
- The benefits, including the prevention of species loss and extinction, maintenance of key ecosystem services and of bio-cultural identities, contribute to enhancing the resilience. Land restoration contributes significantly to achieving the United Nations Sustainable Development Goals.



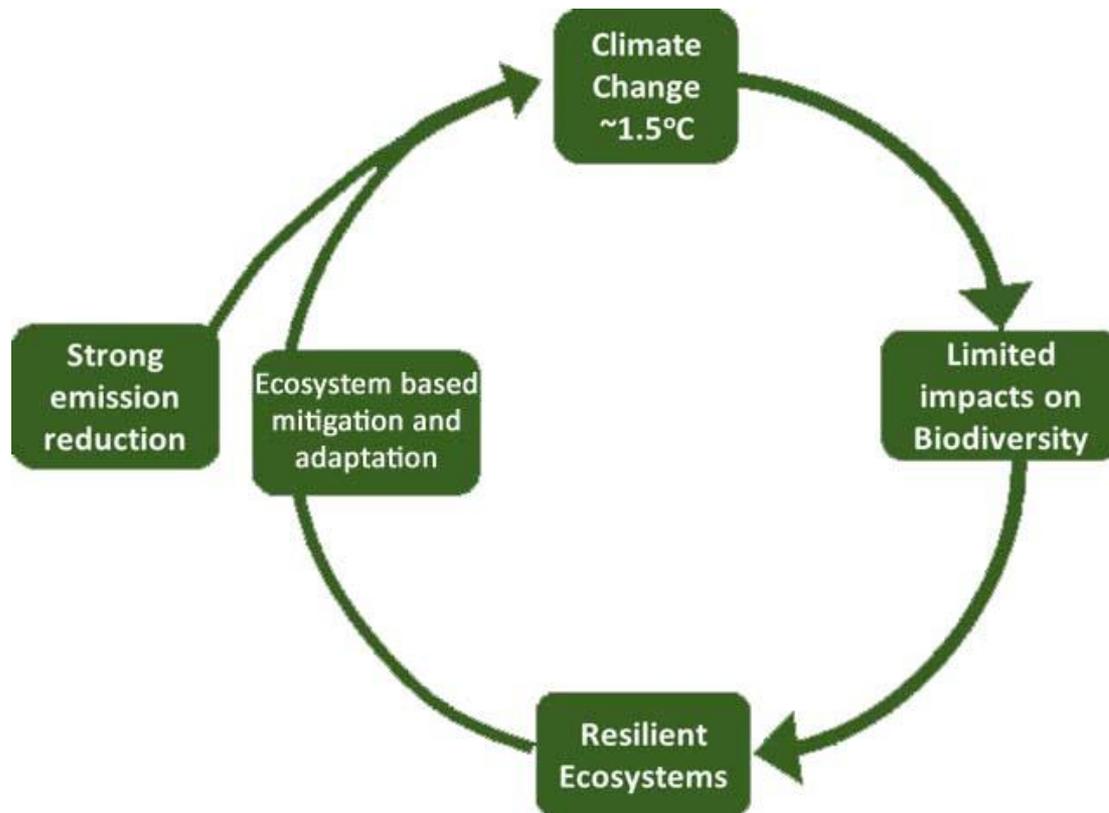
## Biodiversity conservation and use/misuse takes place at home (at domestic level)

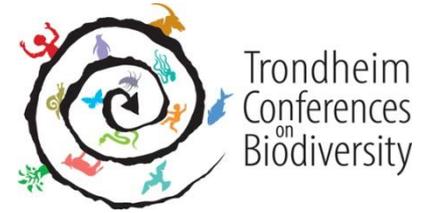
- If coherent action is not taken at the local / domestic level, limited progress will be made in achieving the goals of the 3 conventions.

- Currently, we are suffering the effects of a “vicious” cycle which would worsen if climate change exceeds 2 degrees.



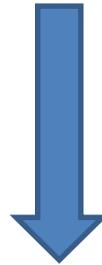
- We should aim for a virtuous cycle, wherein urgent and deep emission reductions allow for climate change to be limited to 1.5 degrees. This would reduce impacts on biodiversity, which in turn would improve mitigation of climate change.





If climate change, biodiversity loss and land degradation are interconnected, they should be addressed together

How to address the three challenges simultaneously at the national level



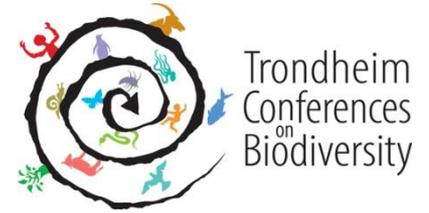
Nature/Ecosystem Based Approaches: a key instrument

- With the help of ecosystem-based approaches, synergies are created between different sectors and multiple goals can be pursued simultaneously often at lower cost.
- It is possible with ecosystem-based approaches to combine measures that can simultaneously protect or restore biodiversity and ecosystem services, remove or reduce emission of atmospheric greenhouse gases and reduce poverty.
- These approaches provide “no-regret” options, as the measures are useful even if the effects of climate change do not materialize as predicted.

## What is already being done?

Countries have made their own national commitments on biodiversity, climate change and land degradation under the Rio Conventions, including:

- Commitments on conserving, sustainably using, and restoring biodiversity in National Biodiversity Strategies and Action Plans under the CBD.
- Land degradation neutrality targets under the UNCCD.
- Carbon neutrality target by 2050 under UNFCCC.
- Pursue efforts to limit the global average temperature to well below 2°C above pre-industrial levels and to make efforts to keep the increase below 1.5°C under UNFCCC.
- Indigenous peoples and local communities, the private sector, civil society, have also made great efforts to address the challenges of biodiversity and climate change.



## **The Egyptian Initiative**

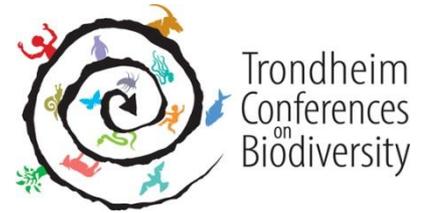
A coherent approach for addressing biodiversity loss, climate change, and land and ecosystems degradation: aims, elements, and status of implementation

## The Imitative promotes transformative changes:

- Policy and good governance: will identify key areas where policy can be advanced and upgraded.
- Cooperation for capacity building on a range of themes, including financial, technical and promotional.
- Partnerships in practice: develop, implement, evaluate and report on case studies of successful, integrated solutions for biodiversity and ecosystem vitality that reduce land and marine degradation and increase resilience to climate change.

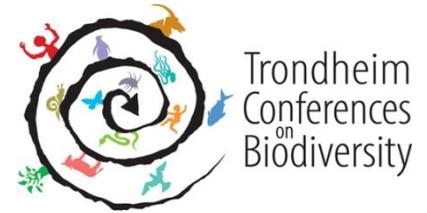
## Aims of the Initiative :

- To guide and support countries to meet, in synergetic and integrated manner, their objectives and commitments under the three Rio conventions, the Paris Agreement, as well as the 2030 Agenda for Sustainable Development.



**At domestic levels**, governments would commit, as part of the Initiative, to:

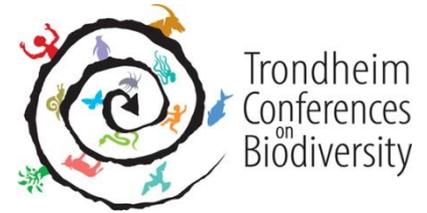
- Prioritise nature-based solutions providing multiple benefits to increase synergies between the implementation of relevant strategies and action plans.
- Increase investment and incentives to enable and promote implementation of nature-/ ecosystem-based approaches.
- Provide tools for decision-makers and experts in policy, practice and civil society to incorporate nature-based solutions/ecosystem-based approaches in priority sectors according to national priorities (e.g. tourism, energy and mining, infrastructure, industry, agriculture, forest management, water, urban planning, fisheries).



- Build their own national capacities including the creation of enabling environment that coherently address climate change, land degradation and biodiversity loss.

### **At international level:**

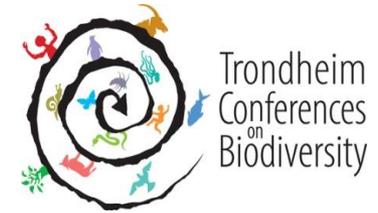
The Initiative will contribute to achieving Paris Agreement, Aichi targets/post 2020 biodiversity Targets, UNCCD neutrality target and 2030 SDGs.



## Ongoing/planned activities:

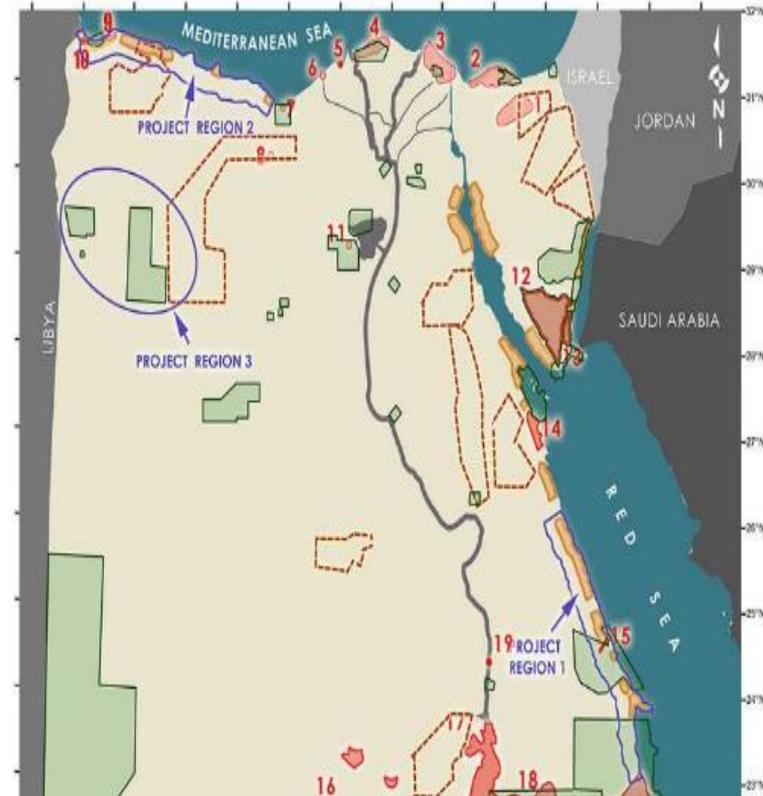
- Mapping of ongoing initiatives and existing tools and resources on ecosystems-based approaches in collaboration with UNEP/WCMC.
- Consultative and scoping meetings on the initiative.
- Assessment of opportunities for ecosystems-based approaches by Member States and partners.
- Identification, design and development of Concept note/project proposal for submission to potential donors (GEF, Green Climate Fund GCF and others).
- Resource mobilization for pilot programmes.

# Mainstreaming the conservation and sustainable use of biodiversity into the tourism development and operations in threatened ecosystems in Southern Red Sea coastal belt in Egypt (UNDP/GEF)

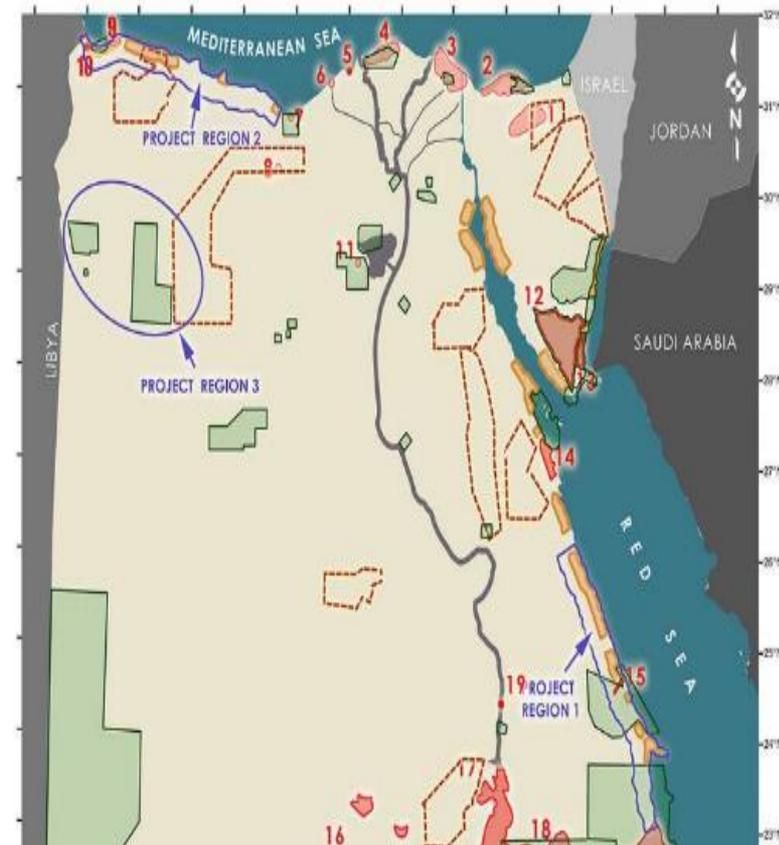


Barriers to mainstreaming biodiversity into the tourism development and operations:

- Insufficient understanding of the importance of biodiversity
- Weaknesses in the enabling environment and governance
- Implementation of the existing regulatory framework
- Voluntary and market-based mechanisms to promote eco-tourism and environmentally benign tourism
- Limited opportunities to involve local communities in tourism and ecotourism-based livelihoods promoting the mainstreaming of biodiversity



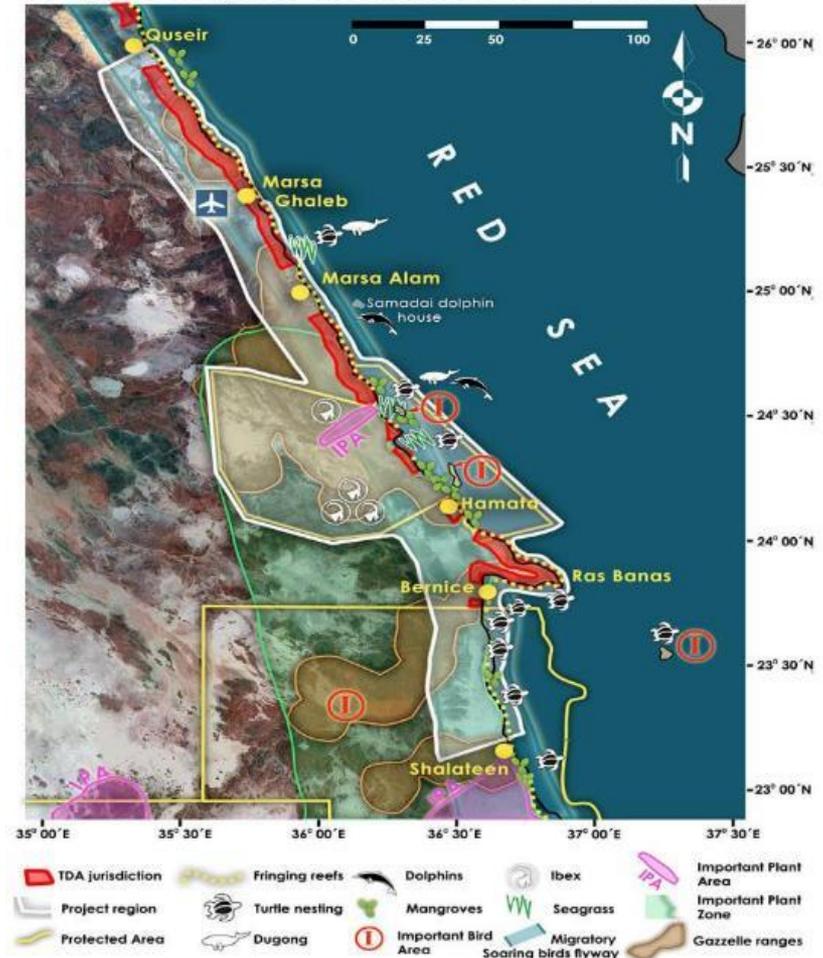
- An incomplete national protected areas system.
- Under-financing and partly weak management of the protected areas system.
- A lack of skills and capacity for developing and managing tourism within the protected areas.
- The scale and complexity of the challenge.
- Conflicting policy objectives.
- A perceived lack of solutions to the problem and of a mechanism to move current thinking forward.



## The project will work on two levels:

- The first level will engage directly with the industry and government to fill gaps in the existing planning and regulatory framework, to identify key areas, habitats and ecological processes and assess their vulnerability and developing a monitoring program to track impacts of tourism on biodiversity for conservation management purposes

Project Region 1: Tourism & Biodiversity

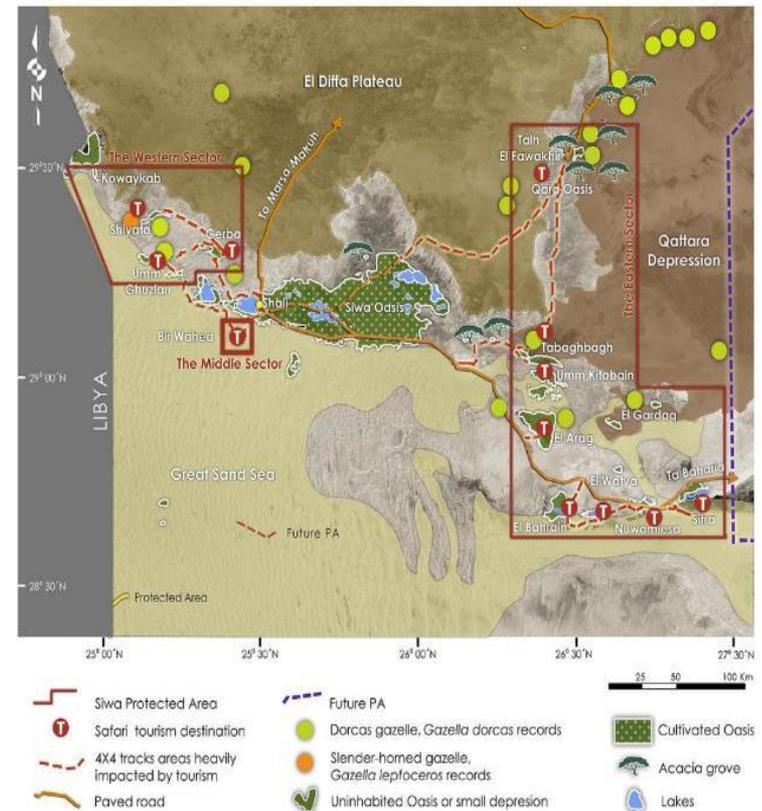


- The second level will engage the tourism industry by developing Responsible Tourism Grading and developing community-based systems to allow those closest to biodiversity resources to benefit and manage them sustainably.
- The project will also create one new protected area and increase the size and management capacity of few more protected areas for sustainable tourism.

## SIWA Sustainability Management Development Pilot Project

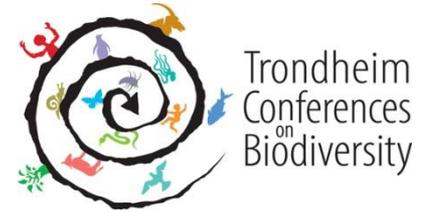
- Siwa Oasis towards the Libyan border in the Western Desert.
- SIWA represent an interesting ecosystem which is characterized by the interaction of numerous forces: social, cultural, ecological and climatic.
- Mixed Adaptation /Mitigation around the nexus of biodiversity, climate change, and land degradation.

Project Region 3: Tourism & Biodiversity map

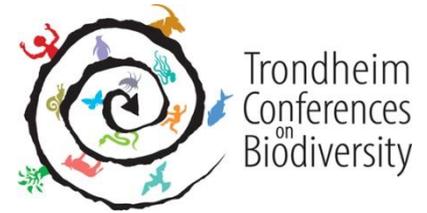


The project will have three components:

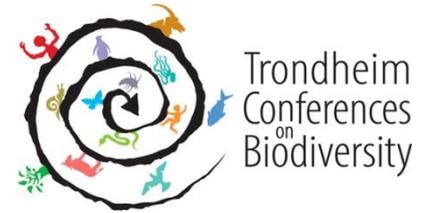
- A cultural component to highlight the importance of understanding the place of culture within social–ecological systems.
- A rural development component (production part and a consumption) land use and human activity/ mix of functional and structural elements required for the self-reproduction of the system.
- A well - being component: SIWA could become a large demonstration oasis where all the above forces are in harmony (agro-cultural & medical tourism) - for sustainability thus resilience, livelihood and wellbeing.



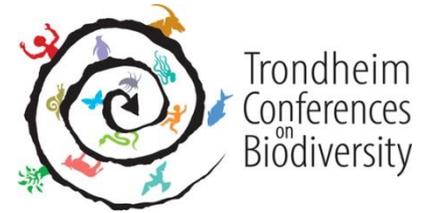
# How the post-2020 global biodiversity framework could foster the coherent implementation of the Rio Conventions: key messages from MEAs consultation in Bern, Switzerland



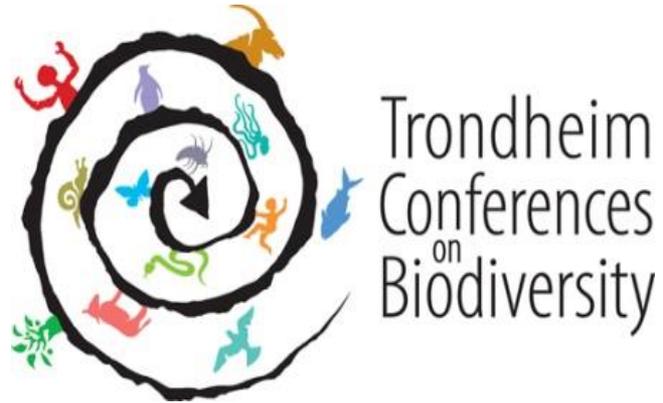
- Business as usual (working in silos) is not an option. A concerted effort is required.
- National focal points of biodiversity related and Rio conventions must work together. You can be from a climate convention, but climate is destroying biodiversity. You can be from a chemical convention, but chemicals are destroying biodiversity.
- New approaches are needed at the national and international levels to improve synergies and coordinated implementation of biodiversity related MEAs (monitoring and compliance versus implementation mechanisms).



- Post-2020 global biodiversity framework should serve as a universal framework for action on biodiversity and foster strong ownership and support for its implementation. This could provide opportunity for biodiversity related MEAs to work together on common goals/targets.
- Strengthening biodiversity mainstreaming by incorporating biodiversity values in national planning and development processes, sectors, policy and decision-making.
- Mainstreaming and the promotion of innovative solutions and best practices is critical for achieving the objectives of all biodiversity related MEAs.



- Future biodiversity targets should be aligned with or supportive of the targets or strategies adopted by other relevant processes, including those associated with the Rio conventions and the 2030 Agenda for Sustainable Development. And vice versa.
- The active involvement and participation of all stakeholders in the development and implementation of the post-2020 global biodiversity framework.
- Involvement and support of MEAs governing bodies to ensure high level political ownership.



**THANK YOU**