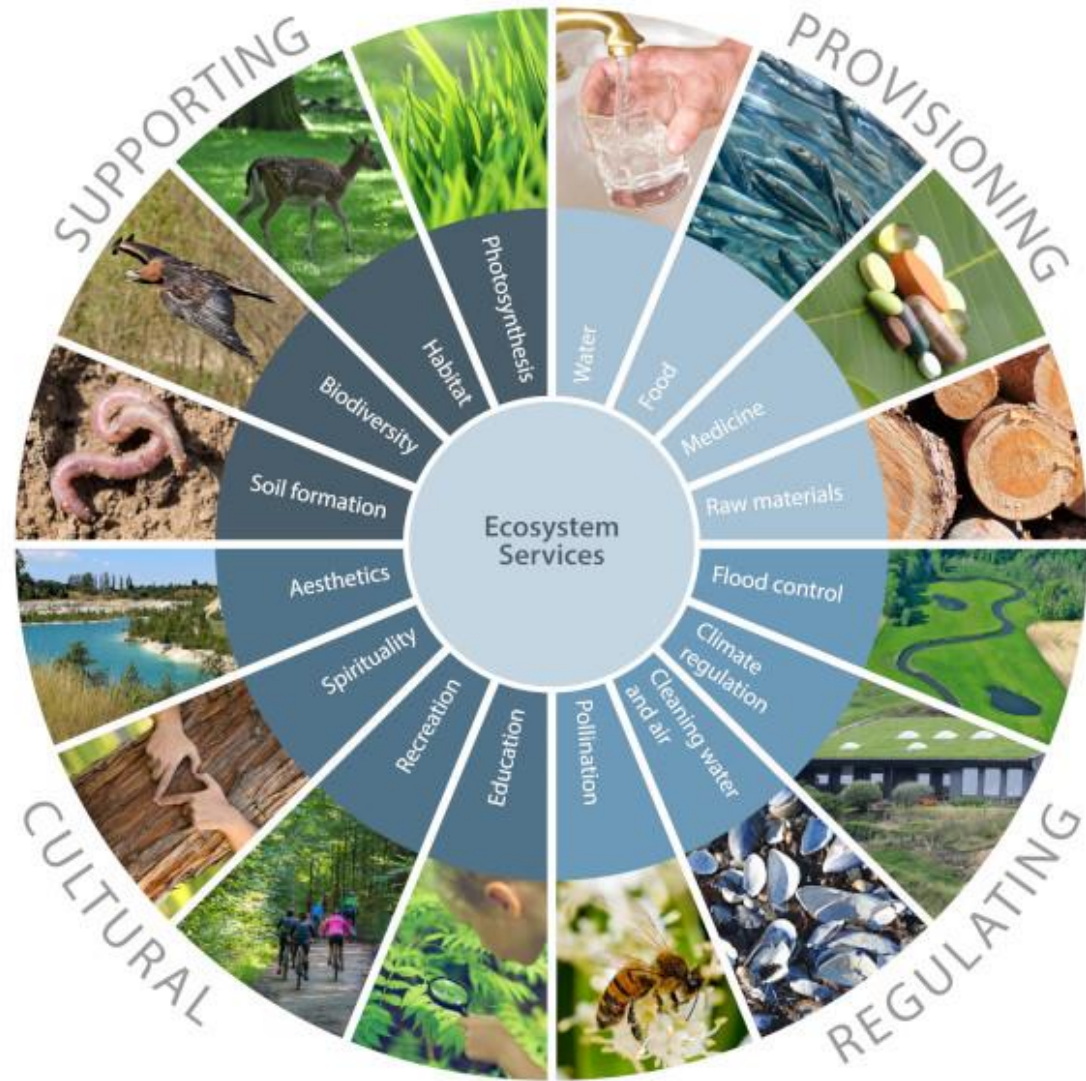




NATURE-BASED SOLUTIONS

NATHALIE DOSWALD

ECOSYSTEM SERVICES



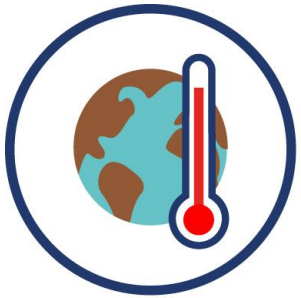
ENVIRONMENTAL DEGRADATION RESULTS IN



- Climate change
- Increased extreme events
- Increased disaster risk and insecurity
- Food insecurity
- Water shortages
- Biodiversity loss
- Increased health risks

NATURE-BASED SOLUTIONS

= Actions to protect, sustainably manage, and restore natural and modified ecosystems that address **societal challenges** effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.



Climate change mitigation and adaptation



Disaster risk reduction



Economic and social development



Human health



Food security



Water security



Environmental degradation and biodiversity loss

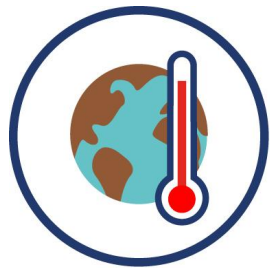
NBS
PROVIDES
MORE
THAN JUST
CARBON
STORAGE



NATURE-BASED SOLUTIONS AND LAND RELEASE

Questions to ask yourselves and the communities:

- WHAT IS THE ECOSYSTEM?
- WHAT DOES IT PROVIDE OR COULD PROVIDE IN TERMS OF SERVICES?
- WHAT SOCIETAL CHALLENGE COULD THIS ECOSYSTEM ADDRESS?



Climate change mitigation and adaptation



Disaster risk reduction



Economic and social development



Human health



Food security

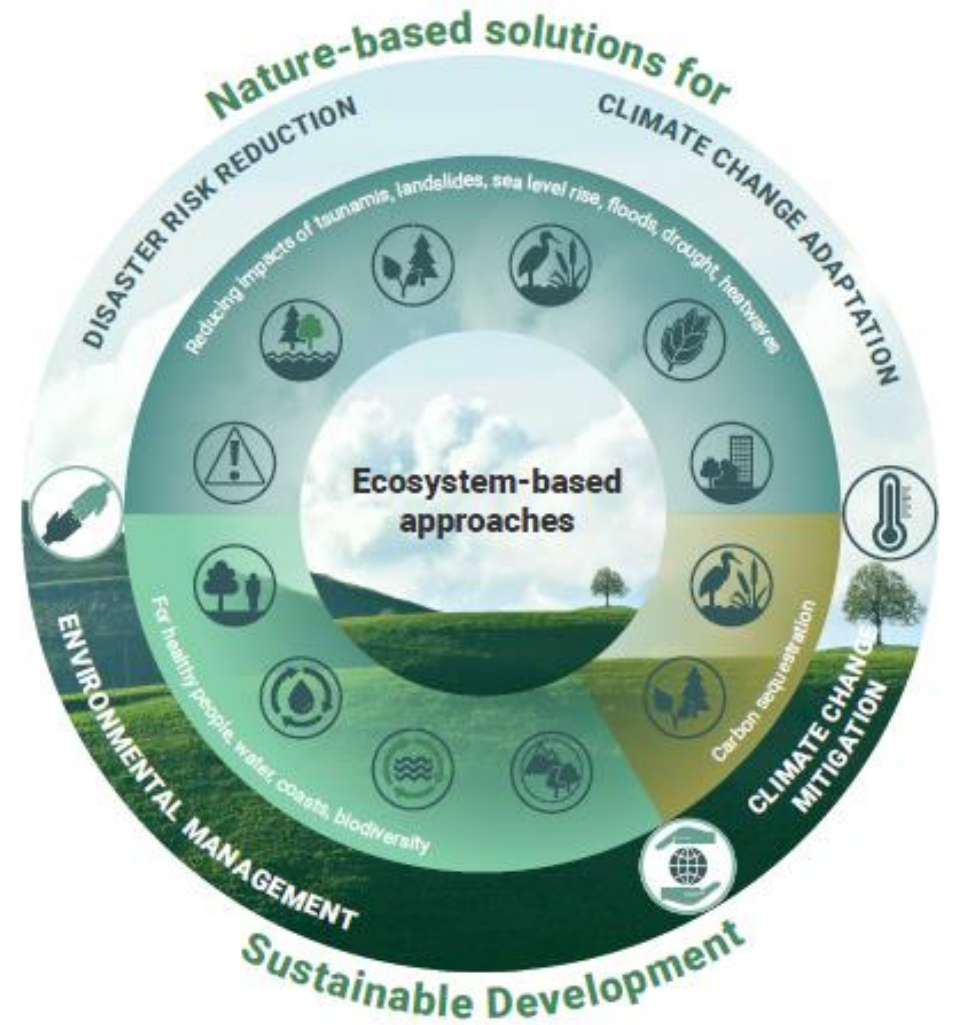


Water security



Environmental degradation and biodiversity loss

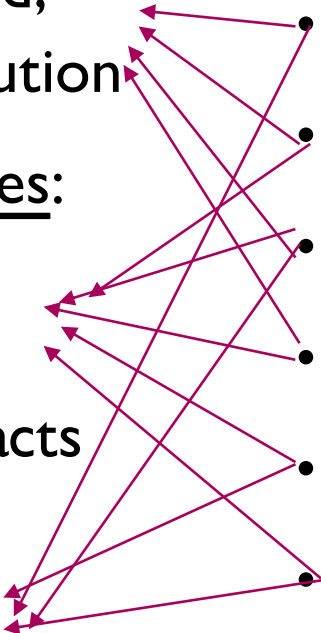
NATURE-BASED SOLUTIONS AND LAND RELEASE



ECOSYSTEM RESTORATION CONSIDERATION

- Using native species
- Ensuring biodiverse restoration
- Root depth, solidity, and rapidity of growth (for reducing slope erosion and landslide)
- Taking a whole landscape approach and considering the socio-ecological system
- Ensuring a participatory approach
- Working with communities to find solutions to environmental degradation

CHALLENGES

- Environmental challenges: land, invasive species, climate, pollution
 - Social and economic challenges: livelihoods, economic development, conflict over resources, distributional impacts
 - Governance issues: land ownership, natural resource management
- 
- Working with ecologists
 - Working with local and indigenous people
 - Risk and impact assessments
 - Inclusivity
 - Capacity building
 - Integrated water resource management, sustainable land management, integrated coastal zone management, etc.

FOOD SECURITY
AND DISASTER
RESILIENCE
THROUGH
SUSTAINABLE
DRYLANDS
MANAGEMENT
IN SUDAN



Aerial photo of village in North Dafur, Sudan

OVERVIEW THE PROJECT



Aim

- Reduce vulnerability (due to conflict zone and unsustainable practices)
- Reduced disaster risk from drought and flash floods
- Reduce famine



Challenges

- Rebel attacks
- Conflict between farmers and pastoralists
- Climate



Beneficiaries

- 17,500 inhabitants out of a total population of 30,000
- in five villages (Eid El Beida, Abudelik, Bahr Omdurman, Wad Kota, Waa'dha) in the Kilimondo locality, North Darfur.



Interventions

- rehabilitation of a water retention structure
- Establishment of community tree nurseries
- Community reforestation
- Pasture land re-seeding
- Terracing and check-dams to control erosion

BUILDING BLOCKS OF THE PROJECT



**Building partnerships and
community engagement**



**Natural resource
governance**



**Local and national
capacity building**



Field interventions

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