



Ministry of Agriculture, Nature and
Food Quality of the Netherlands



WAGENINGEN
UNIVERSITY & RESEARCH

Harnessing the Nexus: Biodiversity and Restoration in Saline Landscapes



HARNESSING THE NEXUS

BIODIVERSITY & RESTORATION
— IN SALINE LANDSCAPES —

Harnessing the Nexus: Biodiversity and Restoration in Saline Landscapes

Opening Remarks

by Isabelle Vreeke, the Dutch Ministry of Agriculture, Fisheries, Food Security and Nature



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From Global Targets to Regional Relevance and Presentation of the Newly Released Multilateral Policy Brief

by Natalia Rodriguez Eugenio, FAO NSLD



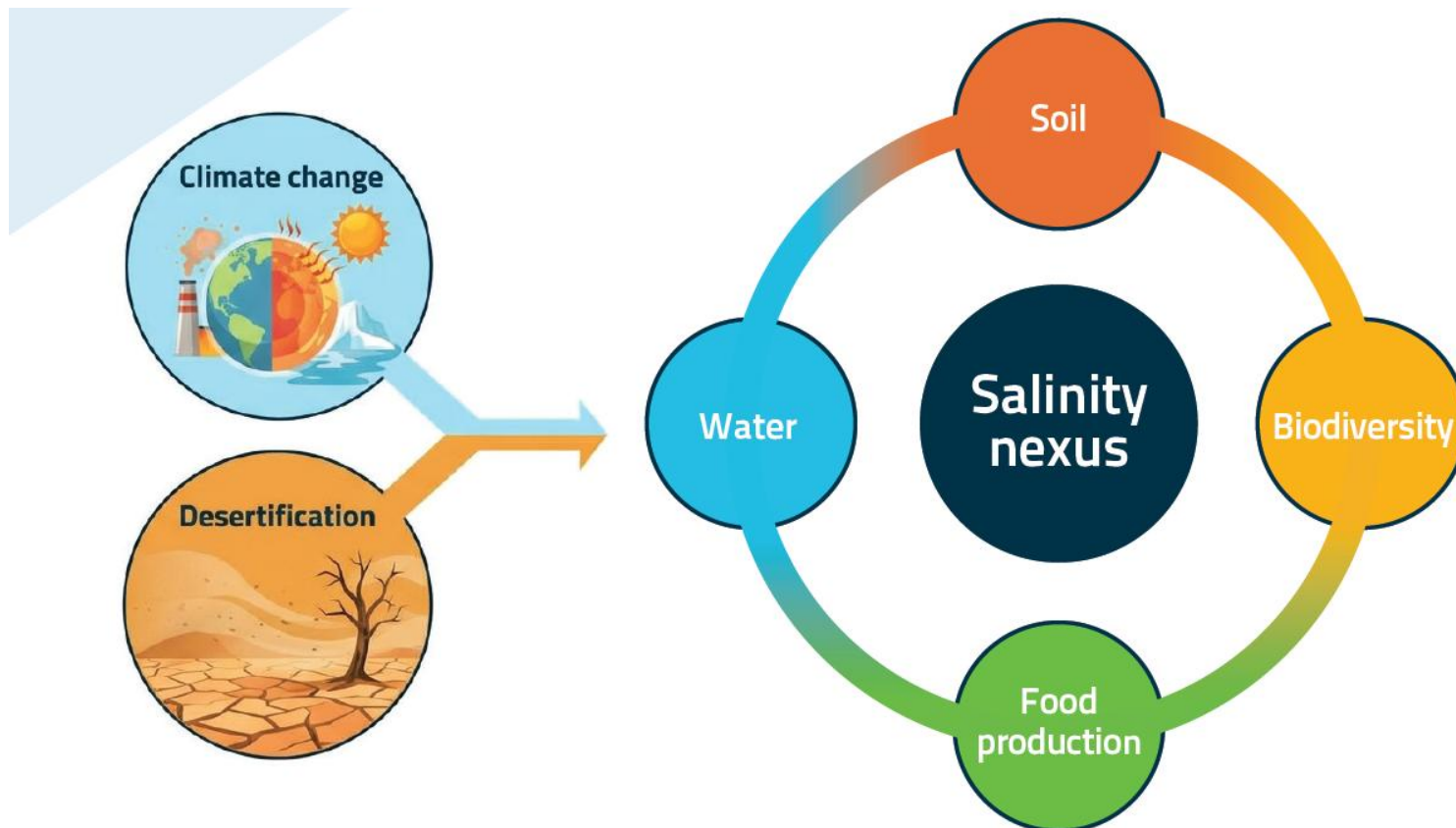
FROM GLOBAL TARGETS TO REGIONAL ACTION

Restoring salt-affected landscapes



Natalia Rodríguez Eugenio
FAO, Global Soil Partnership Secretariat

Salinity nexus: interconnected landscapes and livelihoods



WHY IT MATTERS

- Soil and water health
- Biodiversity and ecosystems
- Agriculture and food security
- Climate resilience
- Human well-being / One Health

From global biodiversity targets to regional restoration

KMGBF • TARGET 2

30%

of degraded
ecosystems under
effective restoration
by 2030

EUROPE AND CENTRAL ASIA

- Irrigated drylands and agricultural soils
- Inland basins and aquatic ecosystems
- Water scarcity, salinization and land degradation
- Locally adapted, integrated restoration

Distinguish degraded salinized land from naturally saline habitats that need conservation.

FAO: connecting global commitments with practical action

WASAG

**Global Framework on Water Scarcity in
Agriculture**

Water security

Sustainable agricultural water management

Partnerships and cooperation

GSP's INSAS

**International Network of Salt-Affected Soils
of the Global Soil Partnership**

Knowledge exchange

Sustainable soil management

Capacity development and policy support

Together: science + policy + practice + partnerships

From Rio Conventions dialogue to coordinated action

UNFCCC

Climate

CBD

Biodiversity

UNCCD

Land

FOUR PRIORITIES FOR ACTION

01

Integrated soil, water and
biodiversity policies

02

Ecosystem-based and context-
specific restoration

03

Farmer- and community-centred
approaches

04

International cooperation and
targeted investment

New policy brief: a shared framework for action



Addressing the challenge of soil and water salinity through a collaborative action

Recommendations discussed during UNFCCC, CBD and UNCCD Conferences of the Parties

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From Single-Sector Fixes to Nexus Solutions

by Mariëlle Karssenberg, Netherlands Food Partnership



Salinity affects water, food systems, biodiversity and livelihoods.

Farmers

Declining agricultural yield

Water Managers

Freshwater availability

Ecologists

Changing ecosystems and biodiversity loss

Our Response: connecting these perspectives

Through the Salinity Country Partnerships Initiative, NFP and NWP connect stakeholders across sectors in partnerships to develop integrated, long-term solutions at the water-food-ecosystem nexus

Four Country Partnerships:

Vietnam

Bangladesh

Senegal

Egypt

Vietnam's Mekong Delta

Problem: Increasing salinity affects agricultural production, freshwater availability and ecosystems

science Salt Lab Project

- Bringing farmers, researchers and other stakeholders together to explore locally adapted solutions.
- Connecting sustainable water and soil management and salt-tolerant agriculture.
- Improving livelihoods and landscape resilience

eco Beyond the Farm

Connecting agricultural adaptation with healthier soils, ecosystem health, biodiversity and freshwater management.

Landscape Approach

Linking agricultural practices directly to broader ecological systems.

groups Cross-sector Collaboration

Upcoming farmer workshop, November, in the Mekong Delta and strategic policy dialogue in Hanoi to connect local priorities with national policies, research and investment opportunities.

Upcoming Events:

- Mekong Delta Farmer Workshop
- Hanoi Policy Dialogue

Different Countries, Shared Challenges

Bangladesh

Saltwater intrusion affects agriculture, groundwater resources and freshwater coastal ecosystems.

Senegal

Restoring salt-affected landscapes requires bringing together water management, sustainable agriculture and ecosystem restoration.

Egypt

Examples of integrated approaches, including constructed wetlands and salt-tolerant vegetation to manage saline run-off, improve soil health, and support agricultural production

Shared Lesson

Water, food production, biodiversity and livelihoods cannot be addressed in isolation.

Partnerships are essential to move from fragmented interventions to landscape-level impact.

hub

Connect sectors

Bridge agricultural, water, biodiversity, policy and business communities.

public

Connect countries

Exchange experiences and solutions

rocket_launch

Accelerate implementation

Contribute to the Global Biodiversity Framework, including Target 2 on ecosystem restoration.

Closing Message

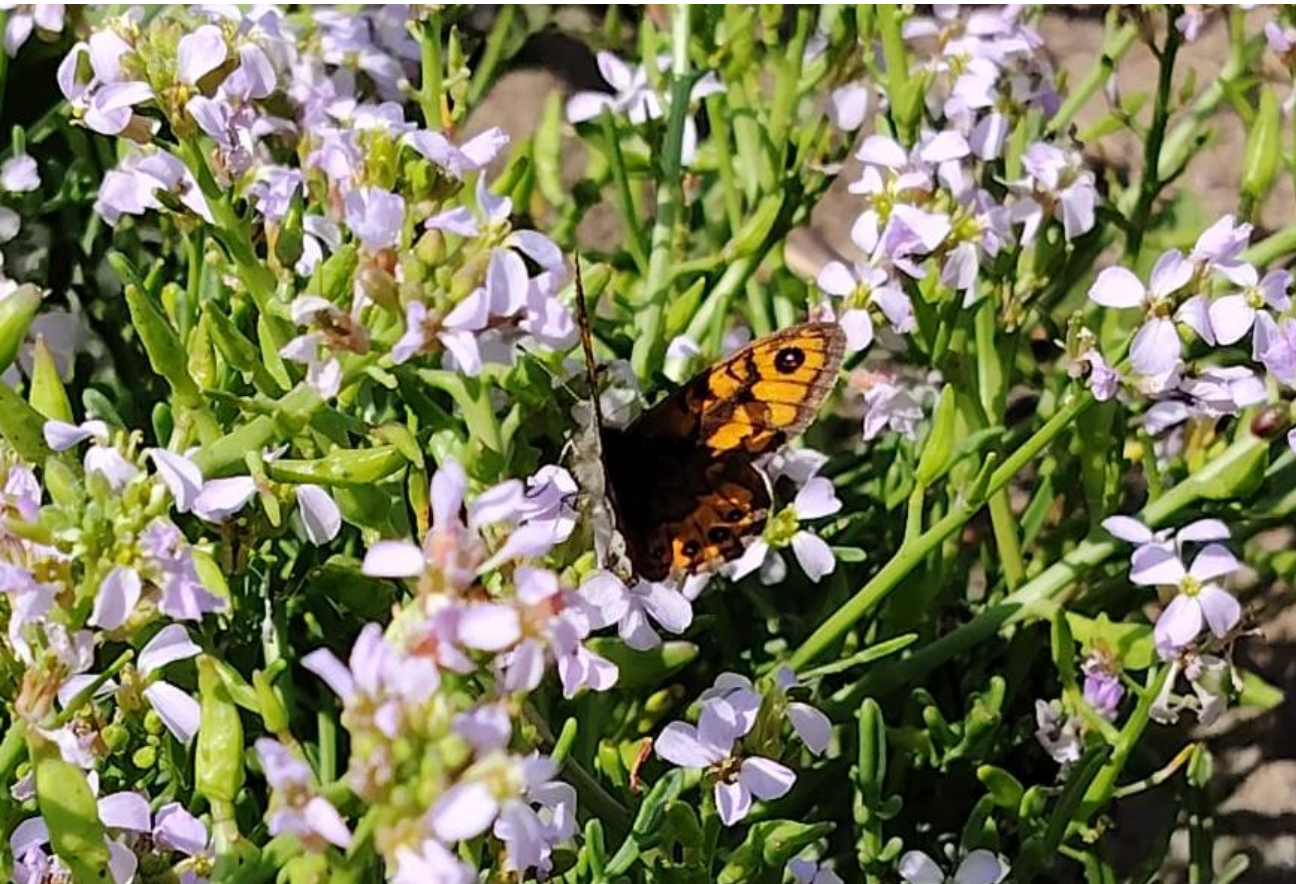
Our challenges are interconnected. Our solutions, and our partnerships, must be too.

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From Degraded Land to Biodiversity Assets

by Nadia Bazihizina, University of Florence and Biodiversa+





From Degraded Land to Biodiversity Assets

Nadia Bazihizina
University of Florence, Italy
nadia.bazihziina@unifi.it

Salty symphonies: bringing back BiodivErsity in mArginal Saltlands (SaltyBEATS)

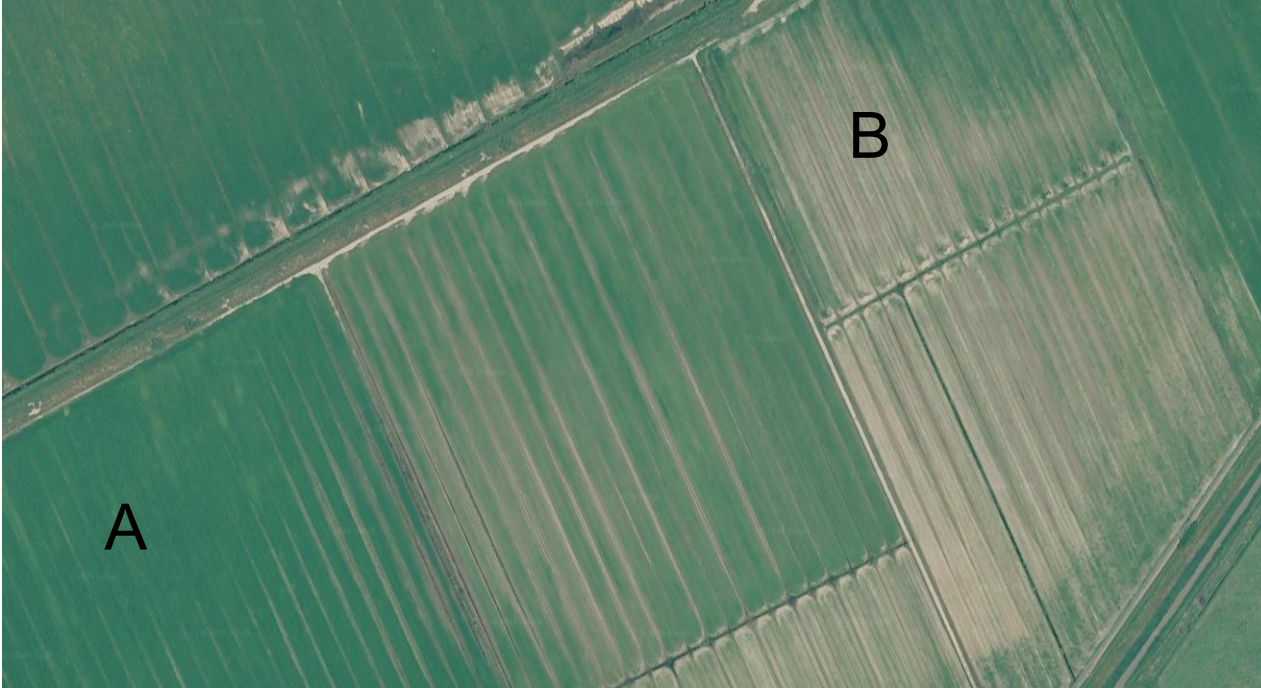


NbS for salt-affected agricultural lands

Interconnected challenges: Biodiversity loss and soil degradation

- Salinity in marginal landscapes is tightly associated with carbon and nutrient depletion and disrupted water dynamics → low soil health and vegetation degradation.
- Intensive grazing, soil compaction, and the physical loss of habitat structure accelerates salt-induced land degradation.

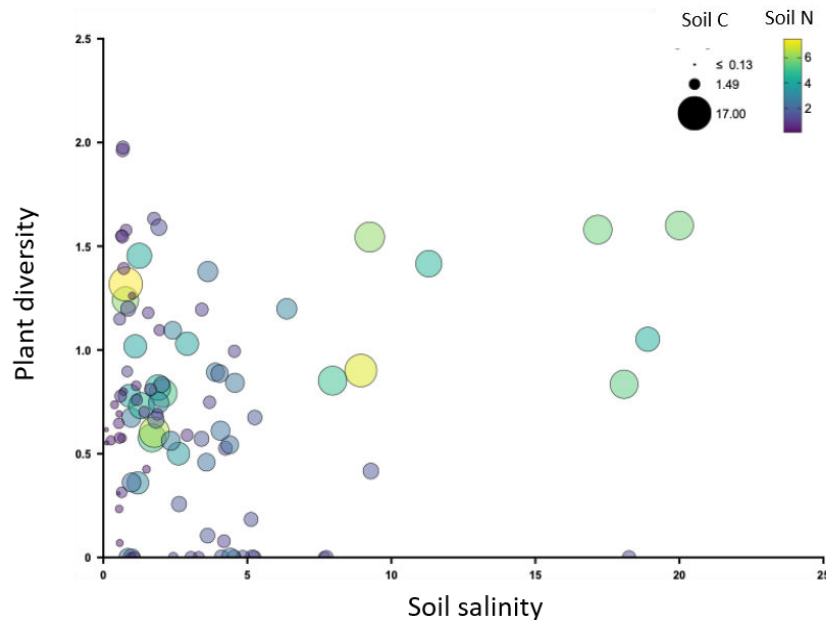
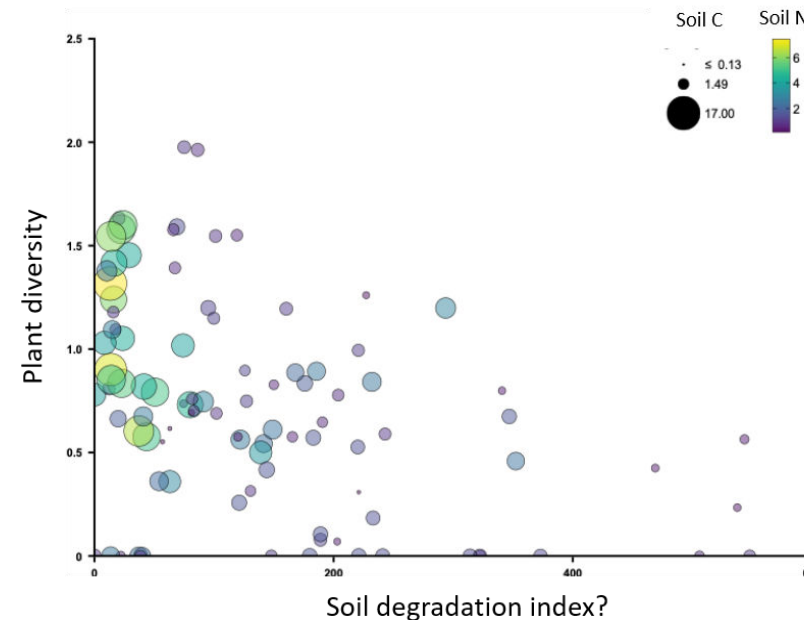
1. Too often the focus is on removing salt from the system
2. What about biodiversity? For stakeholders they can represent two different challenges.



Salinity is only a small part of a broader degradation syndrome

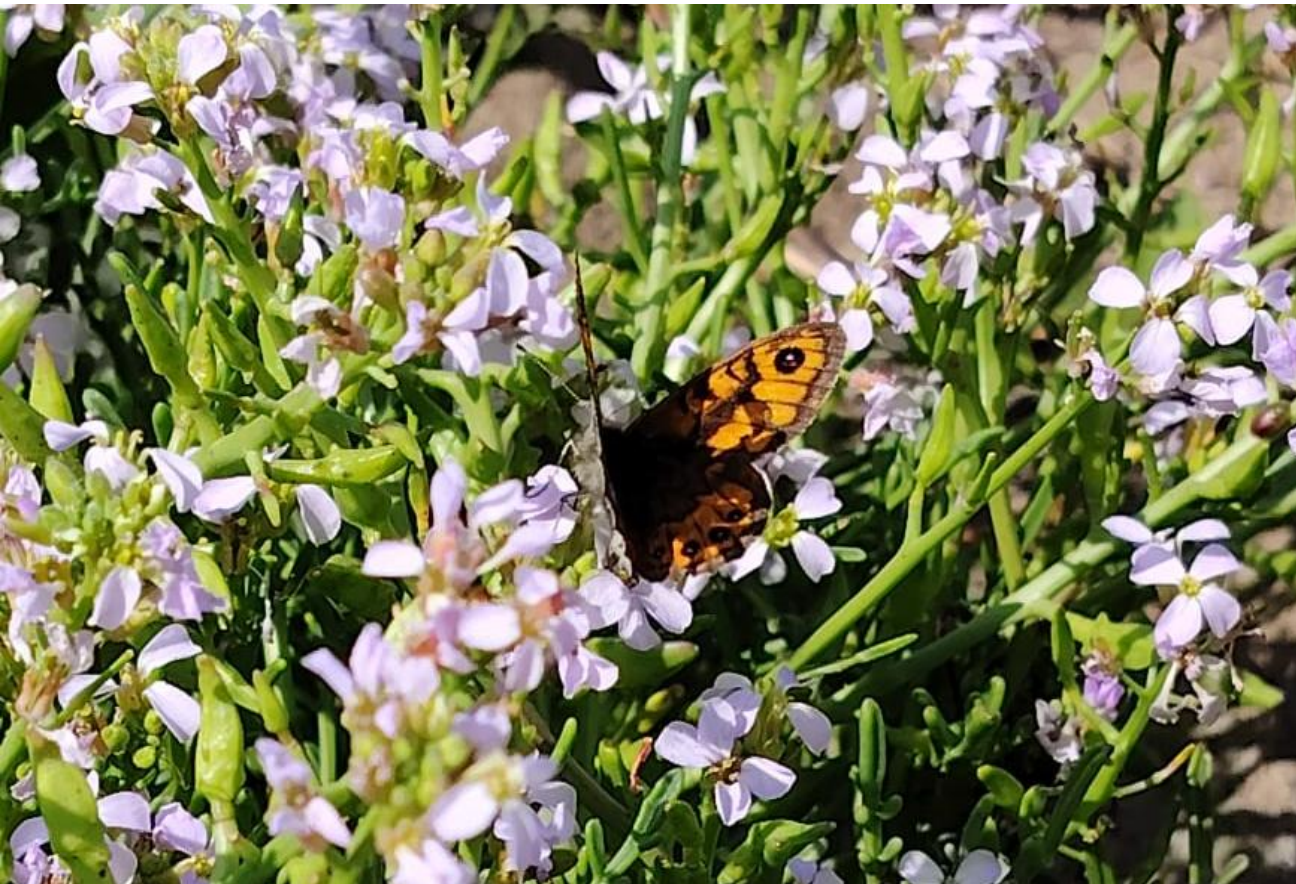
This has important implications for:

1. diagnosis of salt-affected soils
2. for correct saltland capability assessment and NbS selection
3. for impact monitoring and landscape transformation



No single solution can fit all





Thanks

For more information

saltybeats.com and SaltyBEATS social pages
(Facebook and LinkedIn)

Email: nadia.bazihizina@unifi.it



SaltyBEATS



NATIONAL SCIENCE CENTRE
POLAND



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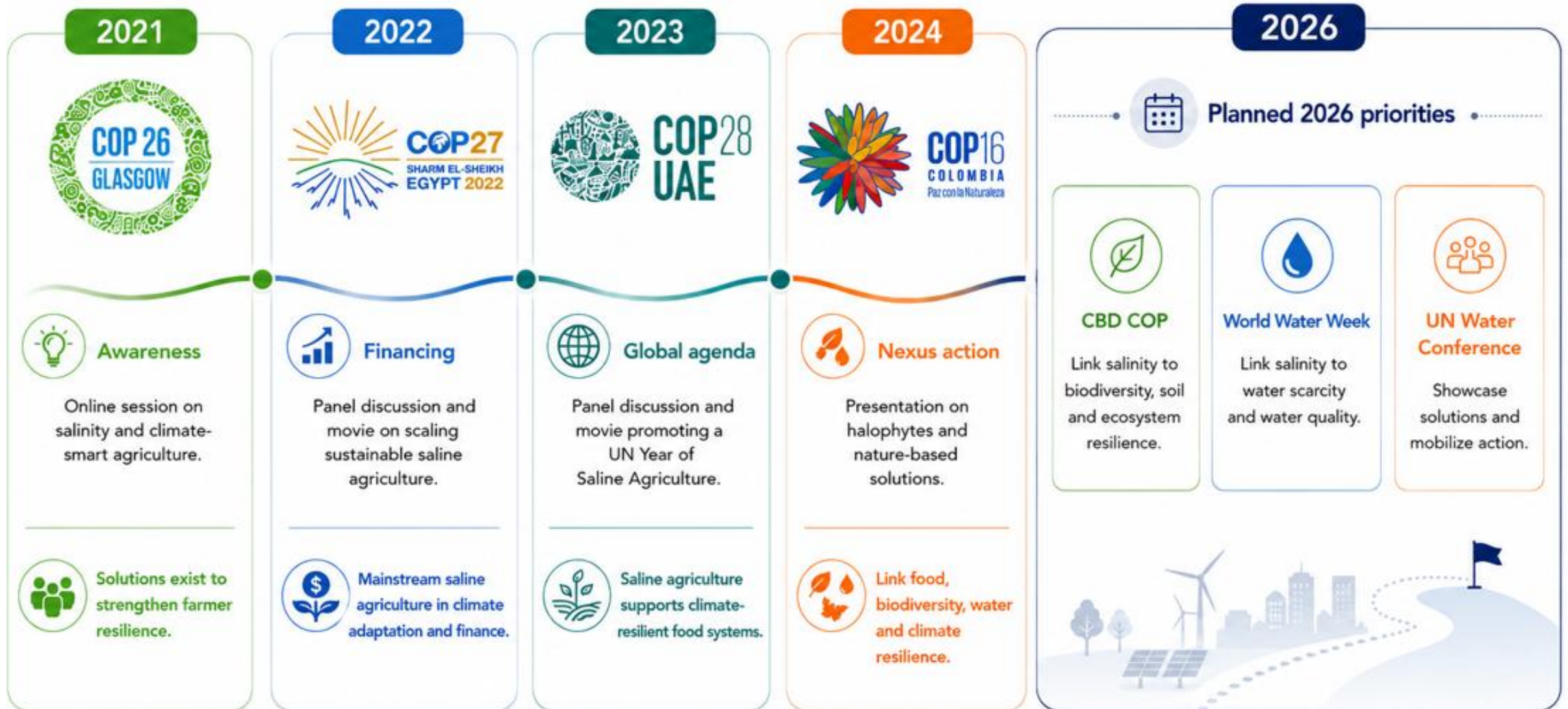
From Awareness to Action: Science, Communities and Innovation

by Kate Negacz, Vrije Universiteit Amsterdam



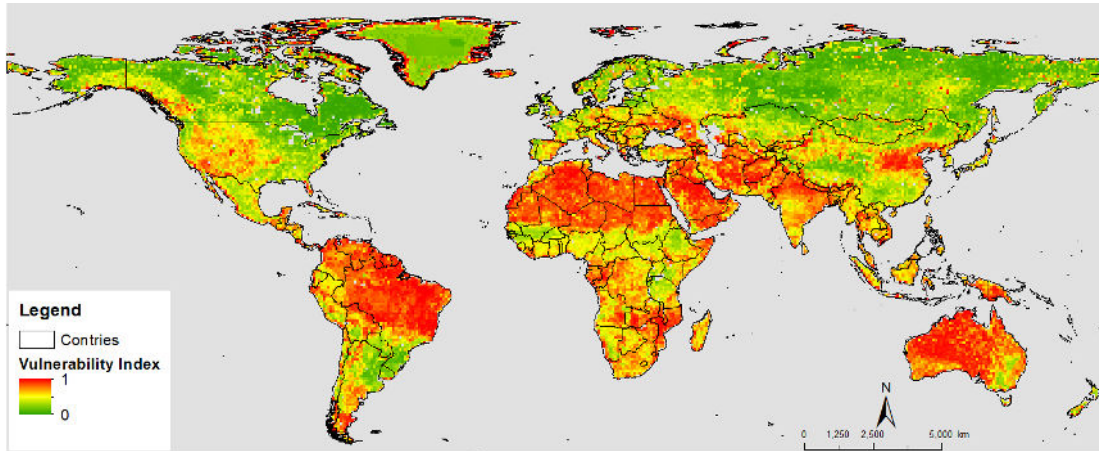
Salinity as slow onset emergency – policy attention

Climate – Biodiversity – Water

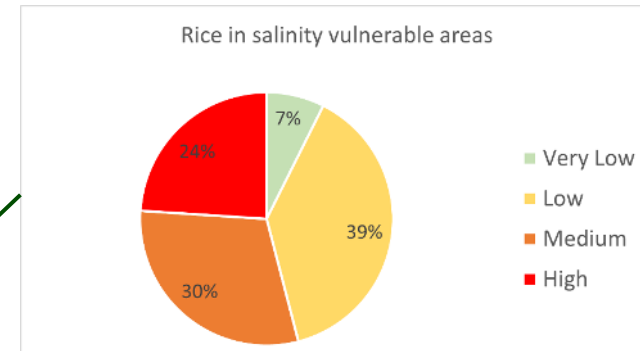
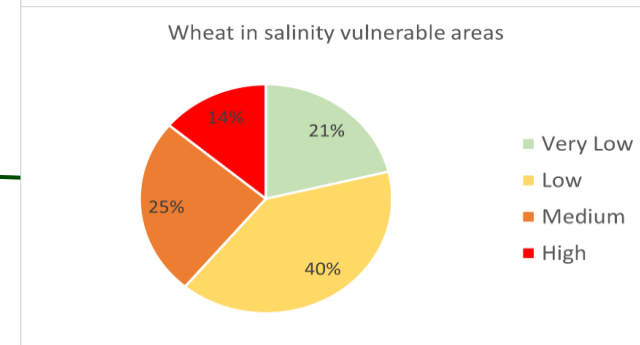
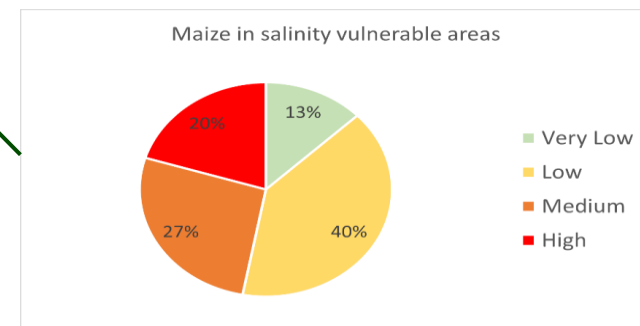


Hotspots for salinity vulnerability and impact on crops

- global level impact



Islam et al, 2026, Salinity vulnerability hotspot mapping: An integrated assessment to identify global areas vulnerable to increasing salinity - Research Portal - Wageningen University & Research
<https://research.wur.nl/en/publications/salinity-vulnerability-hotspot-mapping-an-integrated-assessment-t/>



Local level impact: Co-creation of transition pathways with farmers in Bangladesh



Meetings with farmers in low-medium-high saline areas

Current changes?
Future changes?
How to act?
Explore adjusting current systems?

Initiatives for managing salinity worldwide

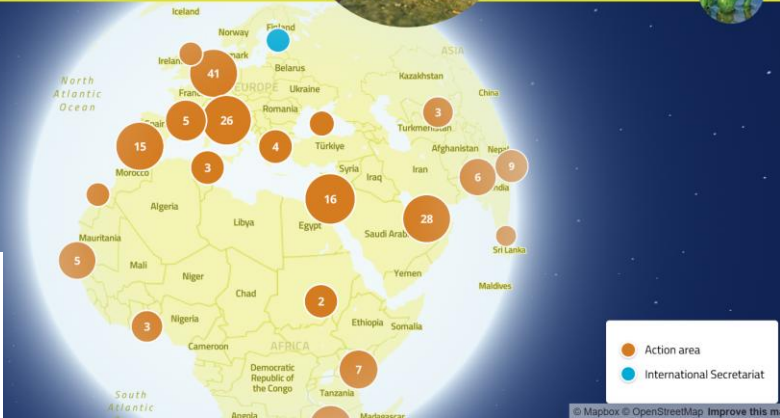
Saline Agri Map



Welcome to the Saline Agri Map!

This online platform presents an overview of saline agriculture projects. You can browse through the world map, click on projects of interest, and read more about each initiatives' details.

Disclaimer: The designations and presentation of material in this information product do not imply any opinion whatsoever by the Saline Agri Map regarding the legal or development status of any country, territory, city, area, or its authorities, nor concerning the delimitation of its frontiers or boundaries.



Building community of science, practice and policy

- Working with nature, stakeholders & ecosystem services - Biodiversa SaltyBEATS
- Understanding, mapping, monitoring and predicting soil salinity across scales – HE SaliNova
- Transdisciplinary community of practice and science - COST Action SUSTAIN



Harnessing the Nexus: Biodiversity and Restoration in Saline Landscapes

Roundtable Discussion and Co-Design of the Impact Statement

by experts and audience

Join us at menti.com

Code: **1546 8217**



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Next Steps for Financing Restoration at Scale

by Marie L'hostis, Asian Development Bank



Financing restoration at scale: 5 steps



1.4 billion ha of land is already salt-affected, and 1 billion ha more is at risk.
Lessons from ADB in Vietnam and Uzbekistan, and the 2026 policy brief.

- | | | |
|----------|---|--|
| 1 | Put salinity in the plans | Integrate salinity into country strategies, sector roadmaps and project pipelines. |
| 2 | Start with capacity and demonstrations | Mekong Delta: a \$225,000 grant for master classes and demonstration fields. |
| 3 | Measure from day 1 | Salinity of soil and water, biodiversity and farmer income, with regular monitoring. |
| 4 | Blend the finance | Grants for pilots, loans for drainage, private capital.
Uzbekistan: drainage on 162,300 ha cut soil salinity. |
| 5 | Scale nature-based solutions | Wetlands, mangroves and salt-tolerant crops, through tools such as ADB's Water Financing Partnership Facility. |

Saline land is not marginal land: it is where restoration, water security and food security meet

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Closing and Launch of the Draft Commitment

by Kate Negacz, Vrije University
Amsterdam

Saline landscapes are critical frontiers for biodiversity restoration, climate resilience, sustainable food systems, and livelihood security. We commit to advancing science, policy, finance, and community-led action to restore salt-affected ecosystems and contribute to achieving the goals and targets of the Kunming-Montreal Global Biodiversity Framework by 2030.

Thank you! Questions?



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