The Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security

Child Project 2.2 (GEF ID 9685) Mediterranean Coastal Zones: Managing the Water-Energy-Food and Ecosystems Nexus.

> Participating countries Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia

The NEXUS and the Source-to-Sea approaches in the MedProgramme, from practice to policy

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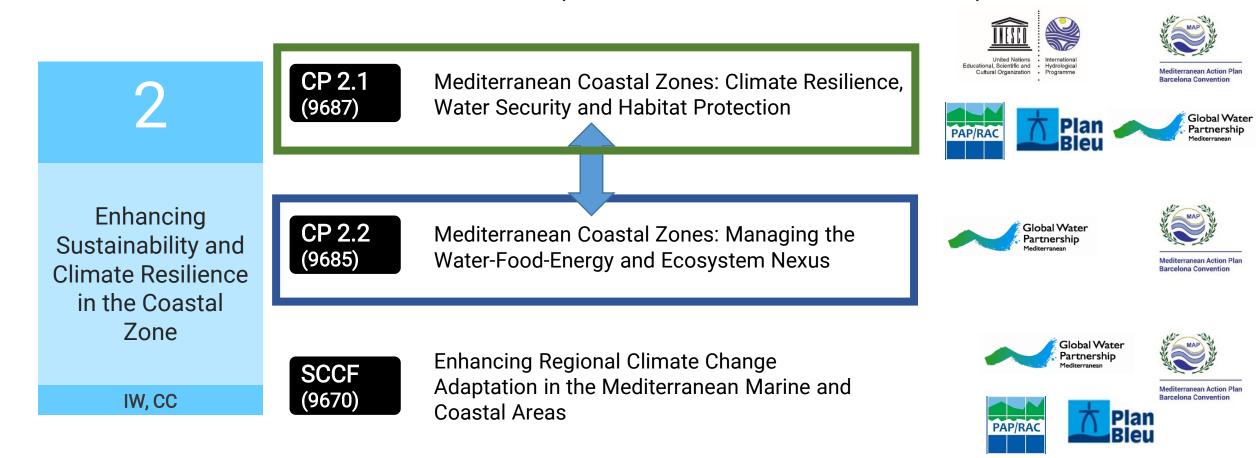






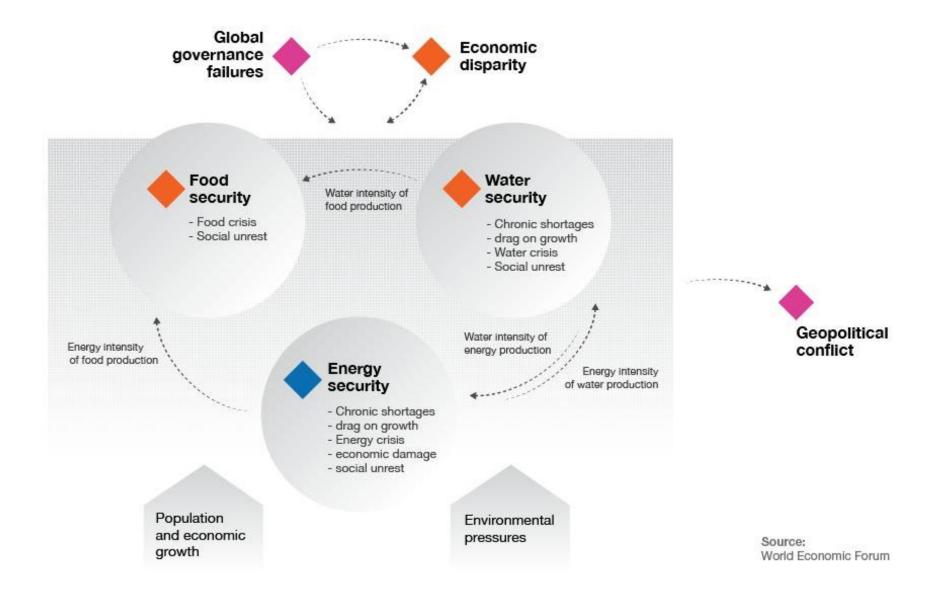


Component 2 MedProgramme: to support adaptation climatic change and to introduce land use policies and development practices respectful of the intrinsic vulnerabilities, gender equality, natural and cultural functions, freshwater-seawater interactions, and geological processes characterizing the diverse Mediterranean coastal zones: from karstic, to flood plain, to fluvial-deltaic, to barrier-strandplain.





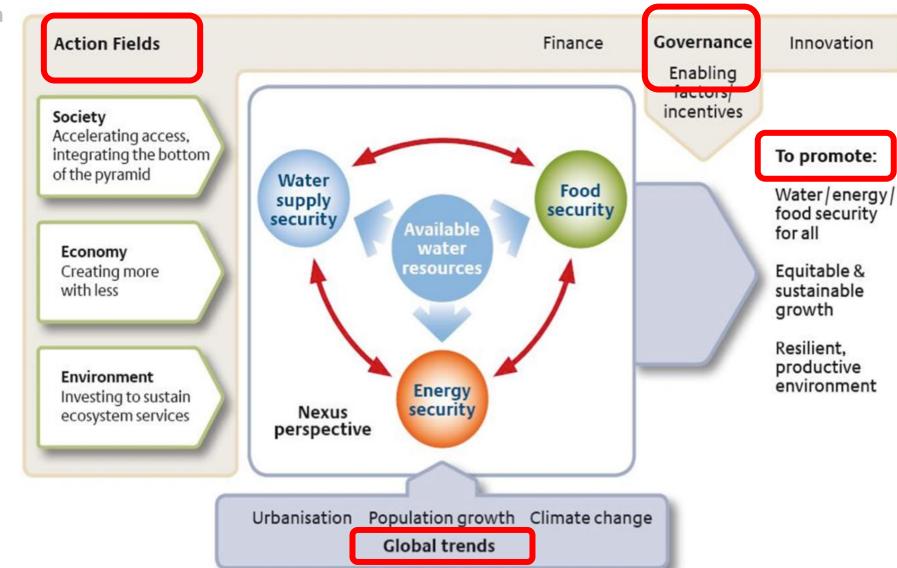






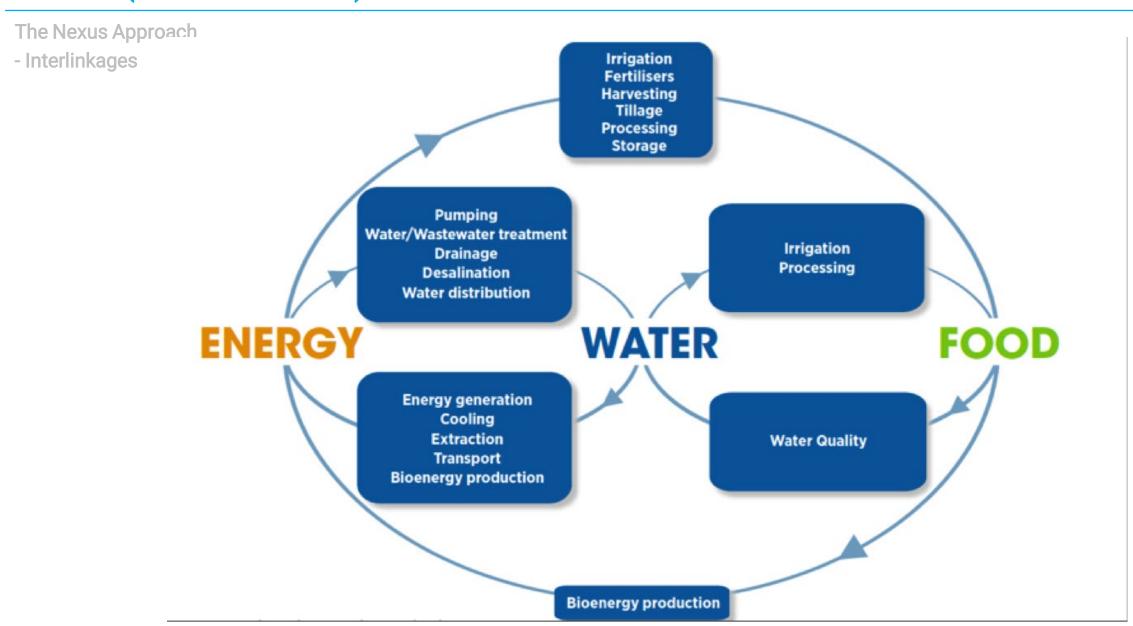


The Nexus Approach



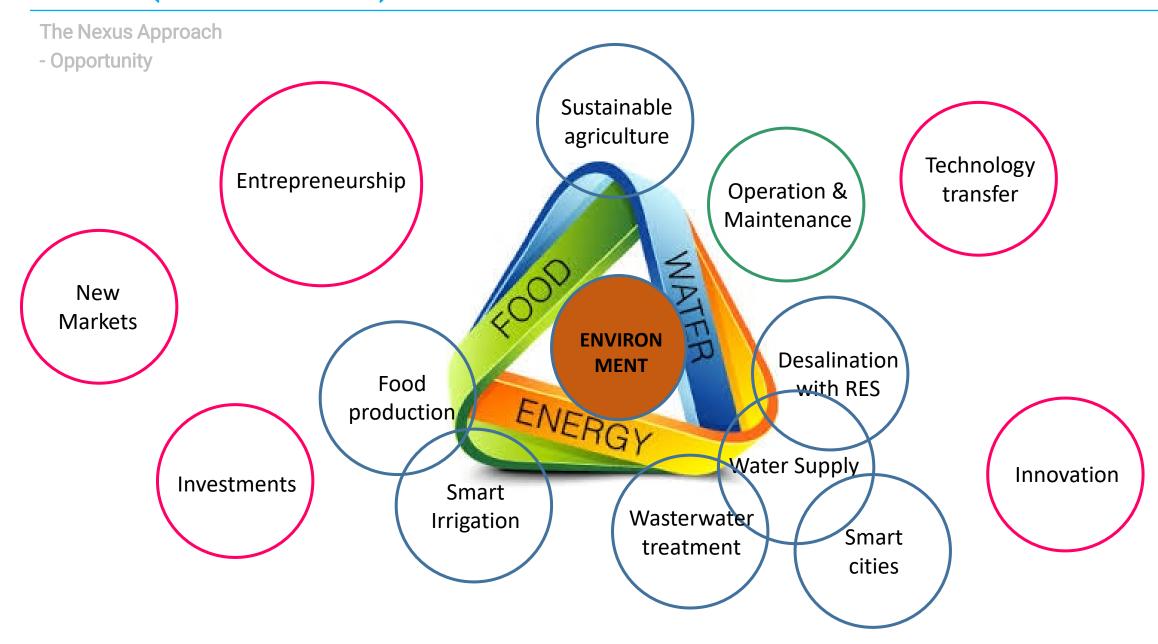






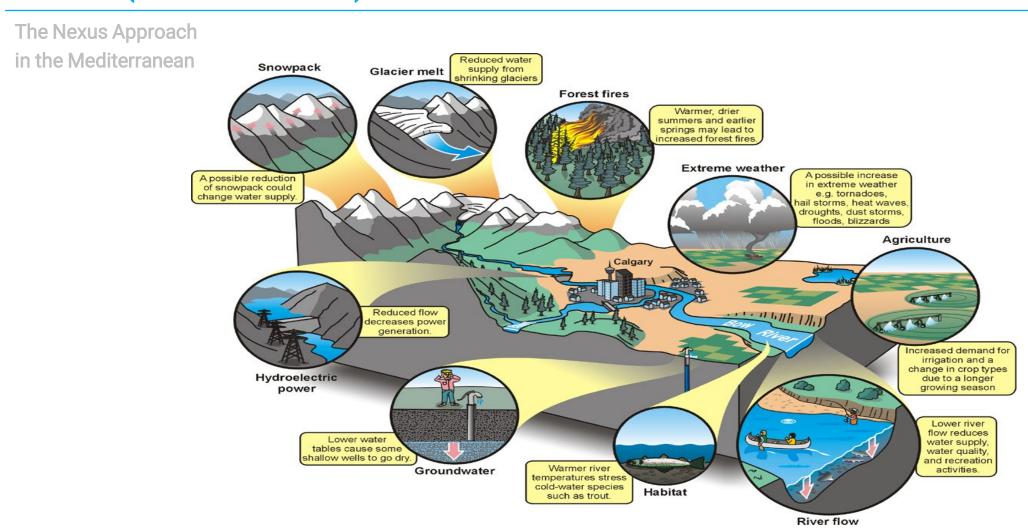










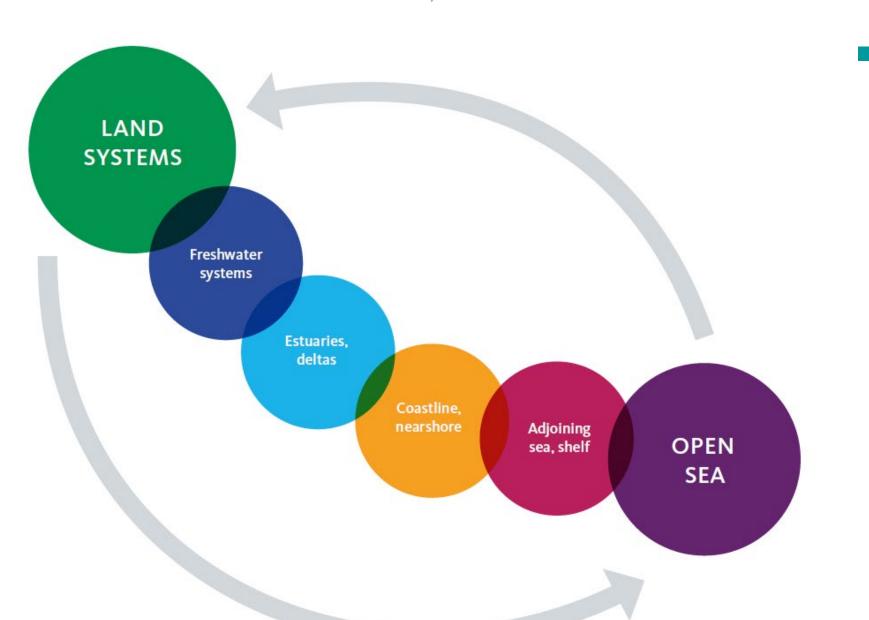


Source-to-Sea: an approach of reference





Source to Sea System

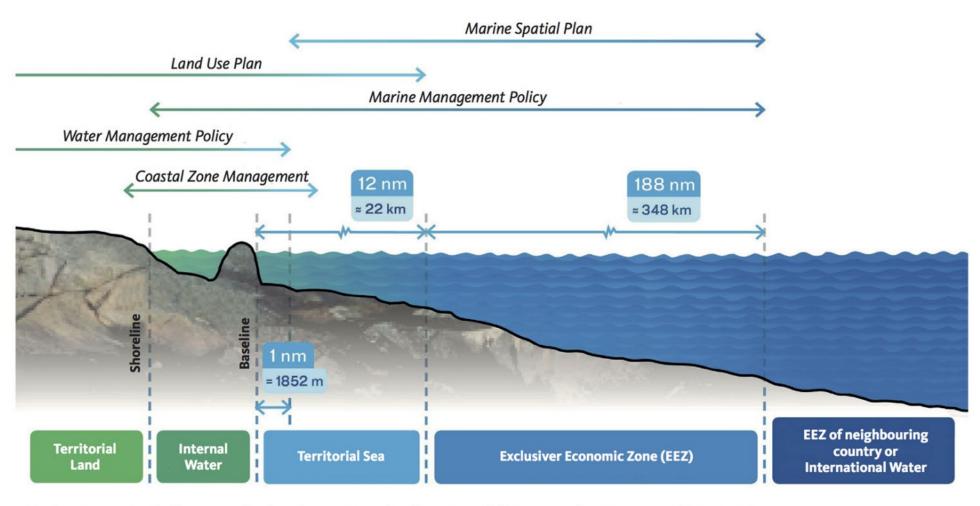








Overlapping and disconnected governance



Overlapping spatial plans over land and sea in Sweden from Swedish Agency for Marine and Water Management.

Systems thinking





Coordination among sectors, across the source to sea system

UPSTREAM-DOWNSTREAM COORDINATION

Land

Freshwater

Deltas and estuaries

Coastline, nearshore

Adjoining sea, shelf

Open ocean

CROSS SECTORAL COORDINATION

Agriculture - Food sector

Water sector

Energy sector

Environment

Marine "sector"

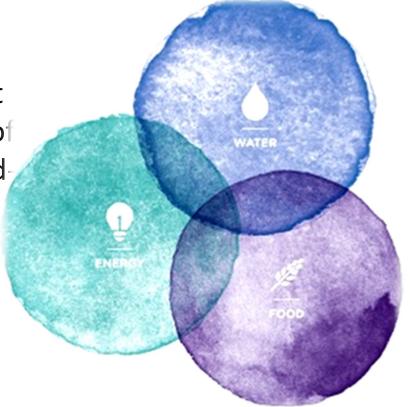
etc.





Aim:

- (i) Understand the interlinkages among the Nexus sectors
- (ii) Integrate -at the level possible- strategies and management options and identify solutions, as means to address issues of priority in coastal areas of importance, fostering water-foodenergy security, reduction of land based nutrient pollution and other pressures, protection of coastal habitats and biodiversity and climate change resilience.







MEDITERRANEAN



The Med Nexus Project – focus at two levels

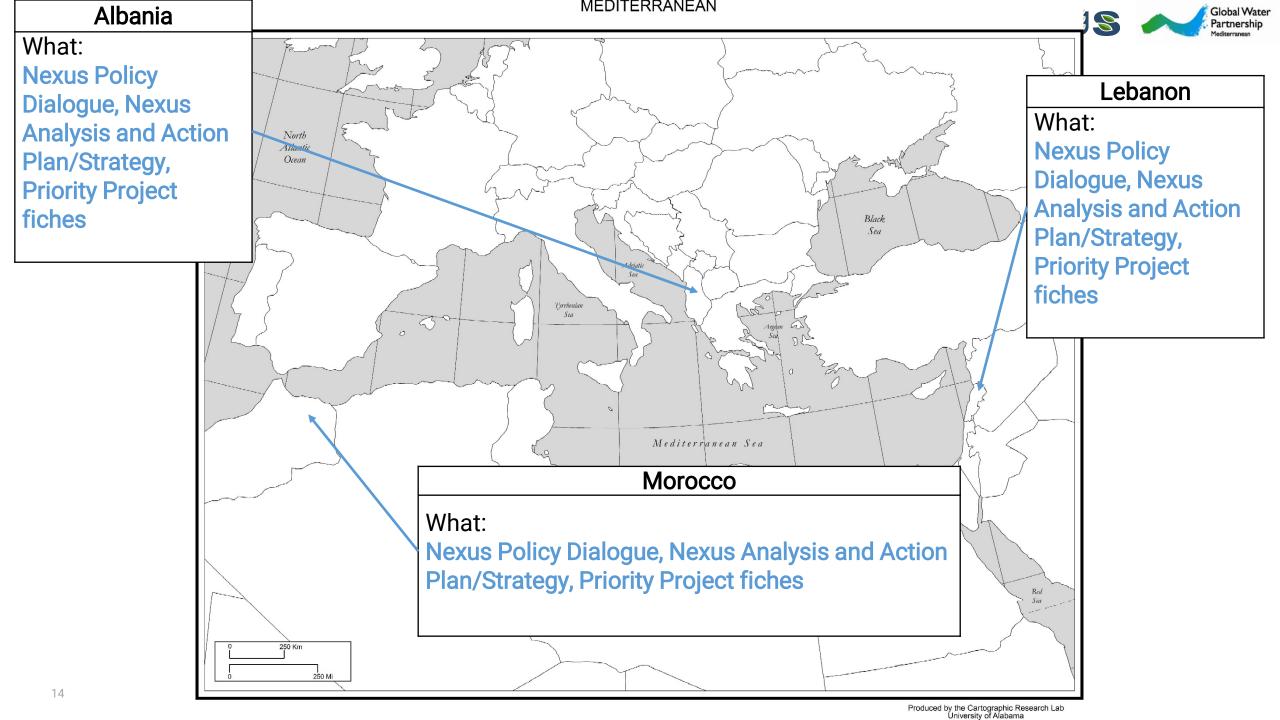






Component 2: Addressing nexus issues affecting the Mediterranean LME

Outcome 2: Interlinkages among Nexus Sectors identified through Nexus Assessments and Policy Dialogues, feeding into policy making in priority Mediterranean coastal areas Aligning wording with the new wording in the RFA.



Component 2: Overview





Output 2.1: New, or existing interinstitutional bodies convening and steering the development of Nexus Assessments and strategic documents

Activity 1

 Facilitation of the work of existing or establishment of inter-institutional bodies to function as Steering Committees of the Nexus Dialogues.

Deliverables

- Reports or Decisions and strategic documents.
- Statistics on the composition of the Steering Committees, including numbers of men and women participating

Component 2: Overview





Output 2.2: Water-energy-foodecosystems Nexus Assessments and multi-stakeholders consultation dialogues in priority coastal areas



- Development of a Stakeholders Analysis.
- Stakeholders Analysis document.

- Development of Nexus Assessments including stakeholder consultations.
- Three (3) Nexus assessment reports including scoping level (Phase I) as well as in depth assessment and quantification of selected nexus linkages (Phase II).
- Reports of the series of multi-stakeholder consultations.
- Statistics on representation of men and women in stakeholder consultations

Component 2: Overview





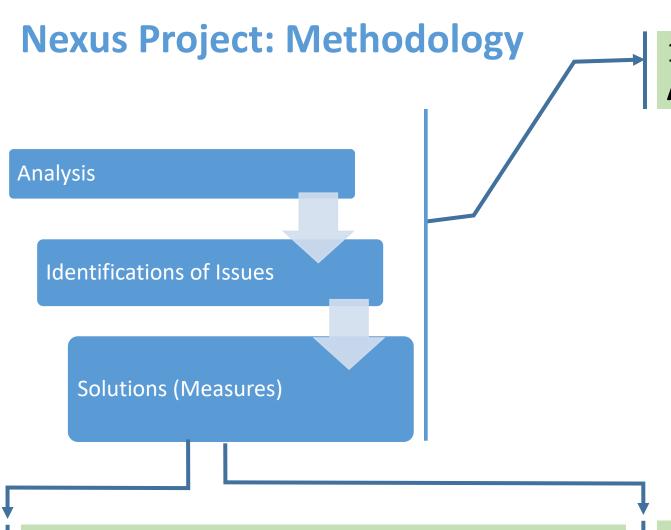
Output 2.3: Nexus strategies/action plans for priority coastal areas, possibly as part of other strategic documents for coastal areas

Activity 1

• Development of Nexus Strategies or Action Plans.

Deliverables

- Three (3) Nexus Strategies or Action Plans stand-alone or as part of existing strategic documents.
- Reports of the consultations undertaken to finalize the strategies or action plans



1. Water-energy-food-ecosystems **Nexus Assessments** in priority coastal areas

2. Nexus Inter-ministerial or cross-sectoral
Committees or equivalent bodies established, OR existing inter-ministerial or cross-sectoral bodies steer the development of Nexus Assessments and strategic documents

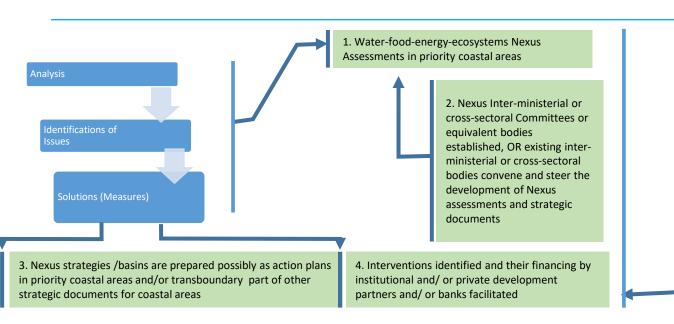
3. **Nexus strategies/Action Plans** prepared in priority coastal/transboundary areas

4. Interventions identified and their financing by institutional and/ or private development partners and/ or banks facilitated





Nexus Project: Methodology



5. Two Nexus solutions tested through demos to address issues known or identified through the Nexus Assessment

- Solutions, structural or non-structural, that balance water management uses taking into consideration energy and land use addressing also environmental concerns in response to identified issues







Component 3: Testing and upscaling Nexus solutions

Outcome 3: Interventions identified and tested, bringing co-benefits to address Nexus tradeoffs.

Outcome 4: Priority nexus interventions identified including relevant mechanisms and arrangements.

Component 3: Overview





Output 3.1: Nexus demonstration activities



- Identification of traditional or novel nexus solutions.
- Report on selected Nexus solutions and sites.
- Assessment of replication potential and feasibility of already applied Nexus solutions.
- Analysis of at least one (1) and up to four (4)
 applications/cases, assessing efficiency, benefits and
 feasibility for replication and upscaling.
- Testing of novel applications and assessment of their replication potential and feasibility.
- Report(s) detailing technical aspects of nexus solutions tested on the ground, strengthened capacities of local stakeholders.
- Statistics on representation of men and women in demonstration projects.
- Analysis of the two (2) demonstrations, assessing efficiency, benefits and feasibility for replication and upscaling

Component 3: Overview





Output 4.1: Identified interventions, including potential sources of funding

Activity 1

Preparation of projects
 documentation/investments fiches for
 priority interventions and/or
 necessary investments.

Deliverables

• Project proposals/ investment fiches for three (3) priority local Nexus interventions and/or investments.





Possible practical fields for Nexus investments

- Green/Blue urban small/medium scale interventions (key role of local authorities)
- Renewables/solar for wastewater treatment and reuse (key role of tourism sector, including SMEs)
- Renewables/solar power for irrigation (key role of irrigators communities)
- Irrigation systems optimizing water use (key role of irrigators communities)
- Nature-based infrastructure, like related to wastewater management / floods and extreme events management (key role of regional and local authorities)
- Renewables/solar power for water abstraction
- Renewables/solar for desalination
- Multipurpose dams (hydro, irrigation, flood mitigation)
- Energy/flow co-optimization in cascades of dams in transboundary basins







Component 1: Institutional Strengthening

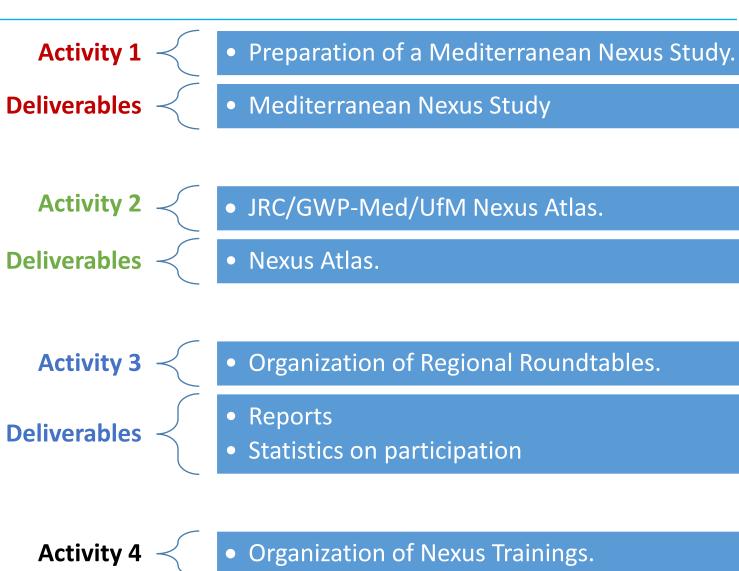
Outcome 1: Enhanced regional and National capacities on the use of the nexus approach to address land-based issues.

Component 1: Overview





Output 1.1: Regional Dialogue and Capacity Building on Nexus assessment and approach.



Activity 4

Deliverables

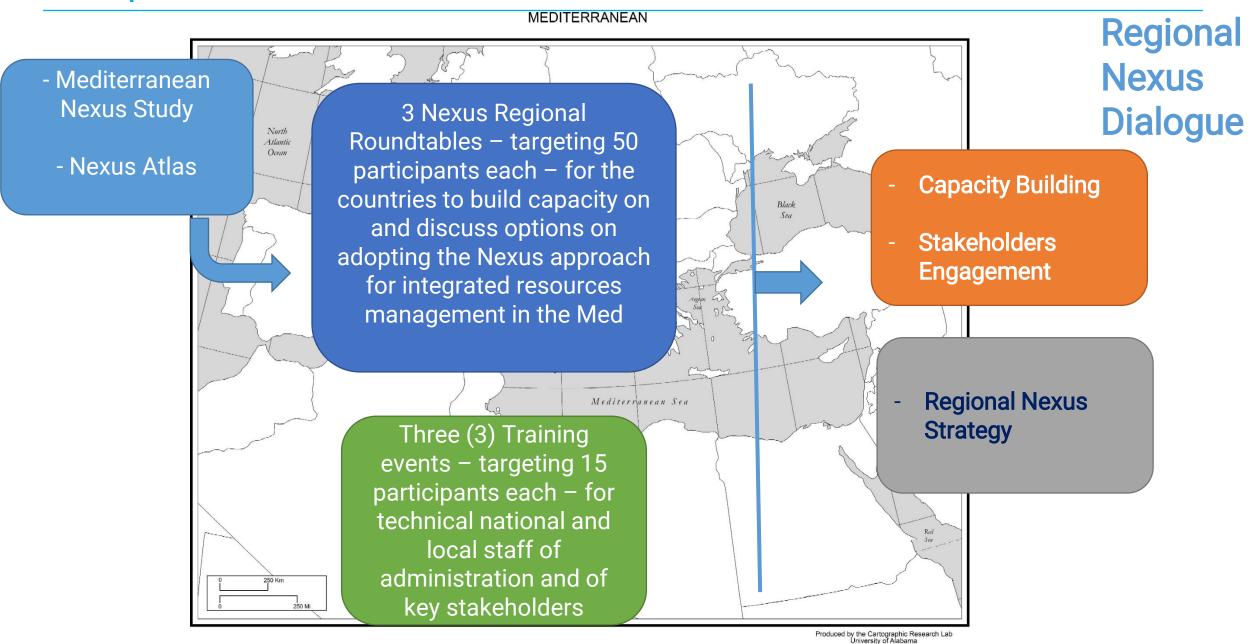
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ReportsStatistics on participation

Component 1: Overview













Component 4: Consultation and outreach

Outcome 5: The medium and long-term sustainability of results ensured by engaging the relevant stakeholders.

Component 4: Overview





Output 5.1: A Stakeholders Engagement Strategy

Activity 1

Deliverables

 Preparation of a Stakeholders Engagement Strategy.

• Stakeholders Engagement Strategy.





Thank you



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