



The Nexus Dialogue Programme

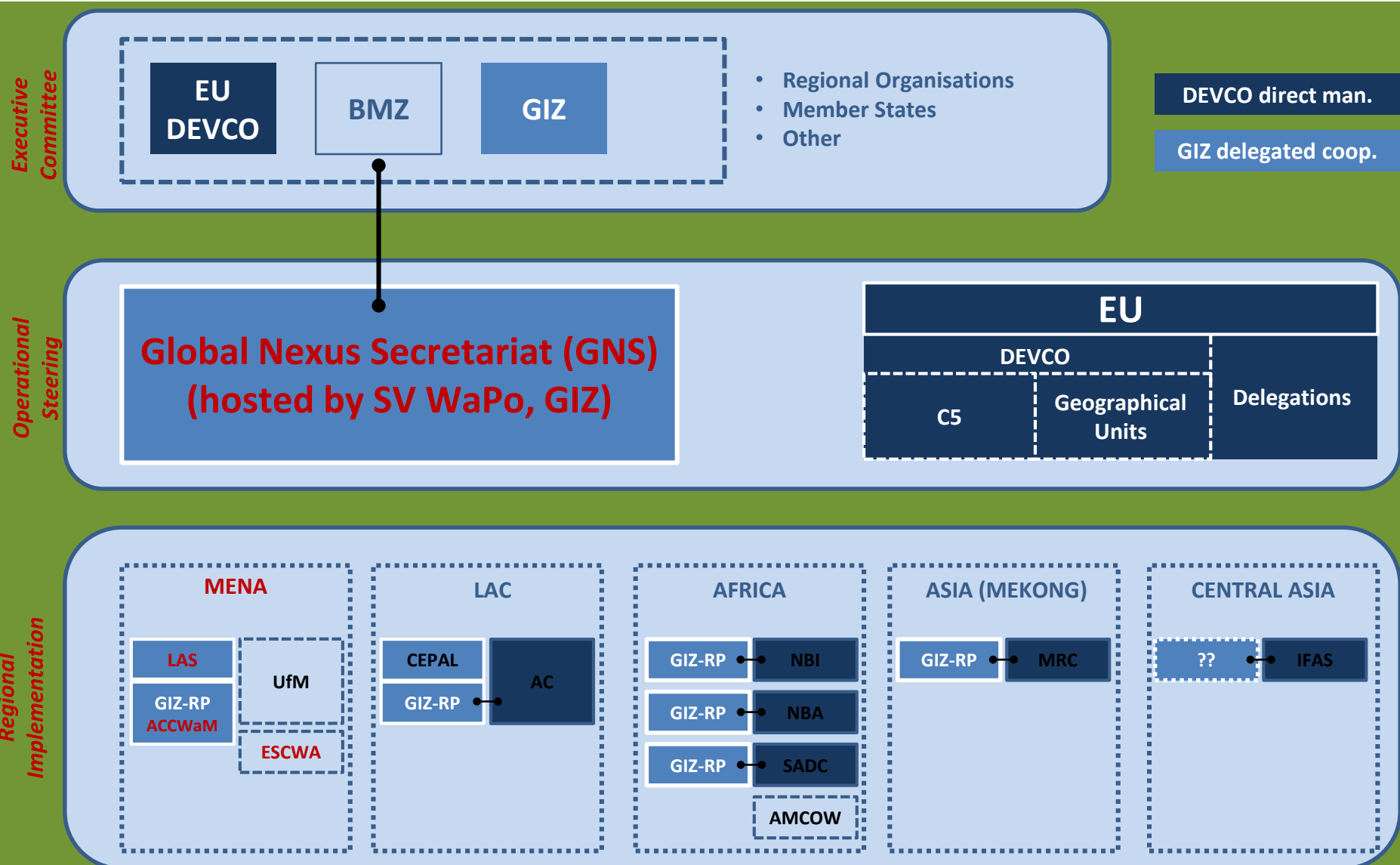
A European-German Initiative

ESCWA Regional Policy Workshop
on the Water-Energy Nexus

30-31 October 2016
Amman/ Jordan



The Nexus Dialogue Programme: Organizational Structure





The Nexus Dialogue Programme: Main Objective

The Nexus Regional Dialogues Programme supports regions –such as the MENA- in the realization of the water, energy and food security nexus; achieve supply security for water, energy and food for individual human beings while ensure sustainable resource use of the related resources (water, energy, soil).





The Nexus Dialogue Programme: Phases

Phase I as preparation for Phase II:

Phase I: 01.01.2016 – 31.12.2018 (5 Mio. €)

Phase II: from 2018 onwards (> 60 Mio. €)

Proposal of Nexus oriented project list (infrastructure) to be financed by Phase II (EU funds of 20 Mio EUR, target of 60 Mio EUR by mobilizing additional funds from further donors.



Global Nexus Secretariat (GNS)

- The Global NEXUS Secretariat (GNS) is a **support platform** for the development of the Regional Nexus Dialogues.
- The GNS ensures **coordination and coherence between the different Regional Dialogue's components**, and implementation of horizontal tasks.
- **Supports partner organizations** in the implementation (e.g. annotation of proposals for quality control and coherence).
- **Stimulates exchange and mutual learning** across the regional dialogues.
- Formulation of **a global Nexus synthesis** on the basis of regional analyses.
- Organization of **participation in conferences, workshops** etc.
- **Publications, brochures** etc.



Nexus Dialogues Programme – Main Pillars

1. Knowledge exchange Between Nexus Regional Dialogues.
2. Human Capacity Development.
3. Nexus Resource Platform.
4. Country Studies and Pilot Projects.



1. Knowledge exchange Between Nexus Regional Dialogues

- Ensure exchange with other NEXUS dialogue donor countries, other NEXUS implementers like UFM or GWP- to foster knowledge exchange, coordination and coherence.
- Support implementation of the NRD components, coordination with the NEXUS Secretariat and support of regional representatives of NRD.
- Support the engagement of relevant sub-regional institutions and national governments (NEXUS champions) to foster endorsement of the main outputs of the NRD process.



The Nexus Regional Dialogues in 4 regions

- **MENA:**
 - LAS – League of Arab States – Implementation: GIZ
- **Latin America (Andean Region):**
 - CEPAL – Economic Commission for Latin America and the Caribbean – Implementation: GIZ
- **Africa:**
 - SADC – Implementation: Global Water Partnership GWP
 - NBA - Niger Basin Authority – Implementation: GIZ
- **Central Asia (Aral Sea Region) – in preparation:**
 - IFAS – International Fund for the Aral Sea – Implementation: CAREC – Central Asia Regional Economic Commission
- **Additional through different funding strategies:**
 - Asia: MRC - Mekong River Commission
 - Africa: NBI - Nile Basin Initiative



The Nexus Regional Dialogues in the MENA Region


- Support LAS as the main counterpart in the MENA Region in all essential components.
- Implement the regional Nexus Dialogues in cooperation with LAS as well as other stakeholders.





The Nexus Regional Dialogues in the MENA Region


- Prepared 6 policy briefs with GIZ/ ACCWaM program.




The Water-Energy-Food Nexus in the Arab Region

POLICY BRIEFS SERIES

- 1 Understanding the WEF Nexus
- 2 Challenges and Opportunities
- 3 Nexus Governance and the Role of Institutions
- 4 WEF Nexus, Resource Efficiency and Sustainable Development
- 5 Capacity Development Needs
- 6 Nexus Technology & Innovation Case Studies




The WEF Nexus in the Arab Region Series is published by the League of Arab States (LAS), with technical and financial support from the German Development Cooperation (GIZ). Opinions expressed in the Series do not necessarily reflect the views of the LAS.



ترابط المياه والطاقة والغذاء في المنطقة العربية

سلسلة موجز السياسات

- ١ فهم ترابط المياه والطاقة والغذاء
- ٢ التحديات والفرص
- ٣ حوكمة الترابط بين القطاعات ودور المؤسسات
- ٤ الترابط وكفاءة الموارد والتنمية المستدامة
- ٥ احتياجات تطوير القدرات
- ٦ دراسات حالة في التقنية والابتكار



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2. Human Capacity Development

- Target group : Ministerial Level, Focal Points, Training of Trainers (40 trainees from 5 regions= 200 trainees).
- Support compilation of a list of (potential) NEXUS experts in the MENA Region. And develop a region-specific NEXUS Training Module for the Arab region.
- “TOT” for regional or national experts (in coordination with regional org. and national governments).
- Piloting: Jordan, first half of 2017.



Human Capacity Development

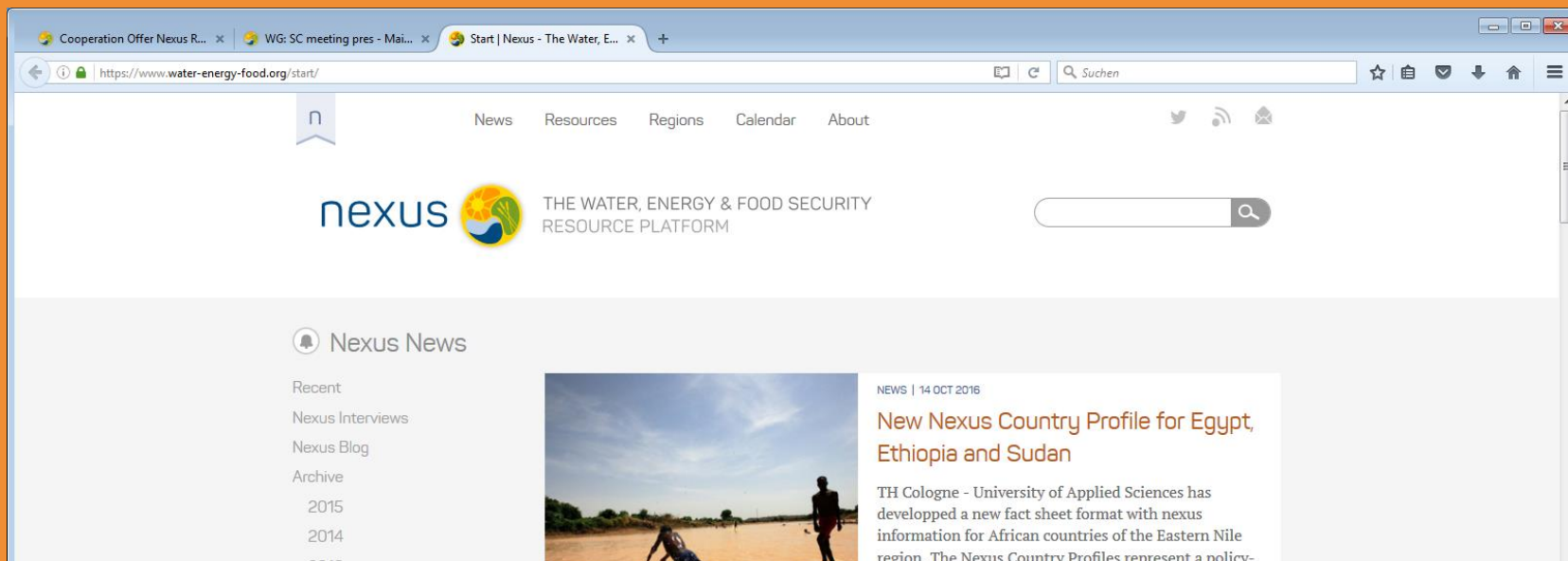
- Development of a HCD framework, adopted to the regional context (in Dec 2016).
 1. Formulation of German and European Nexus case studies with the aim to transfer lessons learnt to the Nexus Dialogues regions (regulatory perspective as well as different levels of planning).
 2. Discussion of Nexus Policies for the MENA region (PBs).
 3. Design of Nexus oriented investments into infrastructure, institutions and individuals in the Mena Region.



3. The Nexus Resource Platform

www.water-energy-food.org

- New – extended concept: The NRP is the central global Nexus Information Hub.
- More dedicated articles are and will be published.
- Awareness rising: re nexus issues: continued increase in unique visitors.
- Connects scientists with practitioners.





MENA Region on the Nexus Resource Platform

- Regional sub sites to publish special regional information about the region and (partly) in the regional language (Arabic, Spanish) Specific Nexus sites for MENA and LA.
- Nexus country profiles: Egypt- Sudan-...
- Publish fact sheets
- Mainstreaming Nexus products: Policy briefs,.....

The screenshot displays the Nexus Resource Platform website. The browser address bar shows the URL <https://www.water-energy-food.org/regions/mena>. The website header includes navigation links: News, Resources, Regions (selected), Calendar, and About. A dropdown menu under 'Regions' lists: Introduction, MENA, LAC, and Nexus Dialogues. The main content area features the Nexus logo and the title 'Middle East and North Africa Region – MENA'. Below the title, a paragraph describes the region: 'The Middle East and North Africa Region, in short MENA, stretches over 6,000 km from Morocco in the West to Iran in the East. Despite significant subregional difference, the entire area is faced with similar challenges. All MENA countries have to cope with a water deficit, while they strive to achieve a self-sustaining agriculture at the same time. Energy production in the region still strongly relies on fossil fuels, even though there is a high potential for renewable energies. Institutions and administration are dominated by sectoral thinking, but bridging approaches are developing.' The page also includes a 'Resources' section at the bottom, with a sub-header 'INFOGRAPHICS | 17 OCT 2016' and the title 'The Water-Land Nexus // Performance of Large'.



Arabic version on the Nexus Resource Platform

Arabic content

Arabic Nexus glossary

The screenshot shows a web browser window displaying the Nexus Resource Platform website. The URL in the address bar is <https://www.water-energy-food.org/resources/det>. The page has a navigation menu with links for News, Resources, Regions, Calendar, and About. The main content area is in Arabic and discusses the Nexus approach, its challenges in the Arab region, and its role in mitigating climate change. The text is written in a professional, serif font. At the bottom of the page, there is a footer with the date and time: 2:59 PM 10/19/2016. The browser's taskbar is visible at the bottom, showing various application icons.

energy, water and environment are combined in one ministry.

Hence there is a great need for reinforcing the institutional governance for adapting the nexus approach, which will require not so much major institutional restructuring, but an improvement of interactions among the relevant ruling institutions.

One of the main challenges in adopting the nexus approach in the Arab region is the limited role of the private sector. There are tremendous opportunities for entrepreneurship and public private partnership, which need governmental support and incentives. There are some promising initiatives for nexus projects in the Arab region such as Sahara Wind Power Project in Morocco, renewable energy for wastewater treatment and reuse in agriculture in Jordan, solar water desalination in Saudi Arabia and the generation of energy from agricultural residues in Sudan.

Finally, the Nexus approach could play a major role in mitigating climate change effects through enforcing the efficiency of natural resources usage, and consequently mitigating gases emissions, in addition to the role of shifting to renewable energies in saving primary energy and limiting carbon dioxide emissions. These trends would contribute to achieving the Sustainable Development Goals and the decisions of the World Climate Summit 2015.

ترابط المياه-الطاقة-الغذاء في المنطقة العربية: التحديات والآفاق

مقابلة مع الأستاذ الدكتور وليد الزباري

1. هل يمكنك شرح "مفهوم ترابط المياه والطاقة والغذاء" لمن لا يعرف هذا المفهوم في 3-4 جمل؟

مفهوم ترابط المياه والطاقة والغذاء يعني النظر في العلاقات المتداخلة بين هذه القطاعات الثلاث بشكل تكاملي عند إدارتها



4. Country Studies and Pilot Projects

- Carry out **two NEXUS country assessments** to identify suitable NEXUS opportunities- Identified Tunisia and Sudan.
- Carry out up to **two small NEXUS pilot study projects**- Identified starting points for Nexus-Pilot projects -Solar Energy Farming Jordan (Building on ACCWaM studies).
- Carry out one **regional Nexus study**, in cooperation with ACCWaM.
- Carry out **a regional NEXUS Action plan** (involvement of 4 countries at least). In cooperation with ACCWaM- To be realized after national case studies (Nexus action plans for phase II).

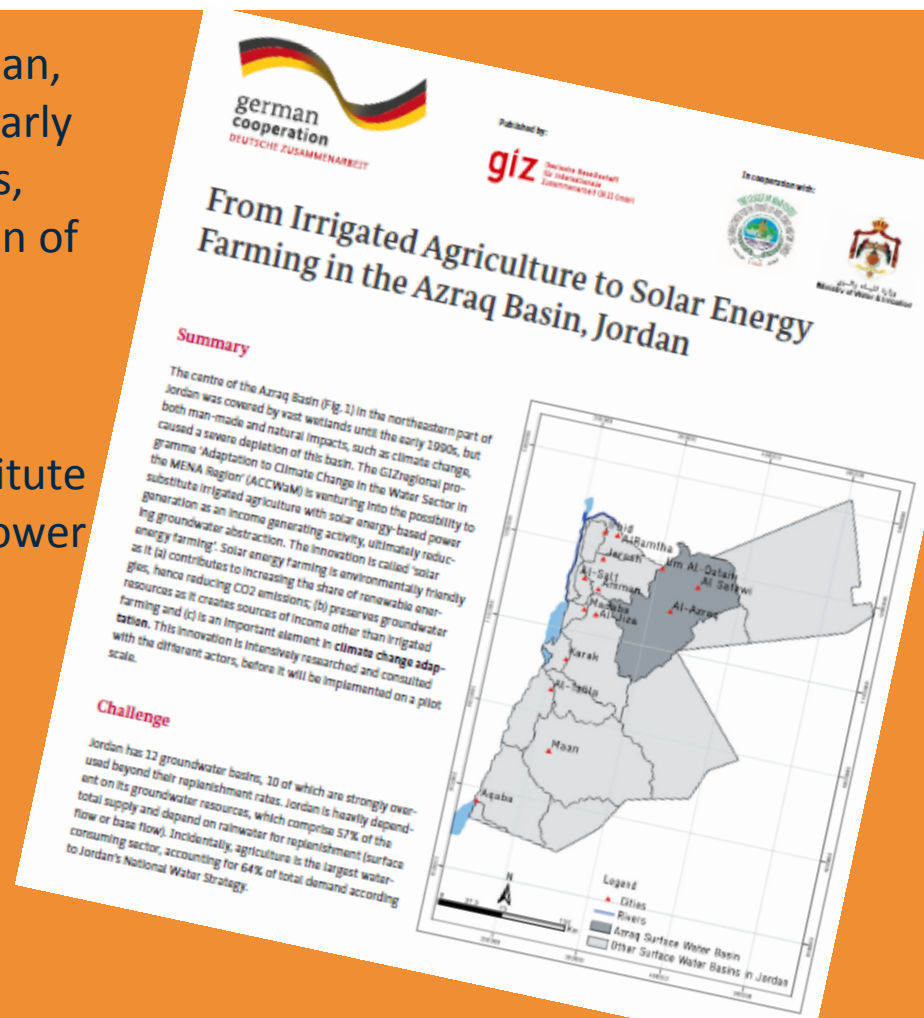


Solar Energy Farming- Pilot Study Project in Jordan

Initiated by ACCWaM in the Azraq Basin in Jordan, which was covered by vast wetlands until the early 1990s, but both man-made and natural impacts, such as climate change, caused severe depletion of this basin.

ACCWaM ventured into the possibility to substitute irrigated agriculture with solar energy-based power generation as an income generating activity, ultimately reducing groundwater abstraction.

The project was supported by the Jordanian Ministry of Water and Irrigation.





Solar Energy Farming- Pilot Study Project in Jordan

Solar energy farming is environmentally friendly as it:

- (a) contributes to increasing the share of renewable energies, hence reducing CO₂ emissions;
- (b) preserves groundwater resources as it creates sources of income other than irrigated farming and
- (c) is an important element in climate change adaptation.

This innovation was intensively researched and consulted with the different actors, but was not implemented.





A Nexus SEF initiative proposed by the NDP

- A small scale SEF initiative is proposed by the NDP building on the studies and research undertaken by the ACCWaM project. This initiative has been proposed as a model for implementing the Water- Energy- Food Nexus approach, regarding the increasing requirements for drinking water-the energy farming offering an alternative water-friendly income opportunity to replace conventional farming, reducing excessive groundwater abstraction by the agricultural sector.
- Proposing an institutional environment enabling the successful implementation of the project.
- Proposing a business model for implementing the project- MWI-MoE-private sector- NGOs- farmers.





Next Steps of Nexus Dialogue Programme

- Exchange knowledge on Nexus between different regions (mainly MENA and LAC).
- Create synergies and joint actions between organizations and countries working on Nexus in MENA.
- Develop executive outlines of country assessments, pilot study projects and capacity development, in consultation with countries, experts, and partner organizations.
- Invite other partners (Donors, regional and International organizations) to join and be part of the Nexus Dialogue Programme: local, regional and global; academic, practitioners, civil society interested in participating are welcome.

Thank You

