## Increasing policy coherence

Developing the Capacity of ESCWA Member Countries to Address the Water and Energy Nexus for Achieving the SDGs: Regional Policy Tool Kit

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**Economic and Social Commission for Western Asia** 



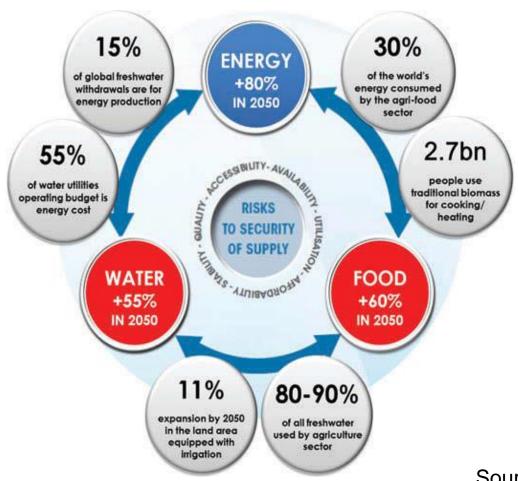
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#### **INTRODUCTION**



#### **Resource Interconnectedness**



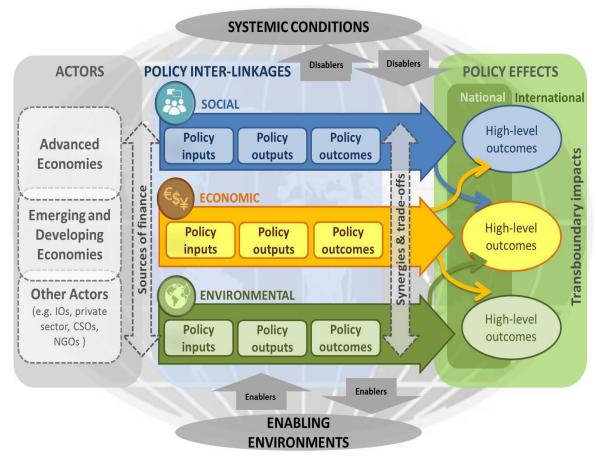
Source: IRENA, 2015

## **Policy Coherence for Development**

## According to OECD, policy coherence should entail:

- 1. Identifying and addressing interactions among various policies in economic, social, environmental and political domains
- 2. Putting in place institutional mechanisms, processes and tools
- 3. Developing evidence-based analysis, sound data and reliable indicators
- 4. Fostering multi-stakeholder policy dialogue

## **Analytical Framework for Policy Coherence For Sustainable Development**



Source: OECD PCD Unit, inspired by the work of UNECE/OECD/Eurostat Task Force on measuring sustainable development.

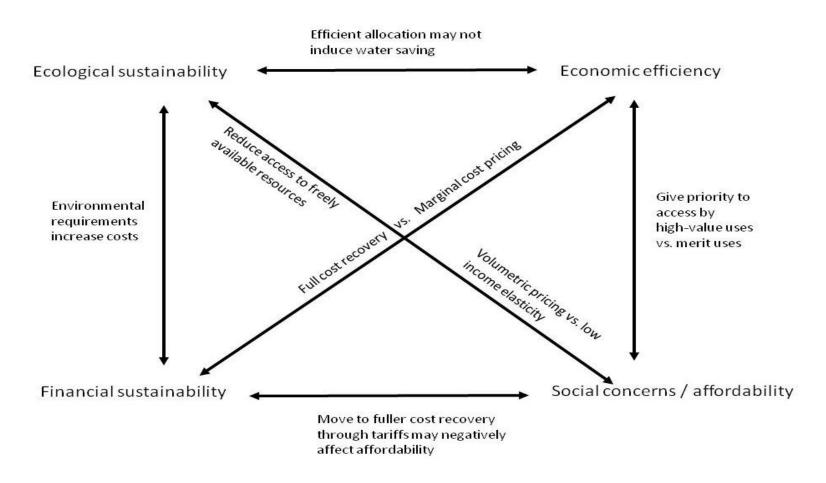
#### POLICY COHERENCE FRAMEWORK



#### **Elements of the Framework**

- Balancing between competing demands, outcomes, and criterion
- Resolving policy coherence between water and energy nexus in the Arab countries
- 3. Defining the scales and levels of policy coherence
- 4. Developing capacity building for more integrated and coherent policy making
- 5. Conducting a dialogue platform among stakeholders
- 6. Developing a Nexus Community of Practice
- Exploring governance models for the Water Energy Food
   Nexus

#### **Elements of the Framework**



## Comprehensive tools needed to create policy coherence

Decision makers require access to comprehensive tools that:

- 1. Are inclusive of all stakeholders and correspond to the **multi-scale** nature of the nexus
- 2. Define and **quantify** interlinkages of water and energy resources
- 3. Enable the development of an integrated strategy for resource management

Resolving policy coherence between water and energy nexus in the Arab countries: Way forward



# Issues that need to be resolved and implemented

- 1. Set measurable goals for water and energy that can be attainable
- 2. Set targets to meet the goals above
- 3. Quantify the impact of each of these targets on the other goal and targets.
- 4. Establish a structure of governance that allow for interaction across sectors.

# Issues that need to be resolved and implemented (continued)

- 5. Establish the hotspots regions or themes that are most vulnerable that requires intervention
- 6. Develop an action plan including financing, management, and governance to address the hotpots with ownership and incentives to achieve the set targets

### Major groups of stakeholders

#### Private Sector (business)

Respond to demand by activating supply chain and managing critical resource systems

#### 2. Government

Major actor in shaping preferences of both society and business through incentives and regulation

### Major groups of stakeholders

#### 3. Society

The source of demand for resources, which takes shape based on population size, social breakdown, preferences and needs.

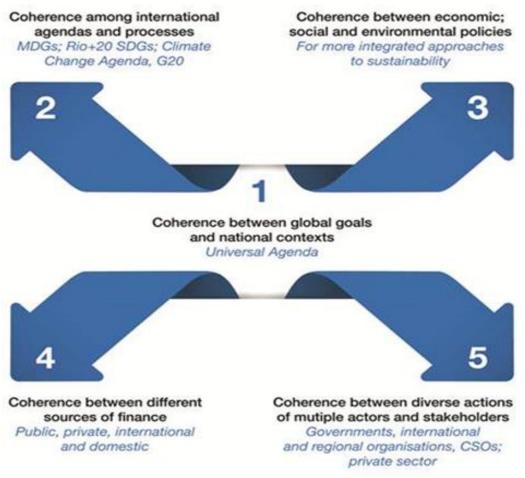
Important role in being engine for accountability

#### 4. Others

Civil societies, NGOs, think tanks

Important role in activating discussions

### **Levels of Policy Coherence**



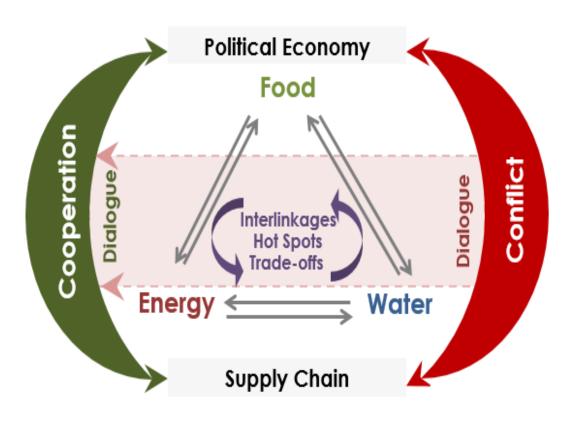
Source: Soria, 2014

# Capacity building for more integrated and coherent policy making

Building national capacities should be focused on:

- 1. Developing dialogue platforms
- 2. Promoting technological innovation
- 3. Data generation and dissemination
- 4. Finding financial channels to move forward

# From Science to the Politics of the Nexus



A resources nexus platform outlining the dynamics of three communities: Science, Private Sector/ Supply Chain and, Politics and Policy. An integrated nexus framework (Mohtar, 2015)

## Science-policy in the Arab region

## Investment and outcomes of Scientific Research in the Arab World

	Arab countries	World average
% of GDP spent on research and development	0.2%	1.7%
Full-time researchers per million inhabitants	373	1,080
Scientific and technical articles published in 2011	7,800 (1.3% of world total)	600,000 (world total)
Articles published per million inhabitants	22	117

Source: ESCWA, 2015. Promoting Science-Policy Interface in the Arab Region

## The role of the Community of Practice: From concepts to analytics and dialogue



The Role of the Community of Practice

# Water-Energy-Food Nexus Community of Practice

The NCoP is a platform for enabling sharing of data, knowledge and best practices

An electronic portal would allow for better coordination and sharing of knowledge in the region

The NCoP could have vital role in monitoring effectiveness of nexus governance models

Data democratization is a requirement of a complex policy

Data democratization is a requirement of a complex policy terrain

Annual meetings and regionals workshops can bring nexus issues to a more specific focus

The Role of the Community of Practice

# The need for the NCoP in the coming years

The NCoP is needed to help promote regional coherence and governance in the implementation of SDGs and climate smart resource management.

To save on infrastructure and human capacity investments; tools, data and good practices can be regionally managed.

#### **Governance Models**



## Water Energy Food Resources Governance



Source: Mohtar, 2016

## Possible Models for Regulating the Nexus

Shared governance coordinated among various units

Successful if all parties involved are assured a voice

2. High level governance unit with oversight to all units

This is more a leadership model where 'charisma' and open vision of a unit will create cooperation

#### **Policy Coherence and the Nexus**



### **Policy Coherence and the Nexus**

Integrated nature of the Sustainable Development Goals is crucial to achieve the goals and targets of the new agenda

The nexus perspective shows the need to adopt an integrated landscape or socio-ecological perspective and the need for a broad conceptual framework linking water to the large sustainable development agenda

According to UN-DESA: A nexus perspective has not been adopted in the framing of the SDGs targets

They failed to recognize inherent trade-offs and synregies among the SDGs and their targets

The simpler the model the better

## Implementation: Funding and Incentives

Investment comes from the private sector

Strategic public investment can attract other sources of financing

Public policies in the water and energy space in the ESCWA countries help

Transparent tax systems

Major funding source for implementing policies for sustainable development

Incentives for sectors that seek to shift to greener technologies
Foreign investment

## Localizing variability in the Arab Region

Common nexus policy coherence can be established in the ESCWA region despite the variability of the region.

Challenges arise as how to maintain regional policy coherence on major issues while keeping the varying local issues in mine.

Establishing a regional effort makes the most effective use of resources

# Water-Energy nexus approach as a tool for enhancing policy coherence

W-E-F security are highly linked in the Arab region The region is energy rich, water scarce, food deficient, and economically and environmentally vulnerable to climate change.

The nexus approach tool implicitly focuses on policy coherence

- 1. Identifies hotspots where a specific policy, technology or consumption pattern can be assessed and evaluated
- 2. Focuses on generating a platform of dialogue between multiple levels

#### Institutional support for policy coherence



## **Partnerships and Incentives**

Dialogue and cooperation with sectors can be promoted with incentives to take action:

- 1. Gained efficiency and/or reduction of cost
- 2. Cost recovery
- 3. Good citizenship and working towards the betterment of society
- 4. Financial gains that will directly benefit the operations of a sector
- 5. Incentives for compliance to policies and laws play an enormous role in sustainability of resources

## **Accountability and Legitimacy**

The ability to measure and monitor the existence of coherent/incoherent policies is important for promoting action and sustained change

**OECD Strategy on Development** 

Mandate to develop robust indicators Monitoring matrix

Feed into "scorecard" for country to self-asses enabling environments for development

## **Policy Coordination Mechanisms**

Coordinating mechanisms should establish monitoring mechanisms and work towards raising public awareness, build commitment to action and track progress and implementation

Accountability tracking and monitoring systems
Challenges to accountability: multiple sites of governance
and power diffused among stakeholders

Civic movements should play a more proactive supportive role while governments need to ensure policies are inclusive and responsive

## Case Study: Morocco and the SDGs



## Morocco: Overview



#### Water

- highly water-stressed
- decreasing ground & surface water supply
- 15% of agriculture is irrigated; 85% is rain fed

#### Climate Change

- more frequent, more intense, and longer heat waves expected (Radhouane 2013)
- Precipitation would decrease by up to 27%

#### Energy

• Imports >95 % of energy

#### **Economy**

- Major Sectors: industry, services, & agriculture
- Agriculture is 13.8% of GDP; employs 40% of population. Growth 2.4% (World Bank, 2014)

#### Food

Ranks 19th in wheat production, 7th in olive

#### **Phosphate Production**

- Top global phosphate producer
- Goal: double mining and triple chemical processing by 2020



## Goals, Targets, & Indicators

#### Goal 2: FOOD



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

#### Goal 6: WATER



Ensure availability and sustainable management of water and sanitation for all

#### Goal 7: ENERGY



Ensure access to affordable, reliable, sustainable, and modern energy for all

#### Target 2.4

By 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.

#### Target 6.6

By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

#### Target 7.2

By 2030, increase substantially the share of renewable energy in the global energy mix

#### **Local Indicators**

Level of production of Olives, Citrus, Fruits and Vegetables

Level of water stress (%) 35.7% (AQAUASTAT, 2010) Renewable energy share in the total final energy consumption - 11.3% (IEA, 2014)

#### Local Strategies

#### Green Morocco Plan



**Morocco Water Strategy** 2030



**Morocco Energy Strategy** 2030



Desalination: 400,000,000 m3

TWW: 300,000,000 m3

% citrus prodcution: *Increase 54*%

Solar: 2 GW

Wind: 2 GW

Hydro: 2 GW

% renewable: Increase up to 42%

% fruits and vegetables: Increase 40% % cereals: Decrease 20%

% olive production: Increase 76%

## Major Tradeoffs

#### Food:

(-) security (cereal) (+) water, land, energy

## **Energy (renewable):**

(+) security, emissions (-) financial, land, water

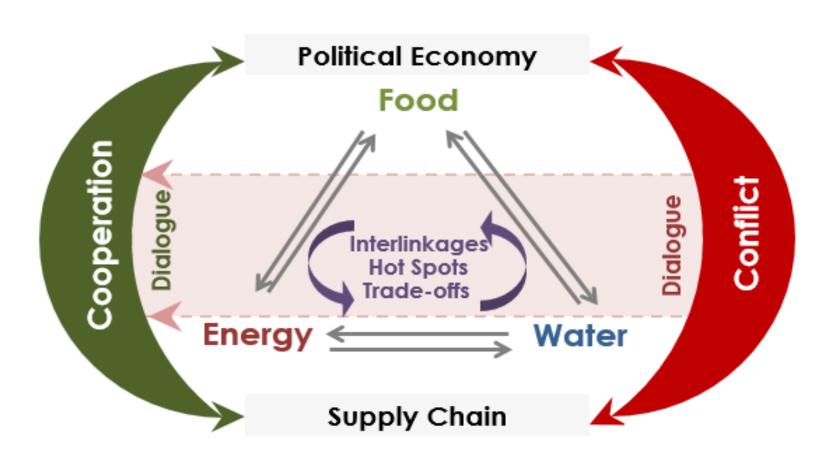
#### Water & TWW:

(+) security

(-) energy, financial

## Beyond Nexus Analytics

# From Science to the Politics of the Nexus



## Concluding Remarks of Case Study

- Targets of the Water Goal can impact the targets of Goals 2 and 7,
- **2) Quantifying interactions** of SDG targets is key to achieving them,
- 3) Multi-stakeholder approach ensures sustainable implementation of the SGDs; inclusiveness in sector (water, energy, food) and type (private, public and civil society),
- 4) The Water-Energy-Food Nexus offers a useful platform for quantifying and assessing interactions between SDGs during their implementation.

#### **Key Messages**



## **Key Messages**

- Policy coherence platform must be developed regionally for an effective and productive use of resources and effort needs to be made to maintain local nature of action and interventions
- 2. Countries and communities are at different stages of social, technological and economic development.
- 3. Establishment of a Nexus Community of Practice is an important, practical tool that will enable policy coherence at the different levels.

## **Key Messages (continued)**

- 4. Capacity building on nexus issues are bottleneck in moving the nexus agenda forward.
- 5. Nexus governance remains a critical implantation gap
- 6. Transparency and accountability in nexus cannot be overlooked

## Thank you

