

# CLIMATE SECURITY DIALOGUE BRIEF



## CLIMATE SECURITY DIALOGUE SERIES

# CLIMATE CHANGE IN THE SOUTH MEDITERRANEAN

BERLIN, FEDERAL FOREIGN OFFICE, 30 MAY 2011

## Summary

The countries of the Southern Mediterranean will be among the most severely affected by climate change. Rising temperatures and sea levels, as well as declining precipitation, will challenge food, water, and energy security in Arab countries and potentially trigger migration from rural to urban centers and across the Mediterranean.

On May 30<sup>th</sup>, 20 experts from South Mediterranean countries and Germany gathered to discuss the security implications of climate change for the region. The Dialogue was organized by the German Federal Foreign Office in cooperation with adelphi, the KlimaCampus Research Group "Climate Change and Security" (CLISEC) at the University of Hamburg, and the Institute for Peace and Security Research Hamburg (IFSH).

The Dialogue highlighted the importance of regional cooperation in order to cope with climate change challenges. However, it became evident that climate change issues still need to be better integrated into regional cooperation approaches, as well as into national water, food, energy and migration policies.

## Background

On the international level, the debate on security implications of climate change has gained great momentum over the past years. Today, climate change poses one of the key challenges for global economic development and human well-being and may put international peace and security at risk.

The South Mediterranean is one of the most vulnerable regions to climate change. Increasing water scarcity, desertification, and the degradation of fertile soils collide with high population growth and a steadily rising demand for energy and natural resources. However, low resource efficiency, insufficient governance, and ongoing conflicts, such as the Middle East conflict and recent popular uprisings, limit the South Mediterranean states' capacities to cope with the challenges of rising temperatures and their global and regional implications.

Recent scientific publications pointed out to the link between climate change effects on food prices and the popular uprisings that started throughout the Arab region in early 2011. The rise in food and energy prices significantly added to political and social unrest that unfolded in the area.

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The often cited concept of climate change as a threat multiplier may therefore find its proof in the recent events throughout the Middle East and North Africa.

Against this backdrop, the Climate Security Dialogue Series started on 30<sup>th</sup> May 2011 with a discussion on »Climate Change in the Southern Mediterranean: The Water-Food-Energy-Migration Complex«. The Dialogue aimed to find answers to the following key questions:

- How will climate change affect the complex nexus of **water, food, and energy** in the South Mediterranean?
- How will these implications influence **migrations flows** and patterns within the region and across the Mediterranean?
- Which **strategies and mechanisms** should be brought forward to cope with adverse climate change effects?

## Interlinked Security Issues

The Climate Change and Security Dialogue on the South Mediterranean clearly highlighted that in the region, water, food, and energy issues are closely interlinked and have a direct influence on the livelihoods of the countries' populations.



*"The lack of water availability is already causing population displacement."*

*Raya Stephan*



*"The failure of Tunisian agricultural policy was revealed by the uprising in 2011."*

*Mohamed Elloumi*

Already today, water scarcity, droughts, and inadequate water governance trigger conflicts and population displacements. In Tunisia, as Professor Mohamed Elloumi of the Institute for Agronomic Research in Tunisia pointed out, the mobilisation and distribution of water causes conflicts among different parts of the country and leads to a competition between industrial and domestic consumers. In Syria, a drought affected more than 1 million people in 2010, according to water law expert Raya Stephan; many of those people responded by relocating to urban centers.

Rapid population growth, especially in urban areas, and rising demand will put heavy pressure on water supplies throughout the South Mediterranean. The major groundwater resources of the region are non-renewable groundwater, explained Stephan. The situation is further complicated by the absence of effective water sharing agreements for rivers and groundwater aquifers. Political and economic interests of the respective countries often trump effective water governance and ecological issues. Limited transparency, science cooperation, and information sharing hamper regional cooperation mechanisms. Current water agreements and cooperation approaches in the South Mediterranean do not reflect nor integrate potential climate change impacts.

In the case of Tunisia, frequency and intensity of extreme dry years may increase due to cli-

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mate change, while generally dryer and wetter periods are likely to vary more. However, both water scarcity and increased climate variability will have negative impacts on agriculture and food security. Inefficient natural resource management leading to excessive use of resources such as water, soils, and rangeland already led to a crisis in the agricultural sector. In Tunisia, Mohamed Elloumi explained that this failure has been decades in the making, but was only revealed by the global food crisis in 2007 and the uprising of 2011. Civil society-based initiatives on sustainable livelihoods exist, but are currently isolated cases. A positive example is the SEKEM Initiative in Egypt presented by Hani Sewilam.

As a large domestic labor market and a provider of domestic food security and social stability, the agricultural sector has an outstand-



*"Migration is both a shared solution and a shared problem."*

*Mehdi Lahlou*

ing role in the South Mediterranean countries. Its failure or success in coping with rising temperatures will also affect migration flows and patterns in the region and beyond. Very likely, climate change will lead to population displacements within countries, especially from rural areas to urban centers, said Professor Mehdi Lahlou of the National Institute for Statistics and Applied Economics in Morocco. Nonetheless, if livelihoods in sub-Saharan countries further deteriorate, migrant flows from these countries to Europe will presumably swell. In this case, the Maghreb would function as a bridge between sending and receiving countries.

The mass migration witnessed after the revolts in various Arab countries proves how little prepared the European countries are for increased migration flows from the Southern shores of the Mediterranean. Measures such as the creation of Frontex, an EU agency to ensure European border security, did not succeed in limiting migrant flows but rather redirected them to more risky transfer routes. Encouraging economic development in the Southern countries would be a more effective approach to reducing migration. Furthermore, it could provide a solution to the brain drain from the region that increasingly poses a challenge to the area's social and industrial development.

*"Climate change could provide an opportunity for voluntary change."*

*Jürgen Scheffran*

Despite abundant fossil fuel reserves in many of the South Mediterranean countries, the region faces severe energy scarcity. As with water, demands will rise due to population growth, economic development, and the impacts of climate change, particularly regional warming. Renewable energy and the introduction of energy efficiency measures provide solutions for coping with this threat, noted Maged Mahmoud of the Regional Centre for Renewable Energy and Efficiency in Egypt.

Most countries in the region already introduced framework legislations and incentives to foster the development of solar and wind power. Still, lack of financial resources and private investment continue to hamper renewable energy deployment. Further challenges include finding a socially responsible regulation for energy prices

## A Window of Opportunity

Though climate change is an *involuntary* change aggravating many problems the region face, it could provide an opportunity for *voluntary* change in order to resolve future challenges, emphasised Professor Jürgen Scheffran of the KlimaCampus Hamburg. The cascading set of events in the South Mediter-

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ranean region, along with the challenges of climate change, provides a window of opportunity for a profound transformation of the region. The next few years will be critical in initiating this pathway.

External partners, such as the EU and its Member States, can play a critical role in faci-



tating regional cooperation and supporting national initiatives. However, they require political ownership within the region and should provide visible benefits for the population at large.

In light of the discussions, the following activities need to be pursued:

- Raising awareness and increasing the capacities of the countries to anticipate potential climate change threats, including which areas and economic sectors are most likely to be negatively affected.
- Enhancing regional scientific cooperation, knowledge exchange, and research on shared climate change threats.
- Encouraging the integration of climate change issues in existing regional initiatives and agreements on shared water resources and fostering their transparent management.
- Assisting South Mediterranean and African countries in developing adequate agricultural and industrial policies that are ready to face climate change impacts.
- Encouraging solutions for bridging the financial gap for the implementation of renewable energy in the South Mediterranean.
- Supporting local manufacturing for renewable energy sites and fostering economic development, for example, by encouraging green technology industries.

## About the Dialogue Series

The Climate Security Dialogue Series provides a forum for discussing the impacts of shifting climate in times of political, economic, and demographic transformations. Linking political, practical, and scientific expertise, the Dialogues aim to identify necessary regional cooperation constellations and measures to minimise negative implications for development, livelihoods, and peace.

The Climate Security Dialogues Series was initiated by adelphi in Berlin, the KlimaCampus Research Group "Climate Change and Security" (CLISEC) at the University of Hamburg, and the Institute for Peace and Security Research Hamburg (IFSH), in cooperation with and supported by the German Federal Foreign Office.

Forthcoming Dialogues in 2011 address Central Asia, South Asia and Latin America. Visit [www.ecc-platform.org](http://www.ecc-platform.org) for more information.



### Publisher:

#### adelphi

Caspar-Theyß-Straße 14a | 14193 Berlin | Germany

T: + 49 30 89 000 68-0

F: + 49 30 89 000 68-10

E: [office@adelphi.de](mailto:office@adelphi.de)

I: [www.adelphi.de](http://www.adelphi.de)

Editors: Kerstin Fritzsche (adelphi), Jürgen Scheffran (KlimaCampus)

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