Collaborative Programme Euphrates and Tigris (CPET)



Figure 1 Euphrates and Tigris Rivers

Themtic Area: Assessment of Natural Resources in Marginal Environments

Geographic Scope: Euphrates and Tigris Region

Purpose of the CPET: Improve dialogue and trust on water management and increase information and knowledge based on ground-truth data to provide evidence on water use, services and impacts in the Euphrates and Tigris region

Timeline: 2013 - 2018

Funding Agency: Swedish International Development Cooperation Agency (Sida)

Partners:

- International Center for Biosaline Agriculture (ICBA), (Coordinator)
- Stockholm International Water Institute (SIWI) (Main Partner)
- American University of Beirut (AUB)
- International Center for Agricultural Research in the Dry Areas (ICARDA)
- Stockholm Environment Institute (SEI)
- Swedish Meteorological and Hydrological Institute (SMHI)

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Increasing water demand as well as climate change impacts are some of the key factors which have effects on water resources in the Euphrates and Tigris rivers. Within this basin, Iran, Iraq, Syria and Turkey are dependent on the water from the river system to sustain ecosystem goods and services, agriculture and hydropower production, municipal and industrial water supply and livelihoods. However many areas within the river system suffer from salinity, land degradation and deteriorating marshlands and ecosystems.

The basin countries have different levels of development, capacity, preferences and behaviors when it comes to managing water at national and transboundary scales. The growing technical uncertainties and complexities in the system have made international policy coordination not only increasingly necessary but also more challenging. It is evident that to manage water better there is a need to strengthen cooperation across the basin countries.

In response to these challenges, the International Center for Biosaline Agriculture (ICBA) jointly with the Stockholm International Water Institute (SIWI), partnering with basin Country Partner representatives and four Implementing Partner Institutions: the American University of Beirut (AUB), International Center for Agricultural Research in the Dry Areas (ICARDA), Stockholm Environment Institute (SEI), and the Swedish Meteorological and Hydrological Institute (SMHI) implement the Collaborative Programme Euphrates and Tigris (CPET). The CPET aims to improve dialogue and cooperation among the basin countries through increased access to information and knowledge transfer regarding water management in the Euphrates and Tigris region.

Activities and Outcomes

During the inception year, all Implementing Partners facilitated dialogue between the Country Partners on key water issues in the Euphrates and Tigris region in order to identify their priority interests as they relate to water use, services and pressures. Findings revealed that pressures across the system are complex, spatially variable and require in-depth evidence across the region to provide clarity on possible strategic transboundary



water management options. The CPET identified that the potential to increase the productivity, efficiency and resilience of water use and services is significant. Furthermore, it brought to light that improvements in the management of transboundary water resources could result in improved regional economic output, socioeconomic and livelihood conditions.

Building on the momentum and progress generated thus far, the CPET provides a platform for dialogue, exchange and trust building. It aims to provide a rigorous evidence base to evaluate transboundary impacts and enable the identification of a range of strategic transboundary water management options and a regional investment programme. During the forthcoming years, the programme will implement activities and provide capacity building and skills sharing, training and dissemination of good practices as agreed by the Country Partners in six Task Forces as follows:

- · Hydrology and climate change
- Hydropower
- · Water quality
- · Agricultural water productivity
- Marshlands
- Socioeconomics

The Country Partners jointly develop and periodically steer the programme of activities with support from the Implementing Partners. Activities include building a hydrological model for the Euphrates and Tigris region and incorporating climate change scenarios in a modeling framework.

Subsequently existing climate change scenarios and river basin hydrological setups will be assessed. In order to determine the water quality and ecological status of the marshlands and coastal zone, extensive analysis will be carried out measuring significant water parameters and flow. Concurrently, in-depth analysis of irrigated and rain fed agricultural production at the regional scale will be performed. This will provide a better understanding of how the agricultural systems in the Euphrates and Tigris region relate to hydrology.

An analysis of hydropower supply and demand options and tradeoffs will also be integrated into the overall water management of the basin.

Anticipated outcomes include contributing to improved

(1) water security for small and large water users; (2) efficiency and productivity of water use, and generation of additional socio-economic benefits per unit of water; (3) management of ecosystem goods and services at the regional scale and restoration options of deteriorated marshlands; (4) livelihood security in rural communities and reduced rural-urban migration; (5) participation of stakeholders, including women, in decision-making on cooperative action in water management at the regional level; and (6) accountability and communication.

Future Directions

The CPET provides a number of important building blocks that support future cooperative efforts in the region where there has been a low level of cooperation to date. Building on the anticipated programme outcomes, future cooperative efforts could extend this technical cooperation to political cooperation. This requires increased investment in water and increased engagement of stakeholders in water management.

"Cooperative efforts for more efficient and productive use of transboundary water resources in the Euphrates and Tigris region will help improve local livelihoods and enhance food security."