Collaboration of UT with Ankara University (Turkey) for Climate Vulnerabilities of Agriculture in Turkey

As part of the Capacity Building in the Field of Climate Change in Turkey Grant Scheme (CCGS), co-funded by the European Union and Republic of Turkey, Ankara University Water Management Institute and Twente University from the Netherlands have carried out the "Building Capacity on Vulnerabilities of Agricultural Sector to Climate Change in Turkey" project. The aim of the project was to understand and assess the vulnerability of agricultural sector in Turkey under hydrological extremes (drought) and climate change, and build awareness and capacity of different economic sectors that are directly affected from it.

To this end, the project team have mapped the water footprint of the Bati Akdeniz River Basin, showing its dependency to fresh waters and rainfall availability, and assessed how drought and climate change may disrupt supplies of key food crops produced. This information reveals where vulnerabilities of the regions' food security and economic stability lie and identifies which food products may become more expensive or difficult to find in the region in the near and longer-term future.

The Bati Akdeniz River Basin's agricultural economy is particularly vulnerable to drought under climate change, which impact production of agricultural commodities and consequent crop yield volatilities related to a rainfall shortfall in the future. Currently the agricultural drought severity is "low to medium" in the region. Climate change will increase vulnerability of agriculture to drought by 40%. In the near future production of tomato, wheat, orange and apple are most likely to be affected because they come from areas with significant or severe levels of drought. In the longer term, products such as olive oil and maize could be impacted since climate change alters rainfall patterns and thereby increases the risk of drought in the river basin. By 2050, 70% of agricultural production will be highly vulnerable to drought.

For more information please visit: http://suyonetimi.ankara.edu.tr/en/a-new-project-funded-by-the-european-union/

