Technical Working Group 2A: Hydrological Modeling

Main points

Purpose of linking RCMs to regional hydrological models:
- To inform regional dialogue and support the preparation of national plans, policies and strategies.
- To generate information at the Arab regional level to help inform Arab positions and negotiations, as well as strengthen the ability of the Arab region to access financial resources for climate change adaptation.

Data availability:
- Hydrological models should taking into consideration region-specific characteristics.
- Suggested that data sharing and access to information from non-Arab countries that are part of shared water basins would be beneficial for better informing the hydrological model.
- Outputs of RCMs should be made available for all those who are interested in running other models.

Benefits of linking RCMs to regional hydrological models:
- Provides a regional perspective on climate change impacts on water resource based on a consist approach
- Regional hydrological models are useful for regional analysis and to assist in assessing areas where national hydrological models are missing
- Regional hydrological modeling can support basin-wide analysis, including analysis of shared water resources that cross national borders.
- Linking RCMs to hydrological models can improve general understanding of the status of water resources relative to the different RCM projections.
- Regional hydrological modeling can be used as screening process to identify areas that may require further analysis
- A regional hydrological models can prevent some of the biases that exist in national hydrological models

Issues to consider
- Local hydrological models might provide more detailed information at the basin level or national level, but outputs from a series of localized hydrological model would likely not be comparable at the regional level.
- RCM outcomes could feed into national hydrological models and could complement and bring more detail to the regional hydrological modeling findings
- Priority should be given to both the political and technical aspects of climate change impact assessment and vulnerability assessment. The regional initiative to provide the science and the tools for fostering regional discussion.