

Future Earth: Addressing Global Change and Sustainability in the MENA Region

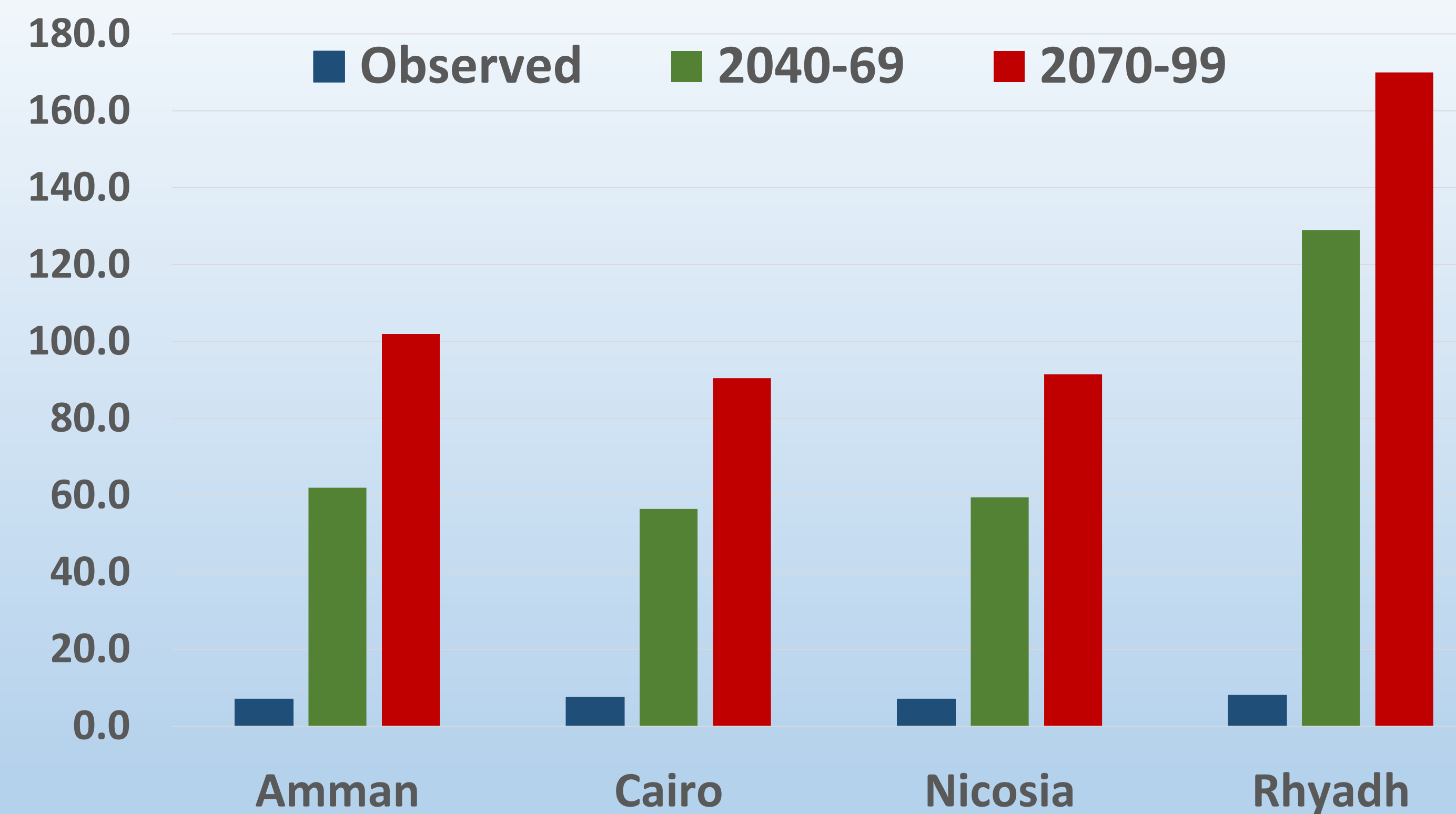
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Background/Introduction

- MENA Region characterized by:
 - ✓ combined population of appr. 350 Mill.,
 - ✓ strong environmental gradients,
 - ✓ climate extremes,
 - ✓ diverse economic, social and cultural identities,
 - ✓ being a climate change “hot spot”,
 - ✓ challenges on energy-, water- and food security
 - ✓ threats to environmental integrity
- Sustainability threatened by
 - ✓ anticipated climate change and impacts
 - ✓ growing demand on resources
 - ✓ environmental/resource degradation
 - ✓ urbanization and globalization



Heat wave days index (HWD90) for selected MENA cities based on observations (Klok and Klein Tank 2009; Zhang et al. 2005) and model output for different time periods and the emission scenarios A1B; extracted from: Lelieveld et al. (2014) []



Future Earth (FE) & Sustainability

- Future Earth:
 - builds on considering local to regional processes affecting global sustainability
 - addresses three broad themes:
 - ✓ Dynamic Planet
 - ✓ Global Sustainable Development
 - ✓ Transformations towards Sustainability
 - advances co-design and co-production of science with relevant stakeholders across many sectors
 - facilitates research on eight major global sustainability challenges
 - addressed through Knowledge Action Networks

FE-MENA Regional Center (FEMRC)

- The Cyprus Institute as FEMRC:
 - enabling and soliciting funding for research,
 - provision of adequate computational facilities ,
 - a comprehensive data repository relevant to FE,
 - an effective communication network,
 - workshops and conferences,
 - education, training and capacity building
- Current activities
 - forming a Regional Advisory Committee
 - convening a first Scoping Workshop on FE research in MENA
 - organizing a workshop/training event on *Water Scarcity, Food Security and Altered Land Use Practices in the MENA Region*



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