

RMSI



CONSULTANCY SERVICES FOR CLIMATE CHANGE



CLIMATE CHANGE IMPACT ASSESSMENT AND ADAPTATION STRATEGIES FOR SUSTAINABLE DEVELOPMENT OF SOCIETIES

RMSI provides solutions to help developing countries in assessing the impact of climate change and plan effective adaptation strategies for sustainable development of their communities. RMSI expertise lies in modeling climate variability and change, and assessing its impact on hydro-meteorological hazards to derive the best possible adaptation options.

Our solutions include development of climate scenarios at regional / local levels, assessment of climate change impact, development of climate information systems, sector specific vulnerability assessment and cost effective adaptation strategies.

We have extensive experience of working with government agencies and international funding agencies such as World Bank, ADB (Asian Development Bank), UNISDR (United Nations International Strategy for Disaster Reduction), IFC (International Finance Corporation), etc. for climate change related studies across the globe.

SOLUTIONS

Climate Change Impact Assessment

- Climate change scenario development
- Downscaling global models to regional / local levels
- Assessment of climate variability and change
- Impact on hydro-meteorological hazards
- Impact on Agriculture, Water, Infrastructure
- Spatio-temporal shifts in natural & agro-ecosystems

Adaptation Planning

- Local/Regional level adaptation measures
- Guidelines for implementation of adaptation options
- Cost-Benefit analysis of adaptation options

Climate Information Systems

- Assessment of climate information needs & gaps
- Guideline to set up 'Climate Monitoring Stations'

SUCCESS STORIES

Development of Climate Information Systems for Enhanced Climate Resilience in Yemen

The objective of the study was to facilitate the Government of Yemen in strengthening the hydro-meteorological service providers. The study found out that there was a lack of existing monitoring networks, gaps in current climate-related databases/information for climate modeling, and lack of advanced hardware.

After the gap analysis, RMSI designed a national unified climate information system through definition of data clusters, standards, monitoring, quality and processing. Besides, RMSI also developed a stepwise approach for data collection, retrieval, and application to the models covering data exchange protocols, data verification mechanisms, communication standards, and cost recovery mechanism.

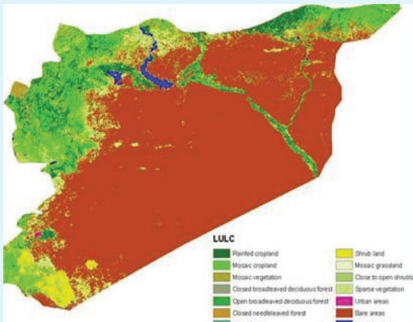


Climate-Induced Spatio-Temporal Shifts in Natural and Agro-ecosystems in the Middle East and North Africa (MENA) Region

The objective of the study was to assess climate change induced spatio-temporal shifts in natural and rainfed agro ecosystems in four countries from the MENA region (Morocco, Tunisia, Syria, and Yemen) and to understand the implications of these changes for development planning.

RMSI experts used internationally recognized methodologies for projecting future climate and isolating climate variables as agents of temporal and spatial shifts in natural and agro ecosystems. Three state-of-the-art global climate models were used under two greenhouse emission pathways in conjunction with agro-ecosystem model and natural-ecosystem model to assess the climate change induced impacts on the agro and natural ecosystems for the four selected countries.

The findings of the study showed that rainfall variability and temperature are projected to increase in all countries through the end of the century, causing major biome shifts in natural ecosystems and decreasing suitability of crops in rainfed agro-ecosystems except for Yemen where a positive shift is expected.



- Monitoring stations maintenance advisory
- Climate information dissemination systems
- Climate information based advisory

Training & Capacity Building

- Climate modeling approaches
- Downscaling techniques
- Climate induced risks assessment
- Adaptation measures - cost and benefits

Private Sector Engagement

- Investment models for improved irrigation systems
- Investment models for climate resilient seeds
- Potential agri-insurance business model options

RMSI's CC Impact Assessment Focus Areas

HYDRO-MET HAZARDS

- Drought
- Flood
- Cyclone
- Sea Level Rise
- Heat Wave/Cold Wave

SECTORS

- Water Resources
- Agriculture
- Infrastructure
- Forestry

“RMSI has carried out the assignment in a professional manner with a focus on understanding our requirements and I am satisfied with their work and deliverables.”

Kanta Rigaud
Lead Environmental Specialist
(Adaptation), Climate Policy
and Finance Department
The World Bank

Key Differentiators

- End to end solutions under one roof - comprising domain specialists, GIS & remote sensing and IT experts
- Excellent track record of working with funding agencies & governments
- Vast project experience in varied geographies such as India, Africa, South East Asia, Pacific, Europe and Middle East
- Dedicated pool of internationally acclaimed consultants and strategic partners
- Multi-disciplinary team of experts including hydrologists, meteorologists, climatologists, oceanographers, geologists, hydraulic experts, institutional experts and adaptation experts, climate change modeling experts, agronomists and soil scientists

About RMSI

Over 3500+ professionals work with us

Technology Partnerships - Esri, Oracle, Microsoft, GE, BEA Systems

Quality Certifications - CMMi level 5, ISO 27001, ISO 9001:2015, ISO 14001:2004, OHSAS 18001:2007

Strategically located three development centres in India, and five global subsidiaries in U.S, Canada, U.K, U.A.E, & Australia

Track record of having implemented some of the largest geospatial projects across the world



For further information, please contact info@rmsi.com or visit www.rmsi.com