RICCAR
Vulnerability Assessment Working Group
Terms of Reference

I. Background

The Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (RICCAR) aims to prepare an integrated assessment that links climate change impact assessment outcomes to vulnerability assessment findings.

The aim of the integrated assessment is to identify vulnerability hotspots through an integrated mapping tool that would allow policy makers and stakeholders to easily identify the impacts of climate change on water resources and socio-economic and environmental vulnerability in the Arab region at the regional and national levels. The materials and findings of the integrated assessment will be disseminated via a regional knowledge hub.

RICCAR is a collaborative initiative supporting Arab Governments that is implemented through an inter-agency partnership involving the League of Arab States, UNEP, WMO, ACSAD, SMHI, UNISDR, UNESCO-Cairo Office, UNU-INWEH, GIZ and ESCWA. Financial support for RICCAR is provided by SIDA, BMZ and the partner organizations.

II. Purpose Statement

The purpose of the Vulnerability Assessment Working Group is to guide the formulation and application of the vulnerability assessment methodology that will contribute to the preparation of the integrated assessment component of RICCAR.

III. Objectives

The Vulnerability Assessment Working Group will exchange experiences, vet different methodologies, identify priorities for examination and propose to the RICCAR Expert Group a methodological approach for conducting the socio-economic and environmental vulnerability assessment component of the integrated assessment. Based on the feedback of the RICCAR Expert Group, the methodological approach will be finalized. The Vulnerability Assessment Working Group will then ensure that the methodological approach is appropriately applied during the preparation of the integrated assessment.

To this end, the Vulnerability Assessment Working Group will:

- Define the objective, scope and deliverables of the socio-economic and environmental vulnerability assessment;
- Agree on the most suitable methodology and tools to be used to prepare the vulnerability assessment;
- Contribute to the collection of data and information to support the assessment;
- Assist with the identification of expertise to provide input to the assessment;
- Provide expert review of the assessment products as they become available.

IV. Specific Tasks

The tasks are divided according to the four steps:
A. Conceptualization and Planning of the Vulnerability Assessment

1. Define the target audience for the vulnerability assessment.

2. Define the objectives, scale and scope of the vulnerability assessment component of the integrated assessment based on an understanding of existing definitions, review of available methods and integrated mapping tools, recognition of information gaps, and consideration of regional and national development circumstances.

   • The objective of the vulnerability assessment should correlate to the critical importance of water resources in the Arab region and draw upon the outcomes of the RICCAR climate change impact assessment component of the integrated assessment. In doing so, the vulnerability assessment should be scientifically sound, policy relevant and participatory.

   • The scale and scope of the vulnerability assessment should establish the geographical units to be used (e.g., regional, sub-regional, national, sub-national, basin level) and the socio-economic and environmental parameters to be addressed.

3. Clearly define the main phases and outputs of the vulnerability assessment to ensure its smooth management and coordination. For each phase and output, suggest milestones, assign responsibilities and clarify the types of products proposed that suit the needs of the defined target audience.

4. Suggest institutional arrangements whereby effective coordination between the various partners and providers of inputs to the vulnerability assessment is ensured to support the development and implementation of the methodology.

B. Methodology Development

1. Review a compendium of methodologies and tools available from the literature, including UNFCCC and IPCC guidance materials, to inform the development of the vulnerability assessment methodology, which may be adapted and adopted from previously conducted vulnerability assessments. Reference should be made to the experience gained from completed and on-going assessments undertaken at the national, sub-regional and regional levels.

2. Provide technical and policy guidance to inform the development of the vulnerability assessment methodology, including its rationale and required inputs. In doing so, the methodology should:

   • Provide a clear link to the methods used and climate change projections generated by the impact assessment component on the integrated assessment.

   • Be based on a multi-disciplinary, cross-sectoral approach that would expose the implications of climate change impacts on water for sustainable development in the Arab region.

   • Be able to be translated into an integrated mapping tool that would support the identification of vulnerability hotspots in the Arab region. The translation of the methodology for illustrating vulnerability will be facilitated by an integrated mapping tool based on user-friendly geographic information system (GIS) applications that are accessible via a web-based interface.
• Take into consideration the existing institutional arrangements and capacities available in regional research centers to undertake such assessments in the Arab region, and its ability to be replicated.

Substantive and financial support for the development and testing of the vulnerability assessment methodology will be provided by the GIZ/adelphi technical advisory team based on the guidance provided by the Vulnerability Assessment Working Group.

3. Identify the data needs, indicators, interdisciplinary analysis, and the specialized models to be applied to conduct the assessment based on the defined scope, scale and objectives of the vulnerability assessment and integrated assessment agreed upon above, taking into account work already undertaken in the region.

4. Comment on the draft vulnerability assessment methodology formulated by the GIZ/adelphi technical advisory team based on the guidance provided above, and contribute to the finalization of the methodology.

5. Contribute to the testing and review of the pilot application of the vulnerability assessment methodology implemented by the GIZ/adelphi technical advisory team.

6. Contribute to the preparation and review of a RICCAR vulnerability assessment training manual, to be drafted by GIZ/adelphi technical advisory team based on the finalized methodology. The training manual would be used to support training and capacity building on the vulnerability assessment methodology.

C. Implementation of the Assessment Methodology

1. Identify key stakeholders to be engaged in the implementation of the vulnerability assessment and their respective roles. The formation and composition of national and/or regional teams to support the preparation of the assessment may be considered.

2. Provide guidance to the experts, institutions, etc. who will be executing the assessment.

3. Facilitate, to the extent possible, access to data, information and knowledge available within the region and from elsewhere to improve the accuracy and policy relevance of the assessment.

4. Review through regular correspondence and face-to-face meetings the progress achieved and provide the support need to ensure successful implementation of the assessment.

5. Contribute to and participate in the capacity building activities that would be organized during the preparation of the assessment.

D. Review and Dissemination of the Assessment

1. Provide individual technical and policy reviews of the draft vulnerability assessment report to support its finalization.

2. Suggest additional peer reviewers from within and outside the region.

3. Assist in the dissemination of the final vulnerability assessment findings at the global, regional and country-levels.
4. Promote linkages between similar global assessment processes underway through the dissemination and sharing of the results and outcomes of the assessment.

5. Suggest meetings and capacity building activities that could be conducted to raise awareness and understanding of the assessment findings.

V. Outputs

1. Work plan, time line and allocation of responsible for developing the vulnerability assessment methodology and ensuring its implementation.

2. Briefing note detailing the agreed scope and scale of the vulnerability assessment and associated guidance for informing the development of the vulnerability assessment methodology.

3. Written comments on draft vulnerability assessment methodology and training manual.


5. Written comments on the draft vulnerability assessment report.


VI. Composition

The Vulnerability Assessment Working Group is comprised of 15 permanent experts representing the following types of institutions:

- 4 Representatives from Arab Governments
- 4 Representatives from United Nations organizations
- 4 Representatives from League of Arab States organizations and Arab research centers
- 3 Representatives from international or expert organizations working in the Arab region.

A GIZ/adelphi technical advisory team will serve as ex officio advisor to the Vulnerability Assessment Working Group during the development, testing and training on the vulnerability assessment methodology. ESCWA will coordinate the meetings of the Vulnerability Assessment Working Group, including meeting logistics.

The Vulnerability Assessment Working Group would aim to have varied technical expertise among its members representing the following fields: socio-economic development, climate science and natural resource management. The composition should seek to be geographically representative of the Arab region. Members should meet the following requirements:

- At least five years of professional experience working on climate change issues in specific thematic areas such as agriculture, water, rural and urban development, economic development, etc.
- Experience working on vulnerability assessment methodologies and applications and/or climate change impact and risk assessment.
- Familiarity with interactive mapping tools.
- Ability and availability to allocate adequate time to the working group on a voluntary basis over the coming two years.
- Commitment to personally attend all working group meetings.
- Fluency in the English language (written and spoken).
- Strong communication skills.
The working group members may also invite and solicit input from other technical experts and advisors with specialized expertise to contribute to their deliberations on specific topics.

**VII. Mode of Operation**

The Vulnerability Assessment Working Group will agree upon a Chair, Vice-Chair and Secretary at its first meeting. On-line communications as well as face-to-face meetings will be encouraged. The working group will convene at least three face-to-face meetings during the development and piloting of the vulnerability assessment methodology.

The Vulnerability Assessment Working Group will report to the RICCAR Expert Group through the Chair. The Vulnerability Assessment Working Group will guide the work of the technical advisory team (adelphi) contracted by GIZ to support the preparation, testing, training and transfer of the vulnerability assessment methodology to the region.

ESCWA will be responsible for modalities and arrangements related to the organization of the working group meetings. Financial support for the working group is provided by the GIZ-ESCWA Cooperation, which will assure roundtrip travel, a daily subsistence allowance and terminal expenses for the working group members to participate in the first three scheduled face-to-face meetings of the working group. Financial support for the engagement of regional research institutions to support the identification of vulnerability hotspots is also provided by SIDA.

All meetings and outputs prepared by the working group will be conducted in the English language.