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# North Africa subregion

“Exchanging knowledge with others, especially those on the ground, is essential for success. Coastal areas of North Africa suffer from climate change consequences such as sea level rise and salt water intrusion, leading to desertification, loss of biodiversity, and loss of agricultural land. Sharing knowledge will bridge the gaps and generate innovative solutions for these problems based on ideas generated from the bottom up.”

**Dr. Salah Soliman**, Senior Expert,  
Bibliotheca Alexandrina

Photo by Claudia Sonnemans, 2011.

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Countries covered by the LAKI in the North Africa subregion



## VI.

# North Africa subregion

## Partnership with Bibliotheca Alexandrina

### Context

The sixth priority-setting workshop covering five countries in the North Africa subregion took place from **19-21 September 2017** in **Alexandria, Egypt**. The MSG consisted of eight experts from non-governmental organizations, the private and public sector, research institutions, and international bodies working on adaptation and climate finance in the region.

### Scoping paper

The scoping paper summarized existing literature for the subregion and identified a total of 45 adaptation knowledge gaps. These related to:

- > Water resources
- > Coastal zones
- > Agriculture
- > Desertification

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## Priority-setting workshop

### Step 1

## Refining the pool of knowledge gaps

The MSG refined the knowledge gaps identified in the scoping paper by adding, deleting, merging and/or modifying gaps and categorizing them into thematic groups. An initial list of 43 gaps was generated for the prioritization exercise.



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### Step 2

## Prioritizing the knowledge gaps

The MSG agreed on five key criteria for the prioritization of the adaptation knowledge gaps and individually assessed the importance of each criterion. These individual assessments were then aggregated to determine the relative weights for the criteria (see annex I). The MSG reviewed the 43 knowledge gaps against these criteria, and produced a final list of 18 priority gaps (see Table 6). Closing these priority gaps would result in the most tangible and impactful adaptation benefits for the North Africa subregion.

The distribution of these gaps by thematic area is illustrated in Figure 9. Seven priority knowledge gaps are related to water resources, followed by five related to coastal zones and four related to agriculture. Most gaps were due to a lack of data (cluster 1, seven gaps), lack of access to existing data (cluster 2, four gaps), or a combination of these factors (three gaps).

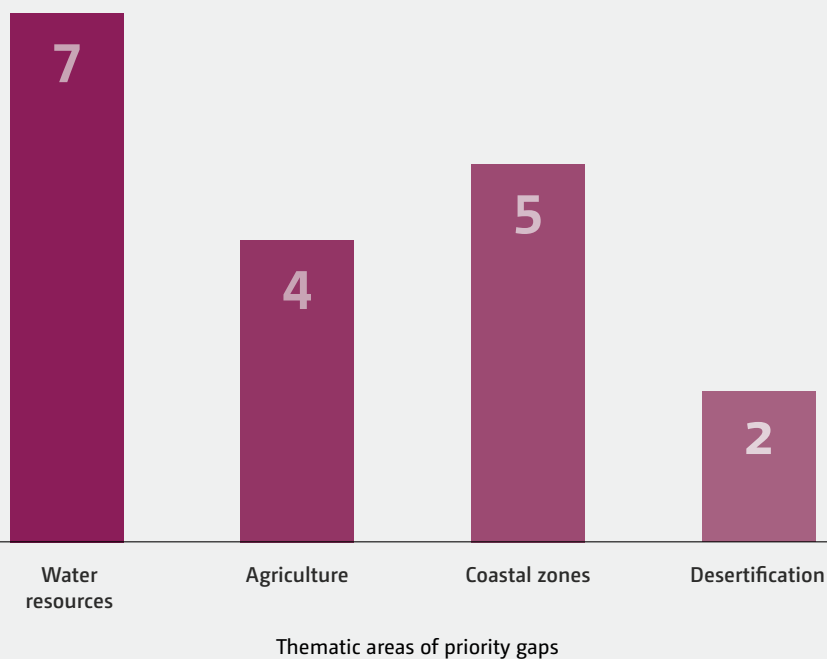
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### Step 3

## Designing possible response actions

The MSG defined potential response actions to close the 18 priority gaps and possible organizations to undertake these actions. To address priority gap nine related to agriculture and livelihoods, for instance, the experts suggested workshops be organized with local farmer groups, co-operatives, and policymakers. For priority gap 18 related to lack of access to data on water quantity and quality, the MSG saw potential for publishing data through existing regional databases. Similarly, lack of data and access to knowledge on rainfall (gap four) could be addressed by sharing policy briefs and projection model outputs via national and regional knowledge hubs (e.g. meteorological offices).

Figure 9 **Number of priority gaps by thematic area for the North Africa subregion**



## Implementing actions to close knowledge gaps

The outcomes of the priority-setting workshop, including the full workshop report, can be found on the Adaptation knowledge portal.<sup>15</sup>

Bibliotheca Alexandrina is currently coordinating with subregional partners and stakeholders to pursue next steps for closing the knowledge gaps identified under the LAKI.

15. see: [www4.unfccc.int/sites/NWP/Pages/LAKI-Africa.aspx](http://www4.unfccc.int/sites/NWP/Pages/LAKI-Africa.aspx)

**Table 6 | Priority knowledge gaps for the North Africa subregion**

No.	Thematic area	Gap description	Cluster	Knowledge user
1	Agriculture	Lack of access to data related to rain-fed agriculture and irrigated agriculture	Lack of access [2]	Researchers, scholars
2	Water resources	Lack of accessible information on climate change impacts on water resources	Lack of access [2]	Water sector managers and policymakers
3	Water resources	Limited understanding of climate variability and trends, including placing current observations into historical context	Lack of actionable knowledge (e.g., in need of repackaging existing knowledge), lack of tools/methods [Mix]	Water infrastructure designers
4	Water resources	Insufficient knowledge on rainfall historical data, trends and projections	Lack of data, lack of access [Mix]	Water resource planners
5	Desertification	Insufficient knowledge and information sharing on solutions/good practices and lessons learned to combat desertification	Lack of data, lack of access [Mix]	Water infrastructure designers
6	Agriculture	Lack of awareness on negative climate change impacts on yield	Lack of access [2]	Water resource planners
7	Coastal zones	Lack of information for developing resilience strategies in urban planning in coastal zones	Lack of data [1]	Ministries of Agriculture
8	Water resources	Lack of accurate information on status of water resources (i.e. water availability, consumption patterns, water quality)	Lack of data [1]	Ministries of Water
9	Agriculture	Lack of awareness on negative climate change impacts on livelihoods	Lack of access, lack of actionable knowledge (e.g., need to repackage existing knowledge) [Mix]	Farmers organizations, local authorities
10	Desertification	Insufficient information and knowledge about interconnections between desertification and socio-economic development	Lack of data, lack of actionable knowledge (e.g., need to repackage existing knowledge) [Mix]	Government, agricultural and rural advisory services providers

No.	Thematic area	Gap description	Cluster	Knowledge user
11	Agriculture	Limited information and knowledge sharing on interlinkages with other sectors	Lack of access, lack of actionable knowledge (e.g., need to repackage existing knowledge) [Mix]	Decision makers, policymakers and planners
12	Coastal zones	Limited knowledge on the benefits of integration of coastal management and protection into national development plans and priorities	Lack of data, lack of actionable knowledge (e.g., need to repackage existing knowledge) [Mix]	River basin agencies, environmental institutions, and water resource planners
13	Coastal zones	Need for improved information regarding population dynamics within sea level rise models	Lack of data [1]	Farmers organizations, local authorities
14	Coastal zones	Lack of information on understanding of risks due to sea level rise among the different coastal zones	Lack of data [1]	Central authorities of demographic statistics
15	Coastal zones	Need for improved information on technologies to protect coastal cities against sea level rise	Lack of data [1]	Ministry of Agriculture
16	Water resources	Limited knowledge on technologies and best practices to adapt to the impacts of climate change on water resources	Lack of data [1]	Policymakers and planners
17	Water resources	Lack of reliable data on water-quantity and quality, including accessibility to available reliable data and databases	Lack of data, lack of access [Mix]	Policymakers and planners
18	Water resources	Limited access to available data on water quantity and quality	Lack of access [2]	Policymakers and planners

For more information, see the full workshop report available via the Adaptation knowledge portal at <http://www4.unfccc.int/sites/nwp/Pages/Home.aspx>