

Nile Water E-Learning Hub: Training and Education Tools for Capacity Development

The online regional Training Course on:

Nile Wetlands Ecosystems Wise use for Sustainable Development

From 7th February – 21st March 2022

1. Module presentation, contents, and discussion forum

Item	Details
Module number & name	Module 2: Wetland Ecosystems degradation and the need for assessment methods and tools
Module Facilitator	Dr. David Were
Introduction	<p>The Nile basin has among the most complex and extensive wetland ecosystems in the world. Wetlands are internationally recognized as important natural ecosystems which provide several ecosystem services. Despite their acknowledged services, wetlands in the Nile Basin are being destroyed or lost at a rapid speed, and remain among the most threatened natural ecosystems. Whereas the threats to wetlands may differ across different locations within the Nile Basin, the outcome is usually the same-degradation or loss of the wetland and the associated services. Wetland assessment is vital in understanding the status of wetland ecosystems in the Nile Basin, and the causes/sources of the threats so that appropriate measures are designed for sustainable management and wise use of wetlands.</p>
Module goal	To have an improved understanding of the Nile Basin wetlands and enhance the capacity of wetland assessment in the Basin for better management
Learning Objectives	<p>By the end of this module, participants are expected to:</p> <ul style="list-style-type: none"> • understand the current status of wetland in the Nile Basin, and explain the various threats to the wetlands • explain what wetland assessment is and why it is important • develop a wetland assessment plan
Orientation Video	Attached in the Module Folder
Mandatory readings Compulsory readings, recommended websites, Recommended Videos	<ol style="list-style-type: none"> 1. Module Notes 2. Rebelo, L. M., & McCartney, M. P. (2013). Wetlands of the Nile Basin: distribution, functions and contribution to livelihoods. In <i>The Nile River Basin</i> (pp. 234-250). Routledge. Read the attached Chapter 3. Springate-Baginski, O., Allen, D. J., & Darwell, W. (Eds.). (2009). <i>An integrated wetland assessment toolkit: a guide to good practice</i>. IUCN. Read Chapter 2
Recommended Readings	<ol style="list-style-type: none"> 1. Finlayson, C. M., & Pollard, S. (2009). A framework for undertaking wetland inventory assessment and monitoring in the Limpopo Basin Southern Africa.
Recommended reading websites	<ol style="list-style-type: none"> 1. https://www.epa.gov/wetlands/wetlands-monitoring-and-assessment 2. https://www.epa.gov/wetlands/how-do-i-develop-wetlands-monitoring-program

Recommended videos	<ol style="list-style-type: none"> 1. https://www.youtube.com/watch?v=cX9V2ZTA92k 2. https://www.youtube.com/watch?v=qFBa8T95hMU
Take home messages	<ol style="list-style-type: none"> 1. The Nile Basin has diverse and extensive wetlands 2. Nile Basin wetlands are facing several threats 3. Wetland assessment is important for better wetland management 4. Wetland assessment is a process, involving defined steps 5. GIS and remote sensing is a very important tool in wetland assessment
Module discussion forum	Considering a wetland in your area, which parameters can you consider for assessment through observation during a site visit?

2. Module quiz

1. Wetlands in the Nile Basin cover about.....of the basin area
 - a) 2%
 - b) 5%**
 - c) 60%
 - d) 8%
2. Which of the following countries has not ratified to the Ramsar Convention
 - a) Uganda
 - b) Kenya
 - c) Tanzania
 - d) Ethiopia**
3. The Sudd wetland, one of the most extensive wetland ecosystems if found in
 - a) South Sudan**
 - b) Sudan
 - c) Eritrea
 - d) Egypt
4. A wetland threat is...
 - a) an activity which affects wetland vegetation
 - b) an activity that diverts water flow into the wetland
 - c) an activity that impairs the integrity and functioning of a wetland**
 - d) None of the above
5. Wetland threats can be categorized as

- a) Physical and biological
- b) Onsite and offsite**
- c) Urbanization and agriculture
- d) Mining and dumping

6. In reference to wetland management, hydropower plants along the River Nile affects downstream wetlands through.....

- a) hydrological alteration**
- b) enhancing climate change
- c) increasing spread of water-borne diseases
- d) altering wetland vegetation

7. Wetland assessment is the process of.....?

- a) determining and describing the status, characteristics, threats and value a wetland**
- b) monitoring changes in the status of a wetland
- c) valuing the benefits provided by a wetland
- d) investing the physico-chemical and biological characteristics of a wetland

8. which of the following is not a level of wetland assessment?

- a) landscape assessment
- b) biodiversity assessment**
- c) rapid assessment
- d) intensive assessment

9. Which of the following is not an objective of wetland assessment?

- a) establishing a baseline in wetlands extent, condition and function
- b) detecting change
- c) providing a basis for declaration of a wetland as a no-access protected area**
- d) characterizing trends over time.

10. GIS and remote sensing is an important tool in wetland assessment which can do the following except...

- a) mapping wetland extent
- b) comparing the current and past wetland state
- c) modelling and predicting the future wetland conditions
- d) deciding whether to covert or conserve**