Gopal Krishna Gokhale College, Kolhapur

Department of Botany
World Wetlands Day – 2nd February 2019

Theme: Wetlands & Climate Change

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What is it all about?

- 1. What is Ramsar Convention?
- 2. What is World Wetlands Day?
- 3. What is Wetland?
- 4. Types of Wetlands.
- 5. Functions and services of Wetlands.
- 6. Threats to Wetlands.
- 7. How to improve the status of the Wetlands?

What is Ramsar Convention?

- Intergovernmental **treaty** (with 138 contracting parties)
- framework for the conservation and wise use of wetlands and their resources;
- The main instrument through which the Convention works is the List of Wetlands of International Importance **Ramsar sites** (recently there are 1328 sites with total area 1.11 mill. km²).

What is World Wetlands Day?

• The "birthday" of the Convention on Wetlands Conservation signed on the 2nd of February 1971;

 Aims to explain the importance of wetlands for the people;

• To clarify the multiple values and services that wetlands provide.

Types of Wetlands (according to the Convention on Wetlands)

- Inland Wetlands
- Marine/Coastal Wetlands
- Human-made wetlands

Inland Wetlands

- deltas;
- rivers/streams/creeks;
- freshwater lakes;
- marshes;
- pools;
- peatlands;
- freshwater springs;
- geothermal wetlands.



Marine/Coastal Wetlands

- Permanent shallow marine waters;
- Coral reefs;
- Rocky marine shores;
- Sand, shingle or pebble shores;
- Estuarine waters;
- Coastal saline and freshwater lagoons.



Human-made wetlands

- Aquaculture ponds (e.g., fish/shrimp);
- Irrigated land (rice fields);
- Seasonally flooded agricultural land (pastures);
- Salt exploitation sites;
- Water storage areas;
- Excavations (gravel/brick/ clay pits);
- Canals and drainage channels;
- Wastewater treatment areas;



Functions and Services of Wetlands

- Water storage and purification
- Biodiversity protection
- Sediment retention
- Groundwater replenishment
- Climate change mitigation
- Recreation/tourism
- Cultural value



Rice fields in India

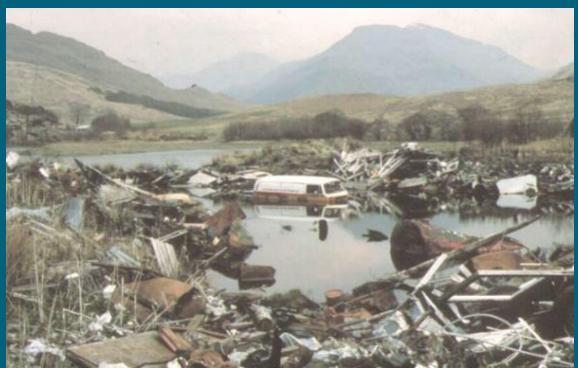
(source: Ramsar Convention).

Threats to Wetlands

- building of dams
- channelization of riverbeds
- •overexploitation of wetlands resources
- •introduction of invasive species
- water pollution



Threats to Wetlands



Ways to Improve the Wetlands Status

- public awareness campaigns
- policy measures
- field actions
- financial mechanisms



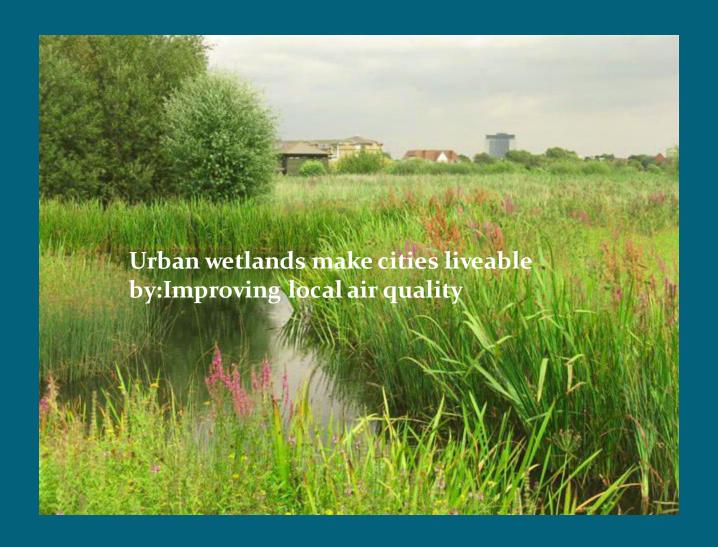
Main messages

- •Wetlands should be conserved because:
- they provide source of food;
- they are important reservoirs for water;
- •they are natural waster water treatment facilities;
- •they mitigate the climate change effects.





Wetland water treatment pond in Melitopol, Ukraine





Chen Bridge, Henan, China



Treating urban wetlands right:Preserve and restore urban wetlands



Thank you for your attention!

