



Nature-based water ecotechnologies, founded on the human right to water and sanitation, and to nature, and on concepts such as sustainable development, gender perspective, systemic thinking, traditional knowledge, circular economy, Ubuntu care economy, indigenous knowledge and local know-how and traditional and regenerative agriculture, offer an integral approach to address water scarcity in South Africa.

The Embassies of Mexico, Denmark and Switzerland, the Mexican Institute of Water Technologies (IMTA), the Centre for Human Rights, the Centre for Environmental Justice in Africa, and the Landscape Architecture Programme of the Faculty of Engineering, Built Environment and Information Technology (EBIT) of the University of Pretoria, along with the Regional Representation of the Office of the United Nations High Commissioner for Human Rights (OHCHR), invite all UP students and the general public, to participate in:

The Water Game Changers Award

Nature-based water ecotechnologies to enjoy the right to water and nature.

This competition follows up on the Panel "El Niño, Climate Change and the Right to Food in Southern Africa" (November 1, 2024), convened by the Embassies of Denmark, Mexico, the Netherlands and Switzerland, and the

Regional Representation for Southern Africa of the Office of the United Nations High Commissioner for Human Rights (OHCHR).

OBJECTIVES OF THE COMPETITION

The Award has the following objectives:

- Create a culture of water based on the human right to water and sanitation, and to nature, and on a gender perspective.
- Increase awareness of the short and medium-term impacts of disruption to the water cycle.
- Create an understanding of the main sources of water loss and water pollution in Gauteng.
- Promote understanding of concepts such as sustainable development, nature-based solutions, systemic thinking, traditional knowledge, the circular economy, the Ubuntu care economy, indigenous knowledge systems, local ways of doing and knowing, and traditional and regenerative agriculture.
- Develop and innovate ecotechnologies and nature-based systems based on the water cycle to gear towards water autonomy and sovereignty, sustainable water generation for safe human use and consumption, agricultural and recreational use, and accessibility and affordability for all, including people living in townships and rural areas.
- Develop community-based approaches so that the ecotechnologies and methodologies that are (co-) created or (co-) developed with local communities can be integrated and are acceptable and usable in the community for long-term transformative change. This includes indigenous knowledge systems and ways of thinking.
- Raise awareness/ education and share information with the public and communities.

COMPETITION CRITERIA

1.- Individual or group participants shall submit a nature-based water ecotechnology project or a proposal to implement a nature-based ecotechnology to save, protect, harvest, cleanse, re-use, recycle or upcycle

water, or re-infiltrate it to natural systems in specific townships or rural areas in South Africa, with emphasis in Gauteng.

2.- The types of nature-based water ecotechnologies developed or used in the project will be classified into the following categories for urban/rural contexts and informal settlements, mainly taking into account underprivileged communities:

- Water-saving technologies.
- Water protection and harvesting.
- Cleansing and re-use of water.
- Wastewater recycling and upcycling.
- Re-infiltration of water to natural systems.

3.- Individual or group participants will focus on concrete ways to promote social and physical access to water for domestic and agricultural use, considering broader environmental, economic and social contexts.

4. The projects will be innovative, viable, and capable of being replicated.

5.- The methodological framework of the projects will take into consideration the human right to water and sanitation, and to nature, sustainability, gender perspective, and community inclusion which entails the incorporation of local or traditional knowledge and community participation in water solutions so that the community can (co-) create or (co-) develop the solution.

6.- Positive impact on ecosystems and in the relationship between human beings, nature and other species.

7.- The projects will answer questions such as how can I/we preserve, save or reuse water?; how can I/we make more efficient and meaningful use of water without polluting it or needing large amounts of energy or plastic in my/our process?; how can I/we return water to nature in ways and conditions closest to its original natural state and cycle?; how can I/we help to raise awareness/ education and share information to the public and communities?; What need does the proposed ecotechnology solve?

STRUCTURE OF THE PROJECT SUBMISSION

Individual or group participants will have two options for submissions:

- a) Design a nature-based-water-ecotechnology (written document and drawings or graphics).
- b) Implement a nature-based-water-ecotechnology and document it.

In both cases, a written project should be submitted as follows:

1. Abstract

2. Introduction

- Present a methodological framework.
- Include a state-of-the-art review of relevant literature.
- Define a problem to be addressed taking into account aspects such as water conservation, energy efficiency, and the return of water to natural systems.
- Provide justification for the work demonstrating both the need for the project and the innovative approach proposed to meet the need.

3. Address the focal areas of the competition.

- Community participation could entail public awareness and education through the competition, potentially including web pages and social media posts.

4. Materials or methodology

- Present the design specifications and sizing calculations conducted for the development of the ecotechnology (diagrams, plans, infographics, etc.).
or
- Describe the scientific tools and ecotechnologies that will be employed to address the problem or meet the identified need.

5. Results and discussions

- Provide a comparison between the developed technology and conventional alternatives, highlighting how it better addresses the identified need.

6. Graphic synopsis presenting and summarising the written proposal.

7. Conclusions

The project submission document should be in pdf format in Arial 12 pt, with 1.5-inch line spacing in paragraphs, and 2.5-cm margins at the top, bottom, and sides, with a limit of 8,000 words.

The graphic synopsis should be a maximum of 2 A3 pages.

WHERE TO SUBMIT

A platform for registration will be provided at the competition launch on 28 July.

WATER GAME CHANGERS AWARD

A first-place winning Water Game Changer will be selected by an expert panel from the convening institutions or with expertise in the field.

The award includes:

- A certificate.
- A prize of 500 US dollars.
- Feedback from Mexican Institute of Water Technology (Instituto Mexicano de Tecnología del Agua - IMTA).
- Presentation session to institutions that could be interested in implementing or developing the winning project further.
- For UP students, potential inclusion in course curriculum, depending on agreement of University of Pretoria lecturers.

EVALUATION CRITERIA

Focal areas to be considered in the competition:

Please substantiate in the proposal

- Sustainability.
- Human right to water and sanitation, and to nature.
- Gender perspective.
- Community inclusion, which entails the incorporation of local knowledge and community participation in water solutions so that the community can (co-) create or (co-) develop the solution.

- Development of nature-based ecotechnologies as environmental solutions for water saving, protection and harvesting, cleansing and re-using, recycling and upcycling, and re-infiltrating to natural systems.
- Positive impact on ecosystems and in the relationship between human beings, nature and other species.
- Development of scalable solutions.

The development of nature-based ecotechnologies will be evaluated as 60%, and the rest of the focal areas as 40% for a total of 100 points. The expert panel will establish its own methods of evaluation.

ETHICAL ASPECTS AND INTELLECTUAL PROPERTY

Participants may make use of Artificial Intelligence (AI) or other innovative tools for information gathering only (such as images and texts). However, the projects must be original and must not include content copied directly from AI or other technological sources.

In the case that participants request it, they will be accompanied in the corresponding procedures for the registration of their creations in terms of intellectual property.

SUPPORT RESOURCES

The [Water Game Changers Day](#) will provide expert insights into the focal areas that will form part of the participants' entry projects. Thereafter, two additional virtual sessions with guidance from the Mexican Institute of Water Technology (IMTA) to support the projects' development will take place on 04 September and 23 October, from 5 pm to 7 pm. This will provide individual and group participants with the opportunity to ask technical questions, to which IMTA will provide general feedback.

TIMELINE

MONTH (2025)	STAGE OF COMPETITION
20 June	Registration to Competition Opened.
28 July, 9 am – 5 pm Future Africa, University of Pretoria.	Water Game Changers Day

	<p>Launch Session of The Water Game Changers Award.</p> <p>A one-day intense training free of charge. Expert insights into the focal areas and concepts.</p> <p>Introductory session provided by IMTA.</p>
08 August	Registration to Competition Closed.
<p>04 September, 5 pm – 7 pm</p> <p>23 October, 5 pm – 7 pm</p>	<p>Accompaniment by the Mexican Institute of Water Technology (IMTA): two additional virtual sessions to support the projects' development will take place, aimed at addressing participants' technical questions and providing general feedback.</p>
21 November	Submission deadline.
November/December (tbc).	Award Ceremony in the presence of the convening institutions.
January 2026.	Presentation session to institutions that could be interested in implementing or further developing the winning project.

CONTACT INFORMATION

For registration or more information: mediasud@sre.gob.mx, with copy to esosa@sre.gob.mx.