

# Course Globalisation and Sustainable Development 2025-2026

## **Lecture 5: 13/11/2025 - Sustainable water management in a changing climate**

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### **Abstract:**

Water management faces numerous challenges, including climate change impacts like droughts and floods, water scarcity, and pollution. These challenges are further complicated by population growth, inefficient water use, and ineffective water governance. It leads to exacerbating competition for water between agriculture, ecosystems, industry, and settlements. The populations of developing countries, primarily in the global South, are particularly vulnerable to the mentioned water-related risks due to high levels of exposure to these risks, their limited coping capacity, and their limited ability to recover from losses. In this lecture, an overview will be given of the water management challenges, climate change risks, and adaptation solutions. Examples will be given from different areas of the world, both in the Global South and in Belgium.

### **Bio:**

Patrick Willems is full professor at KU Leuven. He specializes in water management and climate adaptation, focusing on the study of hydrological extremes such as flooding, drought, and water scarcity. As a key expert on these topics, he is actively consulted in Belgium and was/is also involved in several projects in the Global South (Tanzania, Kenya, Uganda, Egypt, Ecuador, Bolivia, Vietnam).