

# **WATER: Addressing the Global Crisis**

Lead Faculty – Therese Sjömander Magnusson, SIWI

## **0. Introduction: Experience, Knowledge, and Understanding**

0.0 Welcome to this MOOC – Therese Sjömander Magnusson

0.1 Introduction to Water – Pro. Charles Vorosmarty, City University New York

0.2 SDG Vision Statement in 2030 – Pro. Charles Vorosmarty, City University New York

### **1. No One Will Be Left Behind** (Champion: Stefan).

1.1 The Global Goal on Water - Stefan & Angela (UNESCO).

1.2 Water for All, Health for All – Rick Johnson (WHO) and Tom Slaymaker (UNICEF)

1.3. Water-Related Ecosystems - Stuart Crane (UNEP) Hartwig Kremer (UNEP)

1.4 Influencing economies - Marriane Kjellen (UNDP)

1.5 Eliminating Inequalities – Stefan Uhlenbrook (UNESCO)

1.6 Enabling Environment for Change - Stefan & Angela (UNESCO)

### **2. Climate Change** (Champion: John Matthews).

2.1 Weather or Climate?

2.2 Defining Vulnerability and Solutions

2.3 Climate Adaptation and Water Management

2.4 Social Fragility, Conflict, and Mitigation

### **3. Water and Ecosystems** (Champion: Angela Ortigara).

3.1 The State of the World's Water Resources - Stefan Uhlenbrook (UNESCO)

3.2 Global Water Challenge: Gray-Green Solutions - Charles Vorosmarty (CUNY)

3.3 Untapping the Potential of Wastewater – Angela Ortigara (UNESCO)

3.4 Nature-based Solutions - Stefan Uhlenbrook (UNESCO)

3.5 Nature-based Solutions: Resilience - Vladimir Smakhtin (UNU)

3.6 Nature-based Solutions: Real-Life Examples - Engin Koncagul (UNESCO)

**4. Water Governance Crisis: Who Gets the Water, When and How?** (Champion: Marianne Kjellen).

4.1 Water Governance - Alejandro Jimenez (SIWI)

4.2 Water Services Governance - Alejandro Jimenez (SIWI)

4.3 Water Resource Governance: from Source to Sea- Ruth Mathews (SIWI)

Part A Source to Sea - The Challenge

Part B Source to Sea - Accelerating Progress

4.4 Impact of water footprints - Ruth Mathews

4.5 Good Water Governance for Accelerating Progress - Marianne Kjellen (UNDP)

**5. Water and Sanitation Services and Delivery** (Champion: Alejandro Jiménez).

5.1 Overview of Water, Sanitation, and Hygiene (WaSH)- Alejandro Jimenez

5.2 Sanitation Service Chain: an Overview - Martin Gambrill (WB)

5.3 Urban Sanitation - Rémi Kaupp (WaterAid)

5.4 Rural Sanitation - Sarah Dickin (SEI)

5.5. Finance –Joel Kolker (World Bank)

**6. Transboundary Water: Source of Conflict or Solution?** (Champion: Therese Sjömander Magnusson).

6.1 From a Natural Resource into a Political Resource - Therese Sjömander Magnusson (SIWI)

6.2 The Obligation to Cooperate – Mara Tignino (University of Geneva)

6.3 Framework for Collaboration – Therese Sjömander Magnusson (SIWI)

6.4 Case Study: Middle East - Anders Jagerskog (World Bank)

6.5 Case Study: Nile – Anders Jagerskog (World Bank)

**7. Food and Water** (Champion: Jan Lundqvist)

7.1 Green, Blue, and Grey Water – Samer Tolazi (Director, Methods for Irrigation and Agriculture- Jordan)

7.2 From Field to Fork - Jan Lundqvist (Prof, SIWI)

7.3 An Inconvenient Legacy - Jan Lundqvist (Prof, SIWI)

7.4 Nature-based Solutions and Agriculture - Olcay Unver (FAO)

**8. A Critical Connection: Water + Energy – (Champion: Nathaniel Matthews).**

8.1 The Nexus Approach - Nathaniel Matthews (Global Resilience Partnerships)

8.2 Case Study: A Ten Year Program, Songwe River - Anton Earle (SIWI)

8.3 How does Hydropower Impact Water? - Nathaniel Matthews (Global Resilience Partnerships)

**9. Case Studies**

S.No	Expert	Organization	Topic
1	Vedika Bhandarkar	Water.org	Impact Finance
2	Eleanor Allen	Water for People	Water Services in Rulindo, Rwanda
3	Dr. Ruud Grim	The Netherlands Space Office	Space for Food Security
4	Kusum Ahtukorala	Network for Women water Professionals	Empowering Women
5	Viktorija Granstrom	IKEA Industries	Good Water Management in Industry
6	Anna Inozemtceva	The Regional Environmental Center for Central Asia (CAREC)	Agriculture History of Central Asia
7	Emilio Guzman	SIWI	Corporate Social Responsibility in the Water Sector (STWI)