

Institute for Water and the Environment

INTERNATIONAL WATER PROGRAMS

at FLORIDA INTERNATIONAL UNIVERSITY



9 Facts about FIU

- ▶ The student population comes from all 50 US states and 142 countries.
- ▶ FIU has the biggest Hispanic population
- ▶ The university offers more than 180 degrees
- ▶ FIU is among the top 10 largest universities in the USA.
- ▶ FIU alumni go on to do great things.
- ▶ FIU has more than 200,000 FIU alumni out there.
- ▶ 96% of FIU faculty members hold a doctoral degree or the highest degree in their field.
- ▶ FIU operates the only underwater ocean laboratory in the world.
- ▶ FIU is Miami's first and only four-year public research university.

FIU'S VISION

A leading student-centered urban public research university that is locally and globally engaged.”



APPROACH TO INTERNATIONAL RESEARCH AND EDUCATION



CONTRIBUTIONS TO INTERNATIONAL DEVELOPMENT

Global Water for Sustainability (GLOWS)



GLOWS projects geographical distribution: Peru, Ecuador, Morocco, Tanzania, Kenya, Georgia, Ghana, Niger, India, Burkina Faso, Mexico, Honduras, Haiti, and Rwanda .



US\$ 85,000,000.00



Institute for Water and the Environment

*outgrows of SERC (everglades research) the
Global Water for Sustainability (GLOWS)
program and other entities*

**University-wide research and
capacity building institute, with a
multi-disciplinary focus and emphasis
on water, global change and
environmental conservation**



Water: a vital resource

Water Security: a key challenge for the 21st century



Applying Integrated Water Resources Management (IWRM) is critical for the successful implementation and long term benefits of interventions in development water program of various nature



Water Security Challenges

- Defining the sustainability of an IWRM scheme
- What elements / characteristics/ conditions are key to sustainability ?
- Where, when and how to measure these key elements?
- Identifying and defining actors.

UNESCO CHAIR SUSTAINABLE WATER SECURITY



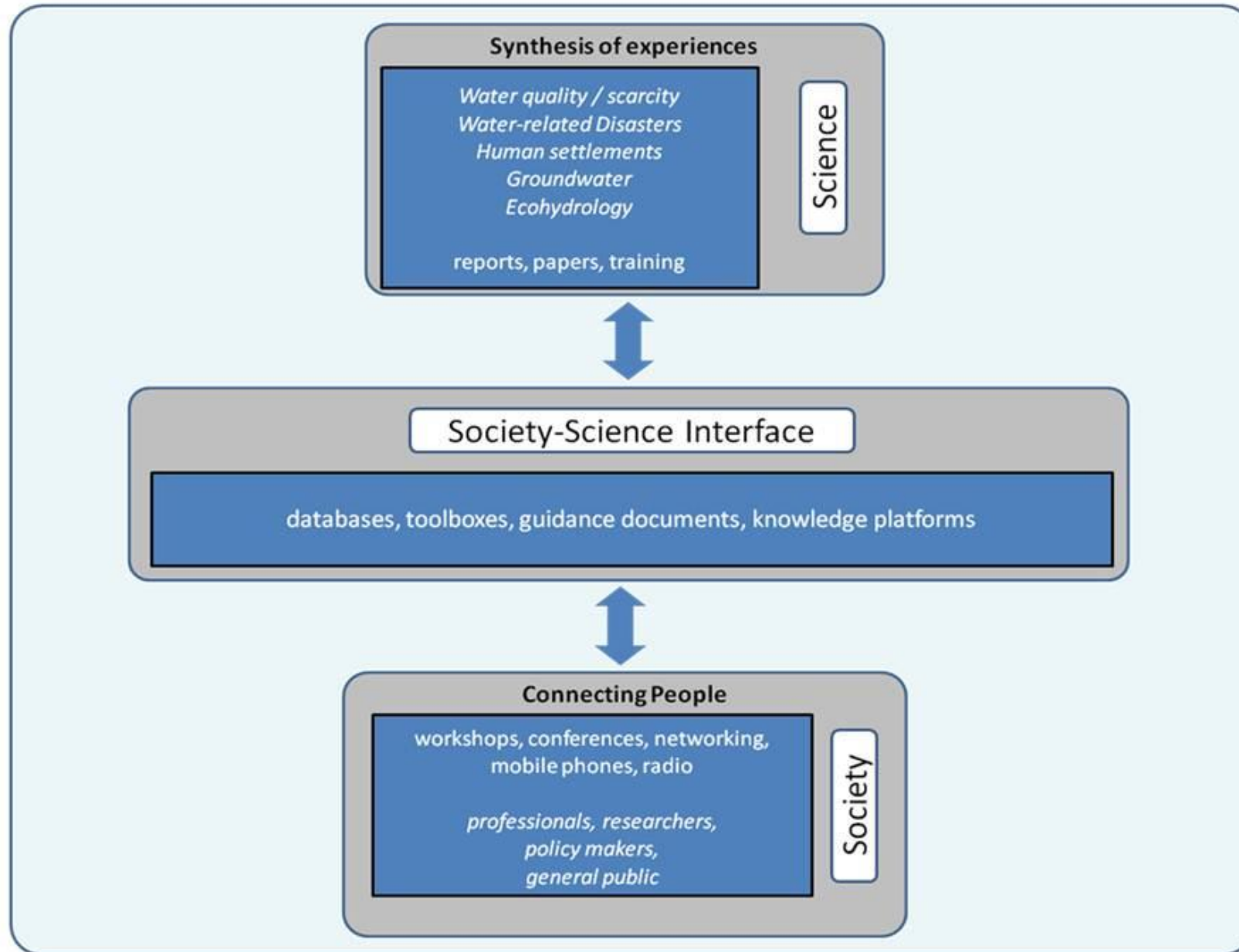
at FLORIDA INTERNATIONAL UNIVERSITY



IHP-VIII 2014-2021



Putting science into action



SDG

Goal 6:

Insure availability and sustainable
management



**The UNESCO Chair on
Water Security Sustainability**

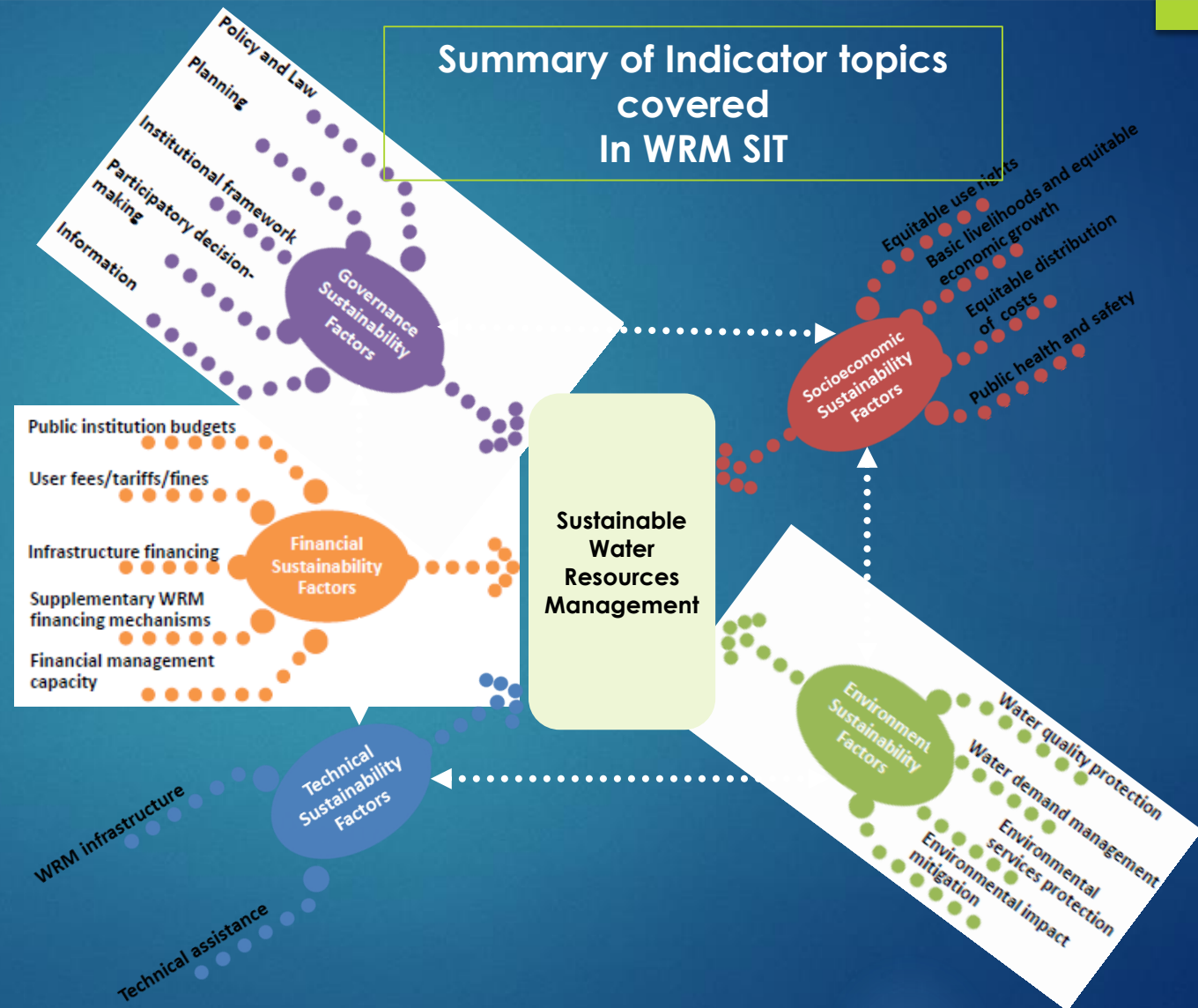


WRM SIT: Indicator Framework

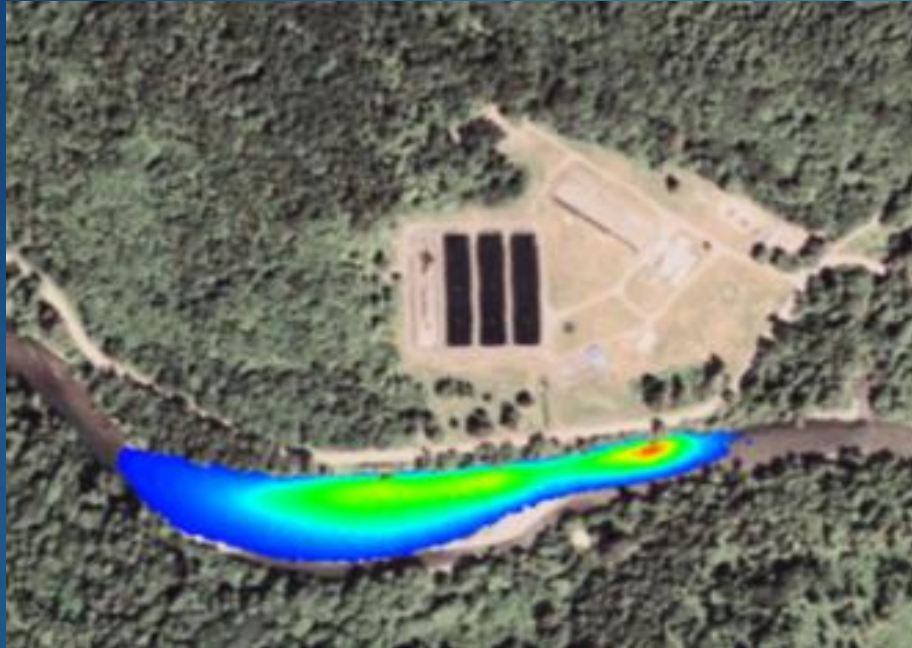
Indicator Framework

- 5 Sustainability Factors
- 21 Indicators
- 81 Sub-Indicator questions
- 3 spatial levels

(For comparison: WASH SIT for Community Handpump includes 5 factors, 24 indicators, 89 sub-indicator questions, and 3 spatial levels)



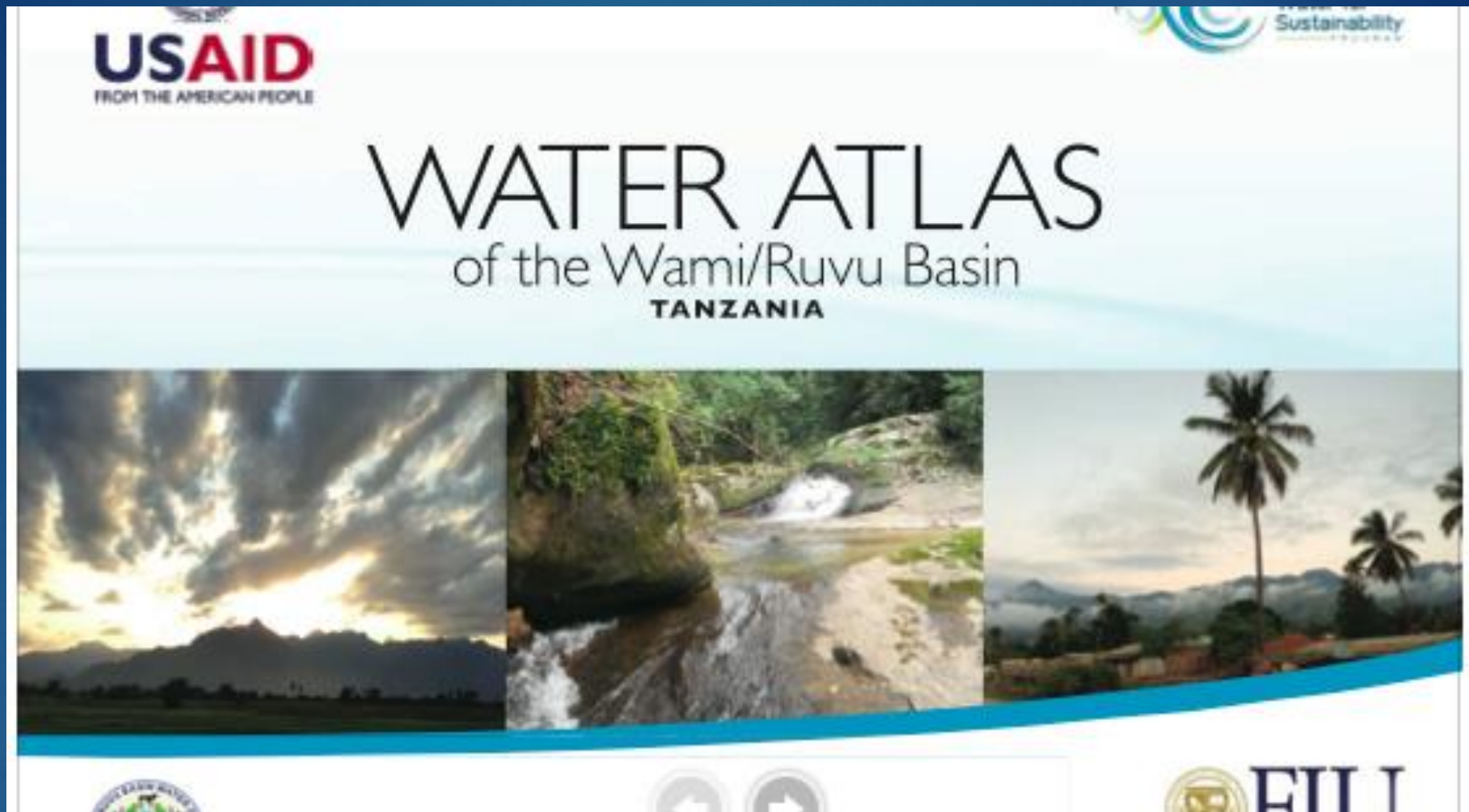
Development of Hydrological Models for Small Island Development States (Haiti)



- ▶ High resolution model in the area of the Caracol Industrial Park (PIC)

- Low resolution model for the Trou du Nord Basin





GIS, mapping and atlas: capacity building in the Ministry of Water in Tanzania

Environmental Flow Assessment (EFA)

- ▶ EPastaza River in Peru, and Ecuador,
- ▶ Mara River in Kenya and Tanzania



Sediment Fingerprinting

- Wami-Ruvu in Tanzania
- Various rivers in Rwanda



Community Water Monitoring



Introducing rainfall monitoring in primary schools

Maria C. Donoso
FIU - InWE

Thank you !