

Monday 20 October: Kick-off

9 – 9:45	Registration to the event	
9:45 – 10	<p>Welcome to the workshop: opening remarks</p> <p><i>Lamberto Alvarez Gil &amp; Hector Cruz Enriquez – UCLV</i></p> <p><i>Ann van Griensven – VUB</i></p> <p><i>Juan Criado, Marthe Cressato &amp; Annelies Mertens – UNESCO</i></p>	
10 – 10:30	<p>Introduction of current and planned projects in Cuba and the region</p> <p><i>Ann van Griensven – VUB</i></p>	
10:30 – 11:00	<p>Be Resilient SIDS project: plan &amp; opportunities + co funding opportunities</p> <p><i>Marthe Cressato – UNESCO-IHP</i></p>	
11:00 – 11:20	<p>Introduction of current and planned projects in Cuba and the region</p> <p><i>Wouter Buytaert – Imperial College London</i></p>	
11:20 – 11:40	Coffee break	
11:40 – 12:00	<p>Empowering communities for resilient water management: A collaborative approach to hydroclimatic challenges in the Andes</p> <p><i>Mario Córdova – Universidad Cuenca, Ecuador</i></p> <p><i>Paul Muñoz, Ann van Griensven, VUB Belgium</i></p>	
12:00 – 12:20	<p>Smart water management to improve water balance control and environmental preservation in river basins (Cuba)</p> <p><i>Erik Ortiz Guerra, Lamberto Alvarez Gil, Hector Cruz Enriquez- UCLV/Ann van Griensven VUB</i></p>	
12:20 – 12:40	<p>Overview of water related projects at the UCB</p> <p><i>Prof Ximena Peres, UCB, Bolivia</i></p>	
12:40 – 13:00	Brainstorm about project ideas/ proposals	
13:00 – 14:30	Lunch	
14:30 – 17:00	<p><b>Proposal writing workshop</b></p> <p>Opportunities for VLIR-TEAM project</p> <p><i>Françoise De Cupere</i></p> <p>Opportunities for ERASMUS+ proposals</p>	<p>Be Resilient SIDS workshop</p> <ul style="list-style-type: none"> <li>• Presentations of each participant per country</li> <li>• Setting the goal for the week: making a preliminary work plan for the next three years (introduce PowerPoint template)</li> <li>• Brainstorm about workplan per country</li> </ul> <p><i>Marthe Cressato, Juan Criado (ESP) &amp; Annelies Mertens (ENG) – UNESCO-IHP</i></p>

Tuesday 21 October: Citizen Science

9:00 – 10:00	<b>Introduction to Citizen Science</b> <ul style="list-style-type: none"> <li>Citizen science &amp; water: introduction of the day <i>VUB &amp; UNESCO (10min)</i></li> <li>The Democratic Trilemma in Citizen Science: Balancing Equality, Mass Participation and Deliberation – <i>Leo Van Audenhove, VUB (30 min)</i></li> <li>Engaging youth in water security, opportunities of scientific literacy through citizen science <i>Ana Escalona Diaz – VUB (10 min)</i></li> <li><i>Discussion 10 min</i></li> </ul>	
10:00 – 11:25	<b>Citizen science toolbox</b> <ul style="list-style-type: none"> <li>UNESCO's Citizen Science Toolbox introduction &amp; examples <i>Annelies Mertens– UNESCO-IHP (25min)</i></li> <li><b>Citizen Science Toolbox demonstration:</b> installation &amp; first test of the application <i>Annelies Mertens (ENG) &amp; Marthe Cressato (ESP) – UNESCO-IHP</i></li> </ul>	
11:25 – 11:40	Coffee break	
11:40 – 13:00	<b>Citizen Science for Water Assessment and Water Resources Planning</b> <ul style="list-style-type: none"> <li>Ciencia ciudadana y recursos hídricos, una revisión de alcance en la ciencia abierta contemporánea <i>Lamberto Alvarez Gil &amp; Michael Álvarez González (10min)</i></li> <li>Transdisciplinary Assessment of Water Resources in the Andes of Peru <i>Giovani Mosquera (10min)</i></li> <li>Citizen science for water quality monitoring in Yala swamp, Kenya <i>Dennis Ochuodho (10 min)</i></li> </ul> <p><i>Discussions</i></p>	<b>Citizen Science &amp; Water Justice</b> <ul style="list-style-type: none"> <li>Citizen science for Indigenous water justice <i>Afnan Agramont (10min)</i></li> <li>Articulating Indigenous rights through citizen science <i>Leonardo Villafuerte (10min)</i></li> <li>The human right to water and Citizen Science in Cuba <i>Beatriz Lorenzo Year (10min)</i></li> </ul> <p><i>Discussions</i></p>
13:00 – 14:30	Lunch	
14:30 – 15:25	New ideas and plans for citizen science applications per country <i>Discussions</i>	
15:25 – 15:40	Coffee break	
15:40 – 16:10	Introduction to the Nacional Parc “Caguanes” and excursion <i>Norgis Valentín Hernández López, Director del Parque Nacional</i>	
16:10 – 17:00	<b>Documentary “Art, Nature and Community Conservation in East Africa”</b> <i>Dennis Ochuodho, Annika Schlemm, Ann van Griensven</i>	

Wednesday 22 October: Field excursion Buenavista Biosphere Reserve + Demonstration session Citizen Science Toolkit

The Buenavista Biosphere Reserve, declared by UNESCO in 2000, spans over 310,000 hectares along Cuba's northern coast. This unique area encompasses sand and rock beaches, diverse forests, archaeological sites, and complex cave systems adorned with indigenous wall paintings.

The [Citizen Science Toolkit](#), developed by IHP, is a mobile application and data portal for citizen science data collection and open access data visualization.

Information received from tour operator:

- General Information Category: Full-day excursions
- Modality: Nautical excursions
- Duration: 6:30 hrs
- Departure time: 8:00 hrs
- Guide: Yes Speaks: Spanish and English
- Program Details Description: Enjoy the beauty of a region that still preserves its pristine beauty.
- Scheduled Itinerary:
  - Pickup from hotels. Transfer to harbour Cayo Las Brujas. Boat trip to Caguanes National Park.
  - Visit one of the caves in Caguanes National Park.
  - Practical citizen science workshop on water quality monitoring.
  - Visit island "Boca Chica"
  - Sail back to the Cayo Las Brujas. Return to the hotel.

Thursday 23 October: Digital technologies

9:00 – 9:45	<b>Introduction to Open Science and Open Data</b> <ul style="list-style-type: none"> <li>Introduction to UNESCO's Open Hydrology program &amp; WINS portal + Demonstration <i>Marthe Cressato &amp; Annelies Mertens – UNESCO-IHP</i></li> </ul>	
9:45 – 10:20	<b>Artificial Intelligence</b> <ul style="list-style-type: none"> <li>AI for water management <i>Annelies Mertens – UNESCO-IHP (15 min)</i></li> <li>Modelos de predicción basados en Inteligencia Artificial como soporte a la toma de decisiones en cuencas hidrográficas <i>Eduardo Enrique Puig Contreras (15min)</i></li> <li>Towards An Integrated Approach: Using Citizen Science and AI to Inform Climate-Resilient Public Space Design <i>Mario Córdova (10min)</i></li> </ul>	<b>Remote Sensing</b> <ul style="list-style-type: none"> <li>Advancements in earth observation for water resources monitoring and management in Africa <i>Timothy Dube (10 min)</i></li> <li>Remote sensing applications for water quality <i>Vann Harvey, (10 min)</i></li> <li>Remote sensing for DRR in Jamaica <i>Cheila Cullen &amp; Shaneice Lester (15 min)</i></li> <li>Leverage IoT and remote sensing data to adapt <i>John Okedi (10min)</i></li> </ul>
10:30-11:00	<b>Internet of Things (IoT)</b> <ul style="list-style-type: none"> <li>Introduction to IoT sensors <i>Wouter Buytaert (15min)</i></li> <li>Water quality IoT sensors <i>Abdellah Touhafi (15min)</i></li> </ul>	
11:00 – 11:15	Coffee break	
11:15 – 13:00	<b>Hands-on IoT</b> (Wouter Buytaert)  (In Spanish)	Proposal developments
13:00 – 14:30	Lunch	
14:30 – 17:00	<b>Demonstration of IoT developments in Cuba</b> (other hotel, transport by bus)  (In Spanish)	

Friday 24 October: Climate Risk Informed Decision Analysis (CRIDA)

9 – 9:30	<b>Introduction to the CRIDA Framework</b> <i>Marthe Cressato - UNESCO-IHP</i>
9:30 – 10:10	<b>CRIDA Step 1: Establishing the decision context &amp; Stakeholder engagement</b> <ul style="list-style-type: none"> <li>• Introduction of Step 1: <i>Marthe Cressato - UNESCO-IHP</i></li> <li>• CRIDA in Guayabin-basin in the Dominican Republic <i>Juan Saldana – INDRHI</i></li> <li>• Participatory approaches for CRIDA: Katari River Basin Case Study in Bolivia <i>Afnan Agramont &amp; Leonardo Villafuerte</i></li> </ul>
10:10 – 10:45	<b>CRIDA Step 2: Climate Stress Test</b> <ul style="list-style-type: none"> <li>• Introduction of Step 2: <i>Marthe Cressato - UNESCO-IHP</i></li> <li>• Using SWAT+ for CRIDA in the Katari basin, Bolivia <i>Ann van Griensven</i></li> <li>• Climate impact modelling using global SWAT+ model <i>Albert Nkwasa</i></li> </ul>
10:45 – 11 :00	Coffee break & hotel check-out
11:00 – 11:45	<b>CRIDA Step 3: Formulating Adaptation Actions &amp; Pathways</b> <ul style="list-style-type: none"> <li>• Introduction of Step 3 &amp; Examples: <i>Marthe Cressato - UNESCO-IHP</i></li> <li>• Sustainable urban Drainage Systems to mitigate climate change impacts such as floods and urban heat <i>John Okedi (10 min)</i></li> <li>• <i>Everything You Always Wanted to Know About Water Conflicts Dynamics (But Were Afraid to Simulate)</i> <i>Mario Lillo (10min)</i></li> </ul>
11:45 - 13 :00	<b>Closing session Be Resilient SIDS</b> <ul style="list-style-type: none"> <li>• Presentations of the preliminary work plans per country</li> </ul>
13:00 – 14:30	Lunch
14:30 – 21:00	Transport back to la Habana