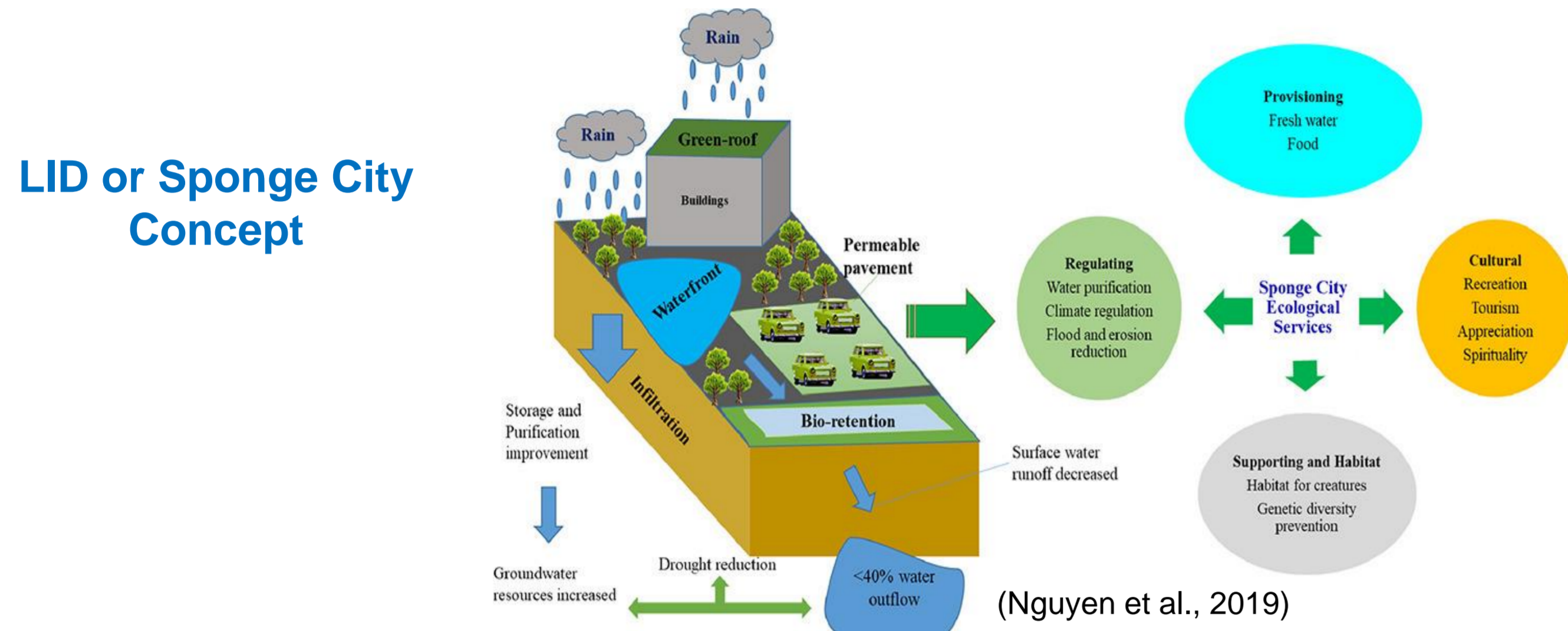


Improving capacity on integrated coastal management with low impact development considering environmental sustainability and climate change in coastal area of Cambodia (CLID)

Research Project implementor: ITC, Partners: RUA, IRD and KU,
Location: Coastal Area (Kep, Kampot, Sihanouk Ville, and Koh Kong)

Background

- The relationship between cities and climate change has been under discussion by researchers and policymakers.
- Urbanization is related to the climate change issue in at least two ways (WMO, 1996): major source of greenhouse gases, and potential impacts of climate change.
- The urban planning process => integrated with green infrastructure, ecosystem-based adaptation, and LID => improve the living conditions and renature the city landscape



Objectives

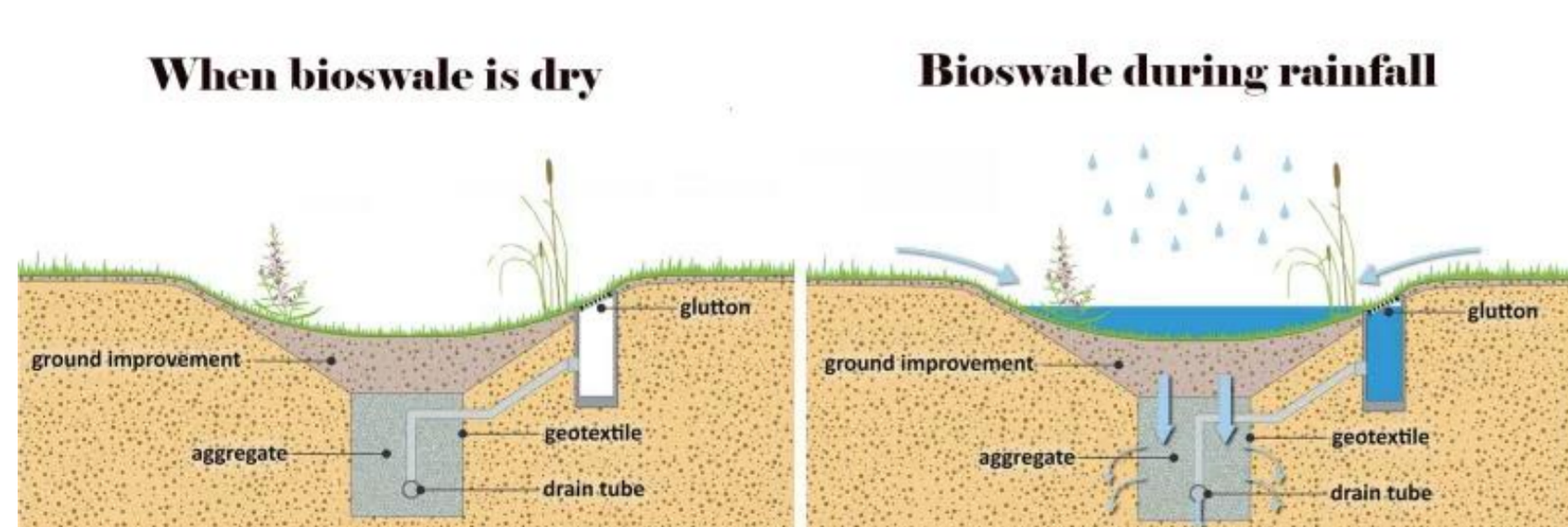
To support the integration of best practices in LID with urban planning process through scenario evaluation platform, workshops, and instruction materials that involve the participation of city planners, policymakers, practitioners, and citizens.

In order to address in-depth, the aforementioned needs, the project aims to:

- Develop resources to support the decision-making process (in the analysis of the best and suitable LID scheme to implement and integrate into the urban planning process in the coastal area of Cambodia);
- Improve the participation of urban residents in evaluating suitable LID and its practices for the urban environment;
- Support dissemination of best practice in the integration of LID in urban planning process focused on climate change adaptation and efficient water management;
- Foster knowledge exchange forum among academia, practitioners, decision-makers, and local people through a discussion forum in the dissemination workshop.

Key technologies and approaches introduced

- Apply scientific modeling tool for scenario analysis on land-use and climate change impact.
- Propose the scenario analysis (land-use change + climate change impact scenarios) of the applying LID or SCC in study area.
- Sea-level rise estimation for Cambodian coastline based on Climate Model output.
- Construct sea-level rise inundation maps based on the elevation data and sea-level rise estimated.
- Dissemination, forum discussion, engagement, and training workshops.
- Baseline and Endline survey of LID concept among practitioners, urban planners, decision-makers, local governors, and local people => track the impact of the project and awareness raising on LID concept through interaction with interviewers
- Scientific publication + model manual for scenario evaluation + LID practice manual + urban planning policy



The Constructor: Building Idea



Courtesy Pierce County, Washington and AHBL, Inc.

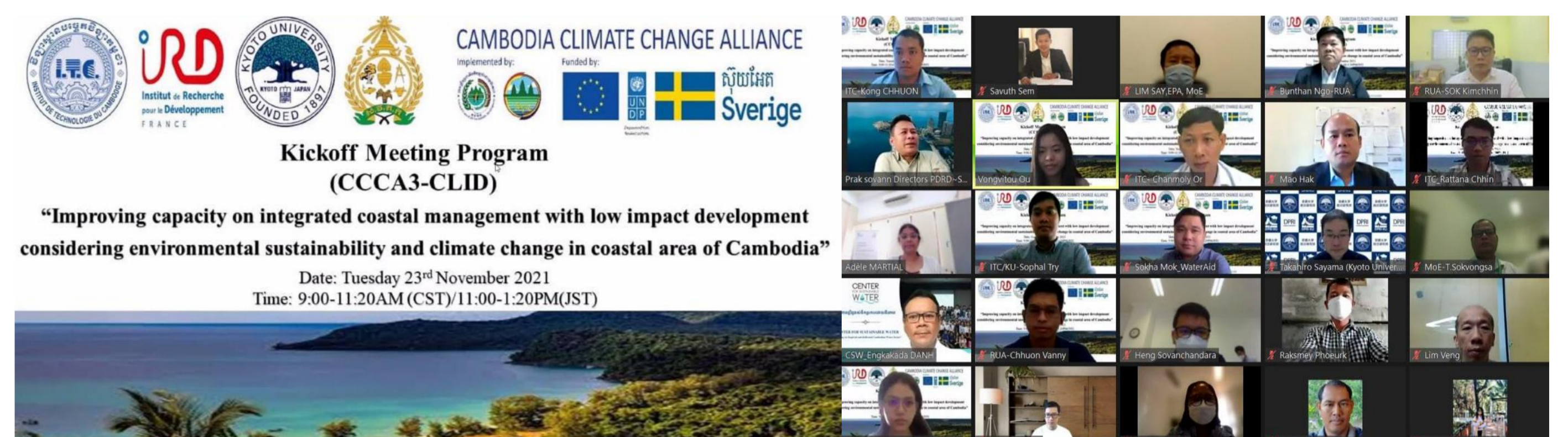
Outputs and key activities

The expected outputs of the project include:

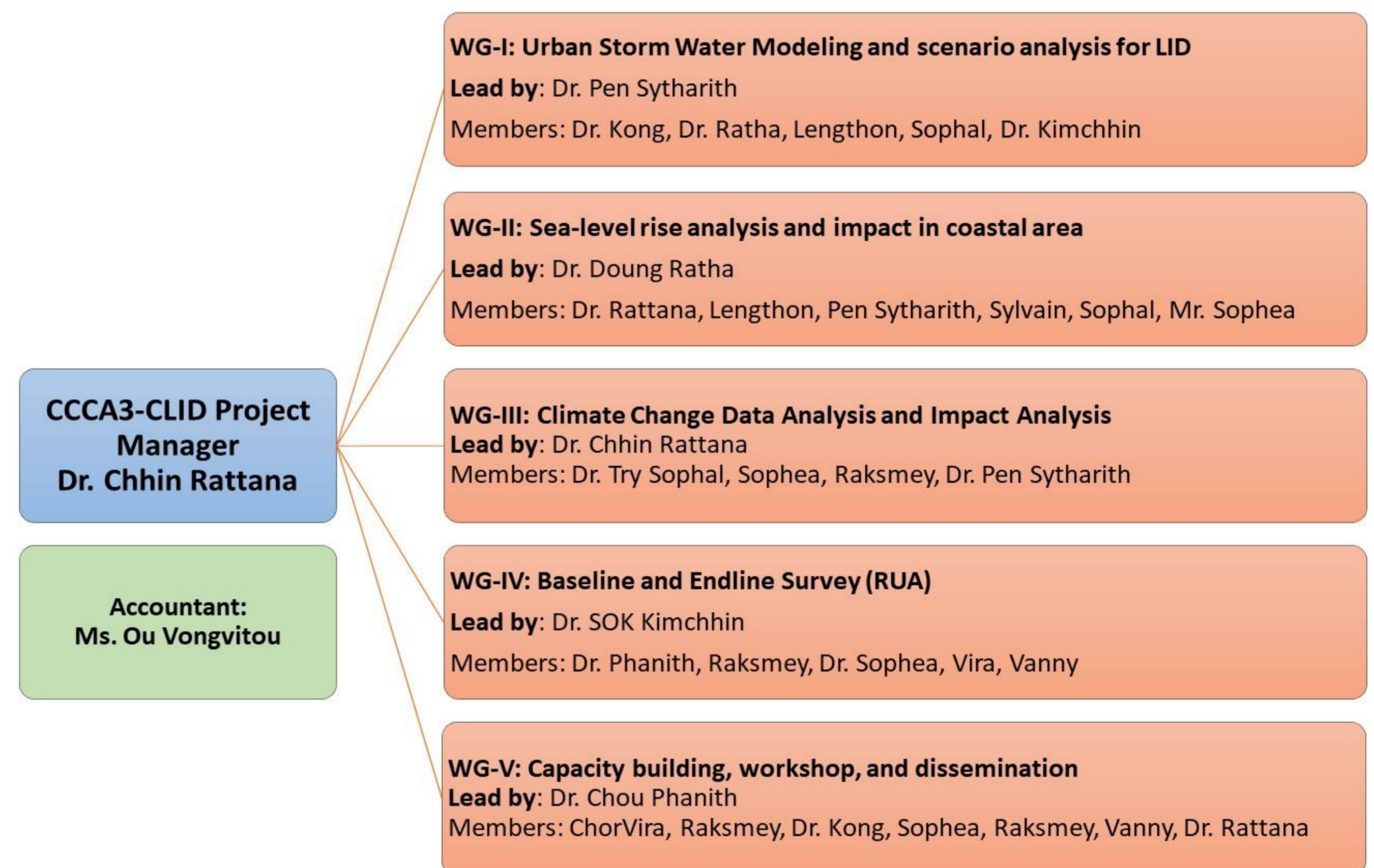
- Tool for evaluating suitable LID and its practices for the urban environment through the model development for analysis of the LID scheme to implement and integrate into the urban planning process in the coastal area of Cambodia: Field data collection, Urban flood modeling for scenario analysis, Propose the scenario analysis with support from collaborative partners.
- Sea-level rise inundation map for coastal area: Review of sea-level rise analysis in the region, Install water-level station for tide observation, Sea-level rise estimation for Cambodian coastline, Construct sea-level rise inundation maps.
- Forum discussion, dissemination, and training workshops on integration of coastal management with LID in city planning process.
- Publication, reports, and training materials will be shared among policymakers, practitioners, academics, scientific community, and relevant people and institutions.

Implementation progress

Kick of meeting of the research project conducted



Working Group Arrangement



Key challenges and lessons learnt

Since the project just started very recently, we do not have actual key challenges and lessons learnt. The following is the expected challenges for the project implementation:

- Even the situation of COVID-19 is getting better in Cambodia now, the risk of outbreak of other mutation variants still possibly impose threat to the field data collection and meeting events of the project.
- The participation of policymakers, urban planners, practitioners, and local government officers in the project activities.

