

Introduction of RRC.AP's Initiatives: Climate Change Downscaler Training and Development of Adaptation Monitoring Indicators

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Presentation outline

- **Climate Change Downscaler Training Workshop**
 - Purposes and Basic features of S8 Downscaler
 - How S8 Downscaler can be utilized
 - Training objectives, target audience & schedule
- **Minimum indicators development for monitoring adaptation**
 - Conceptual stage



Climate Change Downscaler

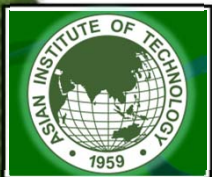
- **Developer**
 - University of Tsukuba
- **Purposes of the S8 Downscaler**
 - To enable impact assessment researchers or technical staff of local governments to use detailed spatial climate prediction data in accordance to their own purposes, they currently need to either request climate prediction researchers to generate necessary data or apply dynamic downscaling that requires advanced specialized knowledge by themselves.
 - S8 Downscaler aims to keep the workload to a minimum for non-specialists of climate modeling to obtain information regarding local climate change projections without supercomputer.



Climate Change Downscaler

Basic features of the S8 Downscaler

- Is a PC software program designed to create climate projections for regions of interest
- Can be run on a PC (without connecting to supercomputers) for simulation with coarse spatial resolution & short prediction period
- Is currently being configured to run on a super computer of Uni. of Tsukuba; complex simulation will be possible only with PC & internet connection, connecting to Uni of Tsukuba
- **Main functions:**
 - 1) Selections of projection area, prediction period, season, emission scenarios and GCM;
 - 2) Modification of land use, green space ratio and anthropologic heat (e.g. car/air con);
 - 3) Projection of present and future climatic factors (e.g. monthly mean temperature);
 - 4) Analysis of computation results (e.g. the number of extreme heat days)



Climate Change Downscaler

- Downscaler can be used for a) climate change impact assessments (climate projections only) and b) urban/agricultural planning that requires assessments of impacts of future urbanization/farmland development on regional climate change as well as assessments of mitigating effects of local government's greening and energy-saving policies on regional heat environments



Climate Change Downscaler Training Workshop

- **Objectives**
 - Increase understanding on the easy running of climate change downscaler
 - Introduce downscaler's functions that allow for making local climate change projections without advanced specialized knowledge
- **Target Audience**
 - Non-specialists of climate modeling (researchers/government officers) who require local climate change projections for their work (e.g. urban and agricultural planning)
- **Expected outcome**
 - Downscaler to be introduced and utilized in participating countries
- **Date and place: End of November, AIT**



Minimum indicators development for monitoring adaptation

- **Overall purpose: to enable developing countries in Asia to monitor adaptation progresses, using simplified indicators**
 - Progresses and results of implementation of adaptation strategies/plans
 - Progresses of vulnerability reduction
- **Currently developing the concept note with AIT faculty (e.g. justification for policy impacts, objectives, beneficiaries, target countries & sectors, methodologies etc)**
- **Duration and steps: Sep 2015 – Aug 2016**
 - Stakeholder consultations and concept note development: Oct-Nov 2015
 - Indicators development: Dec 2015 – Feb 2016
 - Stakeholder reviews (workshop): Mar 2016
 - Indicators demonstration: Apr 2016 on wards
 - Evaluation of indicators utilization and revisions: Jul-Aug 2016



Thank you for your attention.



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