Climate Change Adaptation

Actionable knowledge for sustainable development, climate change adaptation and disaster resilience

A. Rationale

The 5th IPCC Assessment Report highlighted that “Indigenous, local, and traditional knowledge systems and practices, including indigenous peoples’ holistic view of community and environment, are a major resource for adapting to climate change, but these have not been used consistently in existing adaptation efforts”. Furthermore, the Sendai Framework for Disaster Risk Reduction (SFDRR) identified the understanding of disaster risk in its many dimensions as a number one priority for action. However, the Sustainable Development Goals (SDGs) are less explicit on the role of knowledge, as recognised in Target 4.7 ensuring that all learners acquire the knowledge and skills needed to promote sustainable development.

Thus, knowledge is an important component of action, but what kind of knowledge, whose knowledge, and how such knowledge will be used and how it can inform decisions are critical questions to ask. This theme focuses on the role of knowledge, in its many forms, in the implementation of the Paris Agreement (PA), the SFDRR, and the SDGs. While this knowledge may come in diverse forms, its ‘usability’ in the context of sustainable development is key.

B. Important keywords

Actionable knowledge, indigenous knowledge systems, climate change adaptation, disaster resilience, Paris Agreement, SFDRR, SDGs, co-production, models, scenarios, knowledge uptake.

C. Sub-theme

1) Role of indigenous knowledge systems\(^1\) in sustainable development

What is the role of indigenous knowledge systems in responding to disasters, climate change impacts, technological change and related topics in Asia? What are the challenges that indigenous knowledge systems face in an era of global environmental and developmental changes? Are there any examples, case studies, and critical appraisals of the use of indigenous knowledge systems in the contexts mentioned?

2) Context-specific co-production of knowledge

Which existing systems enable successful knowledge co-production at local scales and how do they function? Are there examples of a bridging between local and/or indigenous knowledge systems and scientific knowledge?

\(^1\) Indigenous Knowledge Systems refers to the traditions of regional, indigenous or local communities. Indigenous knowledge is the knowledge that is unique to a given culture or society.
3) **Models as knowledge frames**
How is model-based thinking applied in Asia? Which approaches to scenario and model development are generated in Asia and how are these ways of thinking supported? What has been learned from the application of model-based thinking in Asia?

4) **Scientific and traditional knowledge uptake in policy development and decision-making processes.**
What are trade-offs involved in acting on multiple, perhaps conflicting, knowledge forms from diverse voices with a range of perspectives? What risks are associated with using traditional knowledge for decision-making across levels, including at the household/farm level?