



Summary and key points

Discussion series on Climate Information & Services

Challenges of availability and usability of climate information and services for adaptation planning and decision making

IMACC / April 2013

Background

'Adapt to what exactly?' is the first question a decision-maker may ask when faced with the need to prepare for the consequences of climate change. Without knowing the expected changes in climatic conditions, proactive and anticipatory adaptation approaches are difficult. In a changing climate, we need usable climate information and services to support adaptive management and decision-making. However, availability and usability of climate information and services is confronted with several challenges: information needs to be accessible for potential users, well-organised and managed. User-orientation by tailoring information to specific, local conditions and questions is key in assuring its uptake. Climate projections and information on potential impacts of climate variability and change have to come with an expert judgment about their uncertainty, i.e. the probability of a certain scenario to occur. As in other contexts, information and its provision has to be well coordinated (i.e. requires clear roles and mandates) and communicated (i.e. needs the right channels, packaging and 'language'). Eventually, climate change information for adaptation decisions needs to be officially endorsed in order to be a solid reference.

In April 2013 the **online discussion series** of the project *Inventory of Methods for Adaptation to Climate Change* (IMACC) presented **six webinars** on Climate Information and Services with the aim to share experience with regards to the availability and usability of climate information and services in concrete adaptation action and inform about the latest international discussion in the field of climate services:

- 1. Access to Climate Information Country cases from Tunisia & the Philippines / 15 April at 9:00 am (CEST)
- Access to Climate Information Regional perspective: Caribbean Community Climate Change Centre / 15 April at 4:00 pm (CEST)
- 3. Experiences of Met Services Cases: German (DWD) and Indonesian (BMKG) Met Service / 18 April at 09:00 am (CEST)
- 4. **Online Demonstration ci:grasp –** Climate Impacts: Global and Regional Adaptation Support Platform (GIZ/PIK) / 19 April at 8:30 am & 3:30 pm (CEST)
- 5. **Climate Services an international perspective**: Global Framework for Climate Services (WMO) and the Climate Service Partnership / 22 April at 4:00 pm (CEST)
- 6. Wrap up of discussion results Summary, conclusions, recommendations / 24th April at 10:00am (CEST)

More than 160 participants from the seven IMACC partner countries and beyond joined these webinars. The programme of the discussion series and all <u>webinar recordings</u> can be accessed at <u>AdaptationCommunity.net</u> under



Webinar 1: Access to climate information – from a national perspective

The case of the Philippines: Experiences with enabling access to and sharing of climate information

Dennis G. dela Torre, Planning Officer of the Climate Change Commission of the Philippines, presented experiences on accessing and sharing climate information. The example showed the importance of a strong official framework, i.e. the Philippine Climate Change Legislation of 2009, for better coordination amongst stakeholders. He remarked that the information relevant to adaptation is generally available from both governments and NGOs, however, it is spread over many sources. He suggested the establishment of a well-defined process to facilitate and disseminate



information using official frameworks and the collaboration between the different stakeholders, as in the Community of Practice on Climate Change Actions in the Philippines.

The case of Tunisia: Using metadata catalogues to provide better access to climate information and encourage collaboration amongst providers and users

Ghazi Gader, Knowledge Component Coordinator at GIZ-Tunisia, mentioned that climate information is usually available but the access to it is often difficult and restrictive - and holds some decree of conflict. A tool to approach this problem is a Metadata Catalog. It serves as a vehicle to facilitate access to information by way of describing available



information (i.e. source, method of compilation, conditions under which the data is stored, accuracy, contact person etc.) and therefore navigating potential users to the information they need. Mr. Gader remarked that while the technical solution is in place and has started operating the main challenge of sharing data and information remains institutional and organizational.

Webinar 2: Access to climate information – a regional perspective: Experiences with building a Clearinghouse platform for the CARICOM Caribbean

According to **Timo Baur**, integrated expert at the Caribbean Community Climate Change Centre (5C), а



clearinghouse needs to be a proactive information exchange facility that offers climate change related data: emission data, climate models, impacts as well as adaptation and mitigation project information. Mr. Baur stressed the importance of providing localized, specific and appropriately packaged information and tools. This is only possible in cooperation with national information hubs, concrete projects as well as competent scientific partners. The 5C platform follows the logic of gathering results from (global and) regional activities to in turn inform other initiatives in the region. While many challenges remain, the clearinghouse is the largest and a well-accepted knowledge base on climate change in the region with a clear upwards trend in user numbers.

Webinar 3: Experiences from MET offices in providing user-oriented climate services

The case of Germany: Experiences of the Deutscher Wetterdienst (DWD)

Dr. Barbara Früh, Senior Scientist at the <u>German Meteorological Service (DWD)</u>, presented the **various components of DWD's climate service**, i.e. (1) observation and climate monitoring, (2) modeling, projecting, predicting, (3) capacity building of global climate competence, (4) climate impact assessment – all of which require own expertise and specification. She highlighted the **German Adaptation Strategy** as an important motivation for intensifying the development of the climate service and stressed the importance of matching user demand by providing the **basis for**

expertise and specification. She highlighted the **German Adaptation Strategy** as an important motivation for intensifying the development of the climate service and stressed the importance of matching user demand by providing the **basis for decision making**. Ms. Früh explained the difference between weather forecast, climate predictions as well as projections and stressed the underlying **uncertainties** and how to handle them, e.g. by performing ensemble simulations and communicating results by using probabilities. The DWD provides a climate information user interface through the German Climate Atlas and advisory services,

The case of DATACLIM: Data and information management on adaptation to climate change in Indonesia for the Badan Meteorologi, Klimatologi dan Geofisika (BMKG)

The project team leader of DATACLIM, a joint project of the Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG) and GIZ, Dr. Gerhard Rappold, illustrated the importance of climate services for planning and stressed the important relation between different time scales (or planning horizons for e.g. annual crops and infrastructure), uncertainty and adaptation decisions and costs. He mentioned the importance of BMKG's climate service to the implementation of the National Action Plan on Adaptation to Climate Change (RAN API) that aims at integrating adaptation into the planning of all sectors and explained DATACLIM's work on developing the data

e.g. in the field of waterways and transportation as well as agro meteorology.

base, especially through **historical data recovery**, for the **Climate Change Information System** (CCIS) of BMKG. In conclusion Mr. Rappold highlighted the magnitude of the task of developing a user-oriented climate service, which is a **long term undertaking** that requires various expertise and capacities.

Webinar 4: An example of a global climate service platform – ci:grasp 2.0

Dr. Markus Wrobel from the **Potsdam Institute for Climate Impact Research (PIK)** held a live demonstration of the virtual platform <u>ci:grasp</u> (Climate Impacts: Global and Regional Adaptation Support Platform) that was developed jointly by PIK and GIZ (on behalf of the Ministry for the Environment, Nature Conservation and Nuclear Safety – BMU). He introduced ci:grasp 2.0 that provides new data, tools and intuitive navigation along impact chains – and will be launched in mid-2013. The platform presents scientific results and data mostly in the form of maps and diagrams and informs about climate stimuli, impacts and adaptation examples. It has a global coverage and contains an <u>adaptation project data base</u> (open to contributions!) for the documentation and exchange of adaptation



experiences, while it can be used as a basis for adaptation research by PIK at the same time.





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Webinar 5: Climate Services - an international perspective

The Global Framework for Climate Services (GFCS): Towards implementation

Filipe Domingos Freires Lúcio, Head of the Global Framework for Climate Services (GFCS) Office at the World Meteorological Organization (WMO) described the purpose of the <u>GFCS</u>, which is to enable better climate risk management through the development and incorporation of science-based climate

information into planning, policy and practice on the global, regional and national scale – with particular focus on the developing world. Mr. Lúcio highlighted that about **70 countries around the world do not have sufficient capacities to provide climate services**. In addition to many interesting insights into the work of the GFCS, he emphasized that besides developing the technical infrastructure that is necessary to provide climate services, it is very important to facilitate a process that equally involves providers as well as users of information and that builds trust through dialogue in order to match the needs of the information users.

The Climate Service Partnership (CSP): Early lessons

As presented by **Cathy Vaughan**, Program Manager for the CSP Secretariat at the International Research Institute for Climate & Society (IRI) of Columbia University, USA, the <u>CSP</u> is an **informal, interdisciplinary partnership working to improve**

development and provision of climate services worldwide. Early lessons regarding stakeholder engagement of the partnership include that terminology, e.g. uncertainty, still requires clarification within the community, while there is generally a lack of information regarding what information is currently available as well as a need for training and education. Lessons regarding climate service implementation are that human capacity is key and requires continuous investment, bridging and tailoring of information takes time. Working with existing infrastructure is extremely effective (if available) and climate services need to be part of a risk management package. CSP's future work will focus on evaluation of climate services and providing guidance and training as well as mapping supply and demand of climate services.

Webinar 6: Wrap-up and outlook

In a final webinar, **Michael Hoppe**, Project Team Leader of GIZ-IMACC, summarized the main **conclusions** of the individual webinars and the overall discussion series. It became clear that climate information and service provision requires a **long-term and iterative process** between providers and users of information in order to get to **credible information** products that (1) can be generated based on current best knowledge and (2) **serve the specific need** of decision makers and adaptation practitioners. Information providers need to seek the dialogue with information users and vice versa. Users need to learn to **specify information needs** and **understand uncertainty** (as well as the limitations of science), while those who provide information need to learn to better **tailor** information to users' needs, '**translate' and package** (and sometimes simplify) information.

An **institutional climate service**, as recently initiated by several national met services, is a complex 'system' with many specialised elements. In order to enable effective use of climate information in future planning and decision making a climate service needs to – besides various other tasks – assure a functioning **user interface** in order to link to information users.



