



Communication of climate change induced natural hazards with a web platform

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Climate change induces changes in the frequency and severity of natural hazards. These changes will require societies to adapt their systems to the experienced and anticipated changes. Clear communication of possible climate impacts and the related uncertainties are of importance for adaptation processes. The communication may be simplified if available knowledge is organized in a structured knowledge base of climate impacts and related adaptation measures. Such a knowledge base may be designed as a web-based platform, which enables access of relevant information to stakeholders in developing countries. The Potsdam Institute for Climate Impact Research (PIK) and the German center for international collaboration (Deutsche Gesellschaft für Internationale Zusammenarbeit) GIZ are creating such a platform. Several challenges needed to be considered in its development. A recent review of similar projects has revealed some of these challenges:

1. Users of web-enabled platforms that provide access to climate change related information are confronted with a considerable degree of external inconsistency concerning user interfaces.
2. Existing adaptation platforms differ in how they integrate climate change background information and in how they structure adaptation related information.
3. Links between stimuli, impacts and adaptation are often not made explicit, while making this link visible is expected to be useful.
4. User participation in the pre-implementation phase is the best predictor for usefulness.

We present how we addressed these challenges during the development of ci:grasp, an online climate information service that provides knowledge on current and projected climate stimuli, impacts and adaptation options at the national, sub-national and regional level. We present its design principles, the treatment of uncertainties and demonstrate the platform with a case study on sea level rise.