

Session DD 7.2: DSS – enhancing decision making

Chairs	Dr. Eric Koomen, VU University, the Netherlands
Speakers	Ingrid Coninx, Alterra, Wageningen University, Belgium/the Netherlands Rianne Wood (instead of dr. Claudia Kuenzer), German Aerospace Centre, DLR, Germany Dr. John Hunter, Antarctic Climate and Ecosystems Cooperative Research Centre, Australia Niels van der Vaart, Utrecht University, the Netherlands
Rapporteur	MSc. Marit Heinen, Climate changes Spatial Planning, the Netherlands

According to Ingrid Coninx, there are several challenges in the development of decision support systems: integration of climate change projections, integration of socio-economic scenarios, integrating social and non-monetary impacts, integrating micro scale information, the spatial distribution of risks and the integration of the knowledge of uncertainties. Intangible impacts are often not considered due to their complexity as well as the difficulty with monetizing these impacts. The unilateral focus on material impacts is likely to safeguard wealthy people. The decision support tool described by Ingrid is a methodology for quantifying these intangible impacts to individuals who are flood victims.

Rianne Wood gave the presentation of Claudia Kuenzer about the WISDOM project (Water related Information System for the Sustainable Management of the Mekong Delta). WISDOM is a very large project with 60 researchers and 14 PhD students from 18 different institutes who work on a system that can support decision making and planning at institutes and ministries of relevance for the water sector in Vietnam. Rianne explained the concept of the 'WISDOM restaurant'; in the 'restaurant' you can ask your question, the answer is 'cooked' in the kitchen which uses ingredients (information) from the storage room. Up till now there is no experience with end users. The project team is still working on the identification of who the stakeholders and decision makers are. The plan is to make different interfaces (different menu's in the restaurant) for different users.

John Hunter presented a method that has been implemented as a decision support tool for the Australian coastline. The method provides the user with the likelihood of one or more flooding events by sea level rise, for a given location, period of time during the 21st century and emission scenario. According to John, changes in sea-level extremes have been, and will be (at least for the next few decades) dominated by sea level rise. He can therefore estimate future sea level extremes from knowledge of 1) the statistics of present extremes, and 2) projections of rise in mean sea level and their uncertainties.

Niels van der Vaart just started working on a project within the CESAR research programme (Climate and Environmental change and Sustainable Accessibility of the Randstad). His research goal is to contribute to the attainment of sustainable spatial planning by bringing knowledge of climate change and mobility behavior into planning processes. This literature research will result in an overview of best practices in Planning Support systems that are adapted to climate change. It will also result in functional requirements and specifications for a Planning Support system.