EEA/ETC:CCA

Session report – Capturing and sharing knowledge on adaptation across Europe: how to support decision makers in the EU (Session 5.4). ECCA 2017, Glasgow

This session was held at the 3rd European Climate Change Adaptation Conference (ECCA) in Glasgow, from 5th-9th June 2017. The session was hosted by André Jol and Kati Mattern, from the European Environment Agency.

The session described the progress that has been achieved since the publication of the 2013 EU Adaptation Strategy and shared opinions in an interactive workshop about the future needs for sharing adaptation knowledge in Europe.

One of the objectives of the 2013 EU Adaptation Strategy is to promote better informed decision-making that contributes to a more climate-resilient Europe. This has been actioned by identifying gaps in adaptation knowledge and addressing them through two avenues. Firstly through EU funding, such as structural funds or research funds (FP7, H2020, LIFE Programme, Copernicus) and secondly through the development of the European Climate Adaptation Platform (Climate-ADAPT) that summarises scattered adaptation information in one location, and shares this knowledge across Europe by forward-pointing to the more detailed information.

The session was split into two parts - a presentation part and a workshop part. The presentations reflected on what has been done since 2013 from a variety of EU, project-based and national perspectives. The workshop captured opinions about the future needs for sharing adaptation knowledge and how they could be addressed.

This session report will feed into future EEA and European Commission (DG Climate Action) work, such as the Evaluation of the EU Adaptation Strategy 2017/18.

Part 1: Summary of talks

1. **State of play: EU adaptation policy and knowledge needs (Jelena Miloš, Directorate-General for Climate Action)**

The EU Adaptation Strategy was described with examples of progress against various Actions – for example in Action 1 – Encouraging Member States (MS) to adopt National Adaptation Strategies (NAS), 23 MS have a NAS and 5 are being developed. The Adaptation Scoreboard is another mechanism to assess MS progress on adaptation and uses 'process- based' indicators. There is support available for adaptation actions through e. g Life funding and the EU Covenant of Mayors initiative.

The main part of the talk was about filling the knowledge gaps (Objective 2 of the EU Strategy). There has been a lot of progress since the launch of the Strategy in 2013 in terms of filling the knowledge gaps and the European Commission is now refining these gaps. A general trend has been increased sharing of knowledge and making the knowledge more accessible and friendly to decision-makers.
There is also an iterative process to gather the evidence at the correct level of detail and the EC service contracts' address this need e.g. the "Knowledge assessment" project (lead by Ecofys).
There is currently an evaluation of the EU Adaptation Strategy being carried out to look at progress in MS, sectors and business and to assess whether the strategy is helping to reduce Europe's risks and build Europe's resilience to a changing climate. It is being supported by an independent study. There was a stakeholder workshop on 5th April 2017, and there will be another in January 2018. A 3 month online public consultation on the achievements of the strategy will take place from December 2017 to February 2018. An EC communication on the strategy evaluation will be provided in 2018.

2. **Assessing adaptation knowledge in Europe: national vulnerability assessment, resilient infrastructure and ecosystem based adaptation (Sarah Hendel-Blackford, Ecofys)**

The project covered 3 tasks – National Vulnerability Assessment for Adaptation Plans and Strategies, Infrastructure: Energy, transport & built environment and Ecosystem Based Adaption (EbA). Over 400 sources of literature and websites were reviewed and assessed. Factsheets and thematic reports were produced for each task, and a common methodology was used for all tasks.

The key outcomes for the national vulnerability assessment task were a Reference Framework for vulnerability assessment and recommendations to fill the knowledge gaps and knowledge exchange. The framework is designed to provide a check-list for countries and help to understand that the framing of their assessments will affect the selection of methods and ultimately the success, or failure of the policy. The main recommendations are that detailed guidance is needed for countries to support the choice of methods, the assessment needs to include consideration of social vulnerabilities and there needs to be further development of the tools created within research projects so that they meet practitioner needs.

The "Infrastructure" task covered: Energy, transport and the built environment and addressed the following questions:

1. What (climate) data is available and needed for the assessment of climate impacts?
2. What information is available in terms of vulnerability and risk assessments?
3. What adaptation options are used in the target sectors? (Incl. whether and to what extent costs and benefits are covered)?
4. What decision-making tools, methodologies, and mechanisms are used to address these climate impacts and vulnerabilities?

The "Ecosystem-based Adaptation" task covered agriculture, forestry, coastal, urban, and water management (rivers, lakes, wetlands and watersheds). It looked at biophysical impacts related to adaptation, economic impacts including benefits and ecosystem services co-benefits, or negative impacts. Some of the key success factors were stakeholder engagement, attitudes and cooperation, alignment of activities across agencies, demonstration of private and multiple benefits, multiple sources of finance and independent bodies to link and steer stakeholders and agencies.

3. **Success factors and limitations in the development of user–oriented climate information portals: Lessons from CLIPC, Euporias, Climate4Impact and SWICCA (Annemarie Groot, Wageningen UR)**

Five platforms were evaluated from FP7 and Copernicus projects that had developed user-oriented platforms. The platforms were assessed based on success factors and pitfalls. Three types of users were developed based on their different requirements – climate scientists, knowledge purveyors/consultants, societal end users (policy-makers/farmers). The process needed to be iterative in order to capture the requirements. Three types of indicators were used to evaluate the platforms – tier 3 is the hardest, to link climate data with non-climate data.
Key messages from the work include the need for sector champions, the need for guidance and processing tools, and the need for direct interaction between data providers and users.
The pitfalls include the high turnover in the user panels so it was necessary to regularly bring new entrants up to speed.
The main recommendation was that there is a need to provide additional services around the platforms to create added value and promotion to users e.g. a helpdesk.

4. **Sharing adaptation information across Europe -evaluation of the European Climate Adaptation Platform (Climate-ADAPT)**
(Kati Mattern, European Environment Agency)

The creation of the Climate–ADAPT platform is part of the requirements within the EU Adaptation Strategy - action 5 Climate Adaptation services. Climate-ADAPT is tasked with 3 services – building and sharing the knowledge, encouraging an effective uptake and better coordination.
The progress in achieving these actions is being assessed, and the results will inform the evaluation of the EU Adaptation Strategy that is underway. The assessment will reflect on the changes that have been made since the platform launch in 2012, the growth of knowledge and at a variety of government levels from city to EU levels.

The evaluation of the Climate-ADAPT platform that is taking place in parallel to the strategy evaluation includes both internal assessment and external feedback. The external feedback will be gathered via a user/provider survey covering its core audience of national governments and intermediaries supporting the development of adaptation strategies, and its wider audience of interested parties.

Lessons learnt from the user/provider survey include:
The survey has provided valuable information about the Climate-ADAPT core and wider audience.
The knowledge on the platform is being used, but there are limitations to actions that can be achieved with a platform.
The results of the climate-ADAPT evaluation will help to look beyond the existing situation and set the priorities for the future.

5. **Lessons learned from the development and implementation of the Spanish adaptation platform and upcoming improvements through the LIFE SHARA project (Anna Pons, LIFE-SHARA Project coordinator, Spanish Ministry of Agriculture and Fisheries, Food and Environment)**

Spain was one of the first EU countries to have a NAS and a national platform (AdapteCCa). It was a place to exchange information between the regional governments and was one of the main pillars of adaptation in Spain. However, in recent years there have been limited resources to maintain the platform, and updates were minimal. The SHARA project is now supporting the further development of the platform with the following objectives:

- To assess the platform contents and functionality
- To better define target users, in particular experts vs. general public
- To improve promotion and dissemination of AdapteCCa
- To provide recommendations for the future development of the platform.

6. **Effectivity, quality, credibility and user's enjoyment: how the German Environment Agency takes up success factors of user-centred adaptation portals (Petra Mahrenholz, German Federal Environment Agency)**

Germany has completed an evaluation of their provision of knowledge and tools in the German Adaptation Strategy (DAS) based on the responses from 500 users. They assessed the following factors: Content – up to datedness, quality; Usability- task fittingness, efficiency; Performance – speed; User Experience – emotion, security; Brand value – reliability, credibility. e.g. by monitoring of monthly page views and use of specific adaptation tools. One example of the change in how the information is used is that 1/3 of people are now accessing it through a mobile device therefore the speed becomes very important.

Conclusions:

- Tools appear in many diverse formats (e.g. guide, manual, expertise, case study, checklist, online tool)
- The amount of tools is steadily increasing
- Actors cannot keep track of the relevant information and tools
- There is no need for lots of new tools but rather aggregated overviews (meta data bases) and bundle these on a key platform
- As important as improvements of tools is to continuously raise funds for periodic updating of existing tools in medium-term budget (existing tools should be processed, supplemented or enhanced)
- Users only needed a few additional instruments – a framework and economic instruments
- UBA wishes to learn more about the EEA's platform evaluation philosophy and methods of searching and presenting a huge amount of data appropriately and efficiently.

Part 2 - Audience participation workshop

The workshop captured opinions about the future needs for sharing adaptation knowledge and how these could be addressed. The participants were split into 3 groups:

- Group 1. (Facilitator: Clare Downing) *Embedding the online platforms into processes* - What **added activities/services** could be used to reach out, beyond the platforms to make the knowledge sharing more effective, particularly for supporting the development of NAS/NAPs (including sector plans) in EU countries (e.g. linking with sector-specific activities, online webinars and face-to-face training)?

- Group 2. (Facilitator: Kati Mattern) *Focusing the future knowledge needs* - What are the **new knowledge needs** from different governance levels (e.g. city, national, transnational) and how can

they be addressed in a complementary way?

- Group 3. (Facilitator: Emiliano Ramieri) *New approaches for developing knowledge* - What **new/innovative approaches** are available to capture and share knowledge to support action?

The discussion that took place in each of the groups is summarized in the following notes.

Group 1 ***Embedding the online platforms into processes*****:**

1. Wrong input data taken up by decision makers or misinterpretation of statistical data – importance of communication
2. Difficult to meet the end user needs - Importance of creating/maintaining networks and relationships between data producers (e.g. researchers) and portal (helpdesk) and users (policy makers)
3. Quality and accessibility of the information- Ensure people can understand – e.g. non-science language, short docs for policy-makers, climate change atlas on future climate, video to peak interest.
4. Promote new tools and information via 1. Webinars, 2. Newsletters, 3. Presentations during workshops, conferences.
5. Identify multipliers – aiming at including tools in programmes/plans for adult education, curricula of universities, sectoral organisations (e.g. Develop MOOCS).
6. Lack of an overview of information e.g. comprehensive climate data available
7. Generally not enough detail (spatial resolution) for decision-makers needs
8. Importance of who creates the platform – if public body, entity or project it influences the quality of the helpdesk, need a user survey to ensure user needs are met
9. The bigger the country, the more difficult it is to have a good helpdesk and to train users.

Group 2 ***Focusing the future knowledge needs:***

1. Identifying future needs is a challenge since adaptation to climate change is a very dynamic area. It is therefore important not to fix the agenda too early and to remain flexible
2. The data available through the Copernicus Climate Services need to be harmonized in order to allow users to have the confidence to use them. Social data need to be provided in addition to the climate data
3. Information about the comparisons between climate models would help practitioners to understand and use the climate data
4. Condense the results of Copernicus Climate Services projects (e .g SECTEUR) into business models.
5. Is it of particular interest to provide information on the economic benefit of adaptation measures
6. In order to manage risks better refined vulnerability assessments are needed
7. Information on adaptation needs to be tailor-made for sectors in order to be useful.

Group 3 ***New approaches for developing knowledge:***

1. “Traditional” approaches to disseminate knowledge are still relevant, e.g. fact sheets, case studies, policy briefs, etc.
2. Co-creation/co-productionare important concepts as also attested by various H2020-funded projects. However there is a concern about how feasible it is to upscale them from the local to a wider scale.
3. Interactive GIS and gaming tools are useful new methods of making stakeholders aware of the effects of climate change impacts (e.g. Sea Level Rise) and climate related extreme events (e.g. flooding), in particular on vulnerable systems and assets (e.g. critical

infrastructure) and to support discussion on adaptation options. Some tools also enable a first level evaluation of the effects of selected adaptation options.

4. International design competition to improve resilience and adaptation capacity of local communities (e.g. initiatives of the Rockefeller Foundation). Collaboration between designers and local communities since the beginning as well as, interdisciplinary approach (including social, engineering, environmental and economic aspects) are very important.
5. Use of drawings and sketches to encourage people to identify vulnerable areas, critical infrastructure and possible adaptation options.
6. Concrete demonstration of properly working adaptation measures through demonstration sites at the local level.
7. Concrete demonstration of measures that can improve adaptation capacity and competiveness of private companies.

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