

Tools & Measures

Findings and conclusions from the Cluster projects' adaptation tools and measures

Executive Summary



EXECUTIVE SUMMARY

Background

There is a general scientific and political agreement that climate change is happening and that the impacts could have severe consequences for human and natural systems (IPCC 2007). Regionally tailored strategies to adapt to climate change are required in order to manage the expected impacts. The European Union assigns the task of adaptation as a matter of joint responsibility with the Member States and regions.

SIC adapt! is a Strategic Initiative Cluster (SIC) of eight projects concerned with adaptation to the spatial impacts of climate change under the INTERREG IV B North-West Europe Programme. These transnational projects are active in seven member states in North West Europe and comprise nearly one hundred organisations including all levels of public authorities, scientific institutions, non-profit and private organisations. The constituent Cluster projects are focussed on dealing with the effects of climate change and the development of possible adaptation strategies with the intention of finding sustainable, cost-efficient, good-practice solutions across four action fields:

- Built environment (urban and regional),
- Water environment (rivers, urban water management, coastal / marine),
- Natural environment (forest / nature / agriculture) and
- Social environment (society / behaviour change).

The Cluster Expert Board (CEB) brings together representatives from a diverse range of organisations with the aim to provide effective knowledge transfer from the local / regional level (responsible for actual implementation of adaptation measures) to the national / EU level (responsible for the strategic framework) and vice versa in order to align these approaches. The expert participants were nominated by Cluster projects, from allied projects, from the scientific community and policy makers respectively. The CEB is scheduled to meet once a year to share views and expertise and to discuss the interim results of the Cluster. The initial CEB meeting was held in Holzwickede / Dortmund, Germany in June 2011 with second (CEB2) meeting planned for June 2012 in Brussels.

To date, the main activities of the Cluster have been to:

- compile and compare selected adaptation tools and measures developed and implemented by the eight Cluster projects – categorised by purpose, spatial scope, technical outline, target group, applicability and various other attributes,
- reflect upon the findings by analysing those tools and measures during the 1st CEB meeting,
- set up the basis for the *SIC adapt!* knowledge platform (containing a compilation of experts, tools and measures) and
- prepare key messages as basis for policy recommendations (in preparation for the second phase of Cluster activities).

This paper 'Tools & Measures – Findings and conclusions' is the output resulting from the first phase of Cluster activities and comprises:

- the updated Discussion Paper 'Tools & Measures' prepared in advance of the first Cluster Expert Board meeting (Part I),
- a documentation of results from the CEB1 meeting (Part II) and
- the catalogues of the selected 60 tools and 45 measures (Appendices T and M).

The paper will be sent out to all CEB1 participants in order to ensure that the results reach the Cluster projects' to inform their on-going work. Key messages will be also communicated to a wider target group, in preparation for the second phase of the Cluster's activities which is focussed on policy recommendations.

Results

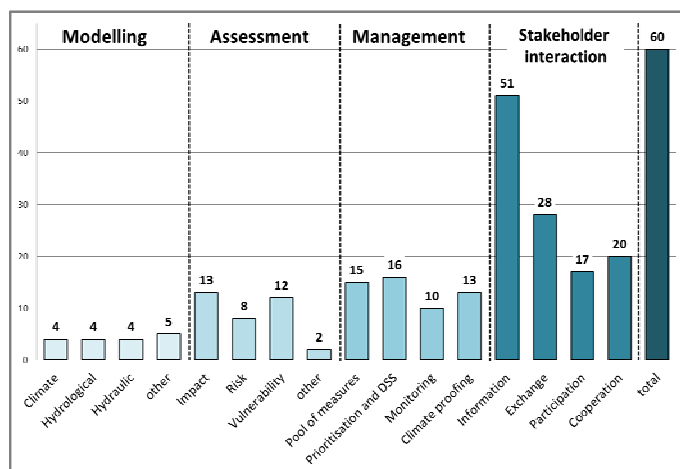


Figure 1 Purpose of the selected adaptation tools

The analysis revealed a broad range of tools and measures in use or in development by the Cluster projects. Their scope is wide ranging and covers different

- modelling,
- assessment,
- management and
- stakeholder interaction tools as well as
- practical solutions on how to adapt to climate change at local and regional level (adaptation measures).

Based on collated information the direct applicability or transferability after modification was discussed at CEB1 with reference to the distinct action fields, the spatial scope and the target groups.

Modelling and mapping tools are important and necessary for providing basic information. It was concluded that there is already a wealth of experience in this field and that the development of modelling tools is not in the main focus of the Cluster projects. They instead concentrate on the practical application of already existing (and partly approved) modelling tools. On this, the INTERREG programme can make significant contributions as

- harmonisation of modelling is needed e.g. within river catchments across borders / regions and
- cross-sectoral agreements are needed which (climate) scenarios are used.

With respect to assessment tools it became obvious that in practice vulnerability assessments are the biggest challenge. The analysed management tools show a broad range of purpose and are of significant relevance to the Cluster projects. These employ INTERREG funding to further develop, apply and test management tools with the aim of gaining practical experience and to assist with the effective implementation of adaptation measures. It was concluded that it is important to integrate the adaptation to climate change into existing and already approved (planning) processes rather than introducing totally new processes. This was especially true for the natural environment action field: It was agreed that additional monitoring of effects and outcome is needed given that the normal duration of projects is often too short.

Regarding stakeholder interaction tools it was concluded that tools that improve information, exchange, participation and cooperation are most important. One of the primary challenges of climate change adaptation is increasing adaptive capacity and therefore institutional change is essential and needs to be initiated and supported. The rather technical tools in the built, water and natural environment action fields should therefore always comprise elements suitable for

- awareness raising,
- creating knowledge,
- knowledge transfer,
- activation of stakeholders and
- reaching actors.

In addition to the discussion on tools it was agreed that measures exclusively for the purpose of adapting to climate change effects are scarce. Instead, it was suggested that the actual implementation of adaptation measures could be fostered by combining measures for different purposes and using windows of opportunities. Therefore adaptation to climate change will be most successful if linked to ongoing activities and fed into routine processes.

When considering the built environment it was concluded that it is extremely important to highlight an added value of adaptation measures for urban and regional development. Multidisciplinary measures – although more difficult in planning, coordination and implementation – may be best suited to include the issue of climate change adaptation and a focus on multifunctional landuse may help to actually implement adaptation measures.

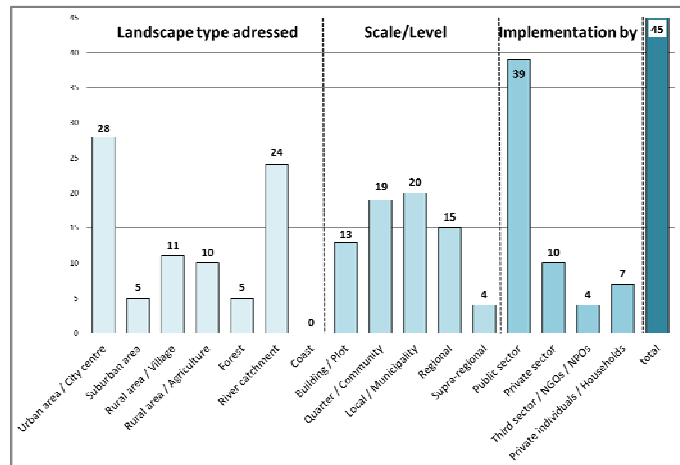


Figure 2 Purpose of the selected adaptation measures

Initial Conclusions

1. Climate change adaptation will only be successful and effective if the development of technical adaptation tools and measures includes stakeholders as part of the process. Particular focus needs to be given to vulnerable groups and to building institutional capacity to develop and implement effective adaptation strategies.
2. The main challenges lie in improving communication, facilitating organisational change and increasing institutional capacity and more specifically in a better coordination and cooperation between:
 - a) the different (sectoral) planning disciplines and
 - b) the distinct spatial scopes – especially between the regional, district and local level.
3. Special attention needs to be paid to the local and neighbourhood dimension of climate change and to the target groups of small and medium enterprises (SMEs), as well as smaller communities and actors that are hard to engage.
4. The emphasis on uncertainties within the context of climate change – often highlighted in academic debate – should not be considered an obstacle as planners are familiar to planning for the future without knowing exactly what that future will hold.
5. The Cluster cross-project exchange mechanism should be used to expand on certain key topics. Those could be action field related topics like:
 - Heat and bio-climatic stress in urban areas (Built environment),
 - Impacts of flash floods and possible counteractive measures (Water environment) and
 - Multifunctional land-use: approaches – experiences – recommendations (Natural environment)
 and more general topics like:
 - vulnerability assessment: procedures – experiences – recommendations and
 - climate proofing: procedures – experiences – recommendations.

The full paper 'Tools & Measures – Findings and conclusions' including all appendices can be downloaded from the SIC adapt! webpage at <http://www.sic-adapt.eu/download.html>


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