Context

Policy context

The Norwegian Climate Adaptation Programme was established in 2007 to coordinate national efforts in adaptation. In 2008, the government released a five year adaptation work programme, setting out goals and associated measures to be addressed between 2009 and 2013, including assessing Norway’s current and future climate vulnerability. This led to the first comprehensive, systematic review of climate change impacts, vulnerability and adaptation needs in the country. The resulting report, ‘Adapting to a Changing Climate’ along with associated sub-assessments, provided a framework for identifying further adaptation actions to be taken at different levels and by different actors. Norway’s 2013 White Paper on adaptation ‘Climate adaptation in Norway’ serves as the Norwegian Adaptation Strategy, and provides the overall policy framework for adaptation in Norway. It emphasises principles and priorities such as: adaptation as a shared responsibility, integrating adaptation in all relevant areas and using the precautionary principle for adaptation planning and decision-making. The White Paper also addressed the need for coordination and efforts to strengthen the adaptation knowledge base and adaptive capacity, particularly at the local level. Together, these constitute the framework within which adaptation actions are implemented, assessments are undertaken, and lessons are learned and fed into relevant policy processes. Norway does not have a formal M&E system for adaptation, but uses existing systems for tracking progress. The emphasis is on adaptation as a continuous learning process.

Purpose of the M&E (learn-by-doing) system

The purpose of the M&E system is to learn what is working in climate change adaptation, why, and inform policy decisions so that they are relevant. This is achieved through a relatively informal learning-by-doing system comprised of surveys with municipalities, research, pilot projects, and stakeholder involvement and dialogue (see figure 1). The results and lessons from these processes are captured in regular national vulnerability and adaptation assessments, which take stock of Norway’s progress in adapting to climate change. The initial vulnerability assessment from 2010 will serve as a basis for future assessments.

Level of application and aggregation

The regular national vulnerability and adaptation assessments are conducted at the country-level every five to eight years, linked to the global assessments of the Intergovernmental Panel on Climate Change (IPCC). Many of the adaptation activities and experiences reflected in the assessments are undertaken at the sub-national level, through individual projects, planning processes and dialogues in Norway’s 428 municipalities.

Status as of October 2013

Norway’s first comprehensive national assessment was released in 2010, although learning around adaptation had started several years earlier, around 2005.
Process

- **Institutional arrangements**

Norway’s Climate Change Adaptation Programme is coordinated by an inter-ministerial group headed by the Ministry of the Environment (which is responsible for Norway’s climate change policies). As of 1 January 2014, The Norwegian Environment Agency will support the Ministry of the Environment in its adaptation work. The regular national vulnerability and adaptation assessments are prepared by an expert committee appointed by the government and representing a broad range of sectors and levels of decision-making in Norwegian society.

- **Establishment process**

Adaptation action in Norway has followed two tracks. The first track has focused on building adaptation as a new policy area through formal processes such as the establishment of the inter-ministerial coordination group in 2007, the five year work plan in 2008 and the national vulnerability assessment in 2010. The outcome of these processes has been integrated into the 2013 national adaptation strategy. The second track has focused on building adaptive capacity, particularly at the municipality level. This work was initially organised through a five year project, housed in the Directorate for Civil Protection and Emergency Planning. This involved working closely with counties and municipalities that had already begun their adaptation processes and launching several pilot initiatives that could eventually be scaled up to the national level. An example of the latter was a series of local initiatives focused on the provision of climate services, which subsequently led to the establishment of a national center for climate services. This project approach allowed for the flexibility needed to track and understand early progress on adaptation. Experiences from the initial five year period have been fed into the policy formulation process and have demonstrated the value in a learning-driven approach to M&E, where progress in adaptation was measured in terms of acquiring and applying knowledge on how to adapt.

- **Implementation process**

Learning on adaptation is facilitated through activities that build on ongoing initiatives and procedures. For example, the Cities of the Future network, which was established to support climate change planning in 13 of Norway’s largest cities and towns, adopted adaptation as one of its five core areas of work. This has provided a platform for sharing lessons on how different actors are adapting to climate change and what is needed to support it. Climate change adaptation is also automatically integrated into the regular reporting procedures of all government spending, associated with the annual budget cycle, ensuring that funds are spent in accordance with intended purposes. This ensures that implementing agencies are given the mandate and funds to work on adaptation. In addition to reviewing the budget prioritization and assessing whether goals are met, the reporting also provides a picture of the range of adaptation activities underway and the progress being made in their implementation, thereby adding to the pool of information about adaptation work in Norway. Further, quantitative surveys focusing on climate change adaptation at the municipality level have been undertaken every 5 – 10 years (2007, 2011 to date) to understand progress in building adaptive capacity.

The lessons from the municipal surveys, research, pilot actions, and continued consultation with different actors feed into the regular national-level vulnerability and adaptation assessments, as depicted in Figure 1 below. While some of the components of the learning system such as the annual budgetary assessments and municipality surveys are done on a regular basis, there is no overarching framework or schedule for implementing the adaptation learning system. Rather, emphasis is put on taking advantage of opportunities (for dialogue, awareness raising and collaboration) as they arise and capture the learning that results from these opportunities so they can easily be fed into the national assessment process.

Figure 1 Components which feed into the regular national-level vulnerability and adaptation assessments
Approach

This is a learning-by-doing system, where climate change actions are implemented and lessons are integrated into subsequent policy and programme decisions. It relies on the use of both formal (structured surveys, research) and informal (dialogues, network support) means of gathering lessons to understand the results of adaptation actions. This learning informs both the development of policies that respond to needs on the ground, particularly at the municipality level, and the regular national vulnerability and adaptation assessments. The 2010 assessment analysed vulnerability in terms of: a) exposure to current and future climate, and b) adaptive capacity, which was understood in terms of institutional capacity, availability of human and financial resources, knowledge base, and ability to prioritize adaptation action. Every effort is made to avoid creating parallel structures and processes that over-burden municipalities. Emphasis is given to stakeholder dialogue when developing the means, methods and tools that support adaptation so that insights into how and why adaptation is happening can be captured and inform subsequent work.

Indicators

Indicators are only used to a limited extent in Norway’s system. A high level indicator related to the national goal for climate change adaptation – ‘Society will prepare and adapt to climate change’ – is under development.

Data and information requirements

The data, information and knowledge used in Norway’s system come in different formats and from a variety of sources, depending on the mechanism used to capture learning on adaptation. Annual budget cycle reporting, whereby ministries (from the bottom-up) report on achievements made in meeting set goals, provides a picture of some of the adaptation-related activities being implemented on the ground. Structured, quantitative municipal surveys focusing on adaptation provide a basis for understanding progress different municipalities have made in integrating adaptation into their planning processes. Formal and informal consultations and dialogues associated with the implementation of climate change activities – such as the delivery of climate services, local adaptation planning, development of green structures – serve as critical opportunities for understanding what is happening on the ground, why certain measures work and others do not, and how this can be reflected in policy. This can all be complemented with commissioned research on a whole range of climate impact and adaptation topics – from managing surface water runoff to preparing for sea level rise – that can influence discussions and future planning. Downscaled climate projections are also a part of the data and information requirements for the learning system. Current projections were done in 2009 for the first national vulnerability assessment.

Output and reporting

The regular and systematic output associated with the Norwegian system is the country-level vulnerability and adaptation assessment, which is linked to the timing of the IPCC assessments process. Otherwise, lessons from various initiatives are captured in guidebooks, thematic reports, and other documents, all of which are made available through the national online adaptation knowledge sharing platform: www.klimatilpasning.no.

Resources needed

Every effort is made to minimize reporting burdens on municipalities. Using existing structures for assessing and reporting adap-
tation work, including knowledge sharing networks, has meant that there has been little need for extra resources to undertake adaptation M&E. The national vulnerability and needs assessment, which was undertaken in 2009-2010, had a total budget of 20 million kroner (approximately USD 4 million), which included costs for scenario downscaling and other commissioned research.

Lessons to date

Lessons from Norway’s system for tracking progress in adaptation to date focus on allowing for flexibility, building on existing structures and processes, and being opportunistic when it comes to sharing knowledge and capturing learning. In terms of flexibility, Norway’s process in which adaptation assessments, actions and policy developments are not necessarily sequential but can take place along parallel tracks, and feed into each other along the way, allows for more responsive policy development. Existing platforms and networks for knowledge exchange and learning, both online and offline, are used and reinforced through efforts to learn about adaptation, which allows for efficient use of resources and stakeholder buy-in, as additional burdens were minimized. A proactive, opportunistic approach to gathering learning, whether through participation at a formal meeting or informal discussions with municipal authorities, has allowed decision-makers to understand what is happening on the ground and effectively validate what is presented in assessments and policy frameworks.

For further information

- **Contact persons in Norway**
  
  **Mrs. Marianne Karlsen,**
  Ministry of Environment
  marianne.karlsen@md.dep.no

  **Ms. Tonje Hulbak Roland,**
  Ministry of Environment
  tonje-hulbak.roland@md.dep.no

- **References**
  

  NOU (2010:10). Adaptation to Changing Climate: Norway’s vulnerability and the need to adapt to the impacts of climate change.

This factsheet is part of a collection of factsheets and an accompanying report which can be obtained at [AdaptationCommunity.net](http://AdaptationCommunity.net).

Published by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Registered offices Bonn and Eschborn, Germany
Effective Adaptation Finance (M+E Adapt) Dag-Hammarskjöld-Weg 1-5 65760 Eschborn, Germany T +49 61 96 79-0 F +49 61 96 79-11 15 www.giz.de

On behalf of Federal Ministry for Economic Cooperation and Development (BMZ)
Division Climate Policy and Climate Financing
Addresses of the BMZ offices
  
  **BMZ Bonn**
  Dahliamannstraße 4
  53113 Bonn, Germany
  T +49 228 99 535-0
  F +49 228 99 535-3500
  poststelle@bmz.bund.de
  www.bmz.de

  **BMZ Berlin**
  Stresemannstraße 94
  10963 Berlin, Germany
  T +49 30 18 535-0
  F +49 30 18 535-2501

As at July 2014

GIZ is responsible for the content of this publication.