



Adaptive Capacity to Climate Change May be Overestimated

Norwegian researchers have recently analysed the wider social impacts of climate change in Europe. They have questioned the current complacency regarding climate change impacts, vulnerability, and ability to adapt in Europe. The study concluded that greater attention needs to be paid to the social context and consequences of climate change, and to possible adaptation strategies.

Climate change is one of the most pressing environmental, social and economic threats facing the planet. The European Commission has taken many climate-related initiatives since 1991, when it issued the first Community strategy to limit carbon dioxide (CO₂) emissions and improve energy efficiency. Nevertheless, it is very likely that Europe may have to face the effects of climate change in the near future, including the alteration of natural ecosystems, changing agricultural, forestry and fisheries productivity, increased risk of floods, erosion, and wetland loss. These possible climate change impacts are not expected to be the same and of the same magnitude all over Europe. It appears that the southern part of Europe may experience stronger and more negative effects than the North. Most European assessments of climate change impacts have focused on different economical sectors and ecosystems, while very little is known about the potential effects of climate change on European society. Furthermore, the main focus has been on technological adaptation, and little attention has been paid to the process of climate change adaptation.

The current study analysed recent studies of climate change impacts, vulnerability and adaptation in Norway, in order to identify the wider social impacts that climate change may have in Europe.

Three main lessons were drawn from the analysed studies:

1. The potential indirect effects of climate change (for example, changes in demand for goods and services in one sector resulting from climate change may also affect other sectors) may be more important than the direct, sectoral effects (for example, in agriculture, future warming may lead to a longer growing season, thus affecting agricultural yields).
2. There are marked differences in social vulnerability across sectors, regions and communities.
3. High national levels of adaptive capacity may mask the barriers and constrains to adaptation, particularly among those who are more vulnerable to climate change. These include communities or individuals living in marginal areas or operating under marginal conditions.

Based on these findings and the results of the reported possible effects of climate change in Norway, the authors question complacency in Norway and other European countries regarding climate change impacts and the capacity to adapt to these changes.

The research shows that the relationship between adaptive capacity and the actual capacity to adapt to climate change impacts is complex. The authors argue that this is due to the fact that actual adaptation depends on a number of institutional, economic, social, and cultural conditions. Therefore, adaptation to climate change may be neither inevitable nor automatic, even if impacts and adaptation options are well known and widely documented. The study presents different examples in Norway where the actual adaptation capacity was not as expected. These cases suggest that in many sectors or areas, adaptation is unlikely to occur without institutional and financial support.

Overall, the authors conclude that in order to evaluate and address climate change in Europe, it is necessary to focus on the social context and to better understand the indirect effects, critical interactions, relative vulnerabilities, and the actual adaptation capacity upon climate change impacts.

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