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National
Climate Change Adaptation
Research Facility



National Climate Change Adaptation Research Plan: Social, Economic and Institutional Dimensions of Climate Change

Summary

A National Climate Change Adaptation Research Plan has been developed to identify the research required to enhance understanding of the social, economic and institutional dimensions of climate change adaptation in Australia. It outlines priority areas for research that can better inform decisions about adaptation to ensure effective, efficient and equitable outcomes.

Its primary purpose is to prioritise the research agenda for the next 5–7 years in the area of social, economic and institutional dimensions of climate change adaptation. This research will contribute to adaptation decisions and investments by Australia's governments, communities, businesses, organisations and residents.

Social, economic and institutional considerations are central to adaptation to climate change in Australia, regardless of the sector, location or social group concerned.

Efficient, effective and equitable action to avoid or minimise the impacts of climate change requires some knowledge of the things that are valued by individuals and social groups, such as employment, good health, and the natural environment, and the ways in which climate change puts these at risk.

It also requires information about what actions are possible so as to avoid these impacts, including their cost, potential effects on other people, places, industries, sectors and future generations, and the barriers to their implementation. Yet there is a paucity of knowledge about these and other human dimensions of adaptation.

There is therefore a need for research that can develop a theoretical and empirical basis to inform decision-making about adaptation by individuals, households, businesses, community groups and governments.

While past climate change research and policy development in Australia has largely focused on the biophysical dimensions of climate change, this Plan will expand the nation's research effort by generating information about:

- the risks posed to (and new opportunities generated for) social and economic systems by climate change
- how social, economic and institutional factors can contribute to, or hinder, effective climate change adaptation responses.

The Plan identifies three broad categories of information necessary to enhance decision making about adaptation in Australia. There is a need for research that advances understanding of:

1. The vulnerability and adaptive capacity of individuals, communities, businesses and industries;
2. The barriers and limits to adaptation;
3. The governance and institutional arrangements necessary to ensure that adaptation is as effective, efficient and equitable as possible.

Within these broad categories, the Plan identifies a number of specific priority research topics.

This document provides a summary of this Plan; the full Plan is available online at www.nccarf.edu.au

This Plan identifies critical gaps in the information needed to address the full range of issues arising from the potential impacts of climate change on Australia's social and economic systems and institutions.



Priority research topics for the social, economic and institutional dimensions of climate change adaptation

The development and application of methods for assessing vulnerability and adaptive capacity that engage and harness the knowledge and skills of individuals, households, communities, businesses, industries and governments.

Identification of the capacity of individuals, households, communities, businesses, industries and governments to adapt to climate change, and of options to enhance this capacity.

Understanding the equity dimensions of current and future vulnerability and adaptation, including:

- the issues for specific population groups who have particular vulnerabilities and limited capacity to adapt by virtue of their socio-economic status, skills, livelihood, cultural or linguistic background, or other characteristics such as age;
- understanding the interaction between existing stressors and climate change, and the implications of this interaction for vulnerability and adaptive capacity.

Understanding the cognitive and affective dimensions of adaptation, including:

- the knowledge, perceptions and emotional responses of people and groups regarding climate risks;
- the time horizons of people and groups who make decisions about adaptation;
- the degree to which people and groups feel empowered to adapt.

Understanding enablers and barriers to collective action, including:

- how shared symbols, beliefs and practices enable or constrain adaptation;
- how economic factors, including distribution of capital and investment, enable or constrain adaptation;
- how social practices and opportunities enable or constrain adaptation;
- how the distribution of power in decision-making enables or constrains adaptation;
- what differing types of decision-makers consider to be the goals of adaptation (e.g., what defines 'successful' adaptation in their eyes);
- what and how differing types of decision-makers know about the vulnerability of others.

Measures to value adaptation. Understanding how to assess and value adaptations to climate change, including the value of opportunity costs, avoided damages, residual impacts, and benefits gained. This may involve:

- reviewing and determining the suite of assessment and valuation methodologies that are most appropriate for use by Australian adaptation policy-makers and decision-makers;
- identifying the limits to the use of these methodologies;
- testing the identified methodologies against relevant current policy in Australia.

Analysis of existing responses from public and private institutions to climate change risks, and assessment of proposals to improve the effectiveness, efficiency and equity of future responses, including:

- analysis of responses in the public, private and third (civil society) sectors;
- analysis of the distribution of roles, responsibilities and capacities of different levels of government and cross-jurisdictional bodies.

Understanding how laws and legal institutions, including regulatory instruments, support or impede adaptation planning and practice, and identifying reforms needed to reduce obstacles.

Assessing the potential for, and limits to, market-based adaptation measures, including insurance markets.

Developing the Plan

The writing team for this Plan comprised Australia's leading professionals researching the social, economic and institutional dimensions of climate change. The team was led by Jon Barnett and included Stephen Dovers, Stephen Hatfield-Dodds, Jan McDonald, Rohan Nelson and Stephen Waller.

Its development followed a national workshop for key stakeholders and researchers, attended by more than 40 participants from a wide range of stakeholder groups including: representatives from the Commonwealth, state and territory governments, local government, insurance companies, non-government organisations, and researchers from universities and the CSIRO.

The National Climate Change Adaptation Research Facility coordinated the development of this Plan, which was then widely disseminated in draft form. A consultation workshop and a formal period of review of the draft Plan ensured that all interested parties were able to contribute comments.

Criteria for prioritising research questions

The writing team identified 16 priority research areas. The nine topics detailed on the previous page were selected as the most immediate priorities.

These were selected using the following criteria.

- Severity of impact/degree of benefit
- Immediacy of required intervention/response
- Need to change current intervention/practicality of intervention
- Potential for co-benefit
- Potential to address multiple, including cross-sectoral issues
- Equity considerations

A coordinated national approach to research into the social, economic and institutional dimensions of climate change in Australia

The implementation of the National Climate Change Adaptation Research Plan for Social, Economic and Institutional Dimensions will be supported by the Adaptation Research Network for Social, Economic and Institutional Dimensions, which is funded by the Australian Government via the National Climate Change Adaptation Research Facility. This Network is hosted by the University of Melbourne, and convened by Professor Jon Barnett.

The aim of both the Research Plan and the Network is to facilitate a coordinated research effort to address the information needs of decision-makers with respect to the social, economic and institutional dimensions of adaptation to climate change. This effort will include the identification of sources of research funding and the communication of research outcomes to inform decision making by government, industry and communities.

The Australian Government Department of Climate Change and Energy Efficiency has made an initial investment of \$5m for research addressing priorities in this Plan. This funding will be made available through the Climate Adaptation Research Grants Program and funds will be allocated via an open call for expressions of interest.



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How to get involved: key contacts

If you would like further information about the National Climate Change Adaptation Research Plan for Social, Economic and Institutional Dimensions please contact:

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