

# Overcoming cross-scale challenges to climate change adaptation in local government: A focus on Australia

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## Abstract

This paper aims to identify key cross-scale challenges to planned adaptation within the context of local government in Australia, and suggest enabling actions to overcome such challenges. Many of the impacts of climate change and variability have or will be experienced at the local level. Local governments are embedded in a larger governance context that has the potential to limit the effectiveness of planned adaptation initiatives on the ground. This study argues that research on constraints and barriers to adaptation must place greater attention in understanding the broader multi-governance system and cross-scale constraints that shape adaptation at the local government scale. The study identified seven key enabling actions for overcoming cross-scale challenges faced by local governments in Australia when undertaking climate change adaptation planning and implementation.

A central conclusion of this study is that a cooperative and collaborative approach is needed where joint recognition of the scale of the issue and its inherent cross-scale complexities are realised. Many of the barriers or constraints to adaptation planning are interlinked, requiring a whole government approach to adaptation planning. The research suggests a stronger role at the state and national level is required for adaptation to be facilitated and supported at the local level.

**Key words:** *cross-scale, challenges, barriers, adaptation, local government, Australia, multi-governance*

# 1 Introduction

There is consensus amongst the scientific community that global climate change is a physical reality (IPCC, 2007). Superimposed on these changes are seasonal, annual and inter-annual variabilities, producing a complex planning environment. Many of the impacts of climate change and variability such as droughts, flooding, storm surges and sea level rise have or will be experienced at the local level; requiring a wide range of local interventions in response (Corfee-Morlot et al., 2009). As a result, local governments in Australia and overseas have initiated plans to adapt to these impacts. However, the pathway to planning and implementation of adaptation is not free of challenges or constraints which can manifest from within and externally to the responsible organisation. Such challenges can take various forms: including capacity and financial constraints, competing priorities, planning time horizons exceeding political lives of decision makers, and the absence of overarching legislative frameworks that integrates climate change (Mukheibir & Ziervogel, 2007; Smith et al., 2008).

Local government in Australia is embedded in a larger multi-scale governance context comprising range of government and non-government actors influencing the adaptation decision-making space. Thus, adaptation planning within local government is dependent on the extent of adaptation occurring at various spatial scales and within sectors, and as Adger et al. (2008) suggests, the dependency of adaptation decisions on scale and agency may give rise to hidden limits to adaptation. Literature on adaptation has identified common challenges to adaptation planning within local government in Australia which include leadership, competing priorities, planning process, information constraints and institutional constraints (Measham et al., 2011). Similar insights have been drawn from international studies (Dessai S and Lu X, 2005). Although these studies have recognised the cross-scale integration and collaboration needs, many of these studies have focused largely on local government itself and internal challenges, rather than understanding the broader multi-governance system and cross-scale challenges that shape adaptation at the local government scale (Mukheibir et al., 2013). This study aims to contribute to filling this gap by identifying a set of critical cross-scale challenges to adaptation planning and implementation by local government in Australia, and to understand the underlying processes and structures that give rise to these barriers. It also aims to suggest practical options for overcoming such challenges.

Australia has a three tier governance structure, comprising federal, state and local governments. Local government is not covered by the Australian constitution, and is effectively an arm of state government. There is currently no over-arching national policy in the public domain that guides adaptation at the state level. It is thus pertinent to understand and address the critical cross-scale challenges that may limit effective adaptation planning and implementation within local government (Burch, 2010; Withycombe, 2009).

## 2 Multi-level governance for supporting adaptation within local government

### 2.1 Theoretical framework

In Australia various academic and government bodies have examined the contextual challenges to adaptation faced by local government through in-depth

case studies and consultation with diverse stakeholders involved in adaptation planning (Measham et al., 2011; Smith et al., 2008). General consensus prevails that adaptation by local government is a 'shared responsibility' which must be supported through collaborative efforts across the three levels of Government (i.e., local, state and federal) (Withycombe, 2009). It also asserts that key challenges stem from the state and federal policy environment in which local government operates; for example there is poor clarity around the role of local government in addressing climate change (ibid). In adopting a systems approach to understanding barriers within Coastal Councils in Sydney, Australia, Smith et al. (2008) argue that the diversity of networks and the complexity of existing governance arrangements hinder attempts to draw clear lines of responsibility and limits the freedom-of-movement of individual organisations. A detailed study of adaptation for coastal cities and infrastructures in Australia highlights the absence of effective mechanisms for cross-scale coordination of adaptation planning within the coastal zones (Department of Climate Change, 2009).

Burch (2010) concluded that effective adaptation planning in Canadian councils is less linked to additional resources (e.g. technical, financial, human resources) but rather to greater facilitation through re-working interconnected structures and processes. These included institutional structures, policy making procedures and organisational cultures (Burch, 2010). Many of these barriers are likely to be shaped by processes and actors working at scales outside of local government. The literature suggests that the most frequent cross-scale barriers that are experienced relate to policy and governance arrangements, followed by operational barriers that often arise within local government but may be driven by deeper external processes.

Socio-institutional challenges to adaptation planning and implementation (e.g. regulatory structures and social norms associated with the rules in use) often arise through the larger governance context in which the system is embedded (Adger et al., 2005). This is largely because planned proactive adaptation is a collective process, and is contingent on the interaction of organisations, together with formal (e.g. laws) and informal institutions (e.g. norms), at various spatial scales. Adger (2001, p.924) argues that "the diversity of impacts of climate change means that the most appropriate adaptation responses will often be multi-level responses". Theories from multi-level governance are used to describe the management of collective issues, the various stakeholders involved and the processes used to influence adaptation actions and outcomes (van de Meene et al., 2011). It emphasises the significance of interactions between structures and processes across both horizontal levels (i.e., cross – level between other local councils or a conglomerate of councils such as the Regional Organisation of Councils) and vertical scales (i.e., cross-scale between different tiers of government) (Bisaro et al., 2010).

Scale issues are often linked with political issues in which different actors strengthen or weaken cross-scale linkages to further their own interests. For example, Preston et al. (2008) comment on the complex top-down governance arrangements that prevail in Australia which limits the entitlements of local government in relation to planning and risk management reforms.

Perspectives from Earth System Governance frameworks are also helpful in our understanding of multi-governance issues and they aim to understand the complex relations between global transformations of social and natural systems, and also illuminate key characteristics to consider when analysing multi-level governance (Biermann, 2007; Biermann et al., 2010). The perspective draws attention to the need to consider issues of power, norms, scale and knowledge which cuts across the five problem areas of architecture, agency, adaptiveness, accountability, allocation and access.

The multi-level governance approach to adaptation planning therefore supports institutional arrangements that facilitates cross-scale coordination and enhances flexibility. Understanding how local government and other agencies utilise their agency to access resources and pursue various adaptation strategies to overcome existing challenges is also relevant. The significance of the interactions between actors, processes, structures and influences is also noted in which the role of power of actors operating at different scales must be recognised.

## 2.2 Conceptual framework

The work by Moser and Ekstrom (2010) provides a useful diagnostic framework for characterising and organising constraints at distinct phases of the adaptation process across space and time, and locates possible points of intervention to overcome a given constraint. Moreover, it questions how best to support adaptation at all levels of decision-making; and thereby improve the allocation of resources and strategically design processes to address the barriers. Moreover, the framework draws on theories of coupled socio-ecological systems thinking as well as multi-level governance theories, by paying attention to scale, underlying contextual processes, structures etc., enabling a flexible approach to examining barriers (Cash et al., 2006; Gunderson & Holling, 2002).

In summary, the process reported in this paper can be described as follows (based on Moser & Ekstrom 2010):

### ***Step 1: Process of Adaptation***

This step organised the challenges according to the three common process phases of adaptation which included: understanding the problem, planning adaptation actions and managing the implementation of selected options. For the purpose of this study, greater attention was placed on understanding the problem and the planning phase as many of the target councils had developed an adaptation plan but not yet moved onto implementation, due to the challenges discussed later. The understanding stage involves problem detection, awareness raising, information gathering and use to deepen understanding of climatic impacts and the need to adapt. The planning stage builds on the understanding, and includes the development of adaptation responses. A question that is applied to every stage in the process includes: *what can hinder, stop, delay or divert the adaptation decision-making process?*

### ***Step 2: Structural Elements of Adaptation***

This step emphasises the significance of context and aims to understand why a given challenge had arisen in the adaptation process by considering the cross-scale context of the governance system. This context which includes mediating processes such as power, values and structures, guides the research to examine how local government collaborates and adapts through the multi-governance system (Bosomworth & Handmer, 2008). In establishing the sources of the constraints, Phase 2 asks the following questions: *What causes the impediments? How do the actors, context and the system of concern contribute to the constraints?*

### ***Step 3: Locating possible points of intervention***

The final step considers the spatial/jurisdictional and temporal origins of the challenges relative to the location of the actor. Based on the understanding gained through identifying the challenges, enabling actions are developed and prioritised, specifying the actors/agents to drive the strategy. In this phase, responses to the following questions are sought: *Who is best placed to drive this action? What resources are required? When can it start and how long will it take?*

*What can get in the way of successful implementation? What will success look like?*

### **3 Data and Methods**

The study was designed to be end-user focused by engaging stakeholders from all tiers of government at the various stages of the study. The study was conducted over six months and adopted a mixed methods social research approach. The research had a national focus and involved participants from 42 organisations with representation from each state and territory, and each tier of government. The research undertaken was covered by the University of Technology Sydney Ethics Guidelines, and all participants were advised that their contributions would be confidential.

In designing the research, we drew on the framework by Moser and Ekstrom (2010) and considered challenges as they arose at the understanding and planning stages of the climate adaptation process. Through the workshops and interviews, we also considered the structural elements that helped contribute to establishing the challenges, and explored points of possible intervention, or 'enabling actions' which could each help overcome one or more challenges.

The research design set out to ensure that the selection of stakeholders would include perspectives from different cross-scale agencies. The research involved the following activities :

- Semi-structured key informant interviews with twenty national government agencies involved in adaptation planning with local government. Interview transcripts were analysed using a qualitative software tool.
- Case examples from five local councils across Australia demonstrating how particular cross-scale challenges had been overcome:
  - Lake Macquarie City Council - New South Wales
  - Western Australia: Peron Naturaliste Partnership
  - Cairns Regional Council - Queensland
  - Tasmania: Regional Climate Change Adaptation Project
  - Penrith City Council – New South Wales
- Workshops with various stakeholders which included:
  - Workshop 1: Identifying critical challenges and causes with local government representatives in NSW (Kuruppu et al., 2012)
  - Workshop 2: Re-prioritising challenges and identifying methods of overcoming challenges with multi-level stakeholders (Herriman et al., 2012)
  - Workshop 3: Discussion, validation and prioritisation of enabling actions to overcome cross-scale challenges with multi-level stakeholders (Mukheibir et al., 2012)

## **4 Results and Discussion**

### **4.1 Adaptation process: Challenges and their underlying causes**

By undertaking steps 1 and 2 outlined in the conceptual framework, the following five main cross-scale barriers were identified by the participants at the first workshop, and further refined at the second workshop (see Table 1):

*A poor understanding of the risks, limited access to and uncertainty of climate change impact related information.*

Before adequate adaptation planning can be undertaken, the likely impacts of projected climate change at the local level need to firstly be made available, and secondly understood (Booth, 2012; Productivity Commission, 2012). Participants asserted that the challenge to gaining this information is less about the lack of data and knowledge but more about the challenges associated with understanding what information is needed, where to find it, and how to effectively use it. Current information and guidance does not meet the requirements of some local governments, since the climate change related data collection and analysis is ad hoc (Productivity Commission, 2012). Climate projections are currently only relevant at a national and to some extent regional level. The scale of the problem has not been made relevant at the local government level, however isolated efforts are to develop fine scale climate projections to address this information gap (OEH, 2012).

Furthermore, a number of stakeholders concurred with the published literature (see Measham et al., 2011) that the poorly and inconsistently articulated problem of climate change (i.e., the science underpinning climate change and its likely impacts on communities) by the various tiers of government was a key challenge to effective adaptation response planning and overcoming the deeply held values, beliefs and climate skepticism faced by local government planners.

*An inconsistent governance structure and leadership.*

Primarily the the lack of ownership, accountability and commitment to climate adaptation at the federal and state level was raised by participants, together with the unclear roles and responsibilities for taking action. It was unclear whose responsibility it was to be taking leadership of the adaptation issue. Several local council participants noted that increased expectations were being made of local government as they were responsible for implementing many of state policies/strategies, due to the legal status of local government which makes them accountable to the various states. However, participants stressed that limited statutory protection of local government activities/initiatives were available within the context of climate adaptation (e.g. the absence of consistent sea level rise policies at the state level which local government could adopt to support their adaptation planning decisions).

Additionally, short political timeframes and cycles, which failed to coincide with adaptation planning time frames, meant that elected official were reluctant to make long term decisions, which were perceived at times to be difficult and unpopular in the short term.

Power inequalities between various tiers of government was an additional theme that was raised by several interview respondents which had hindered co-operative governance arrangements. At times, local government felt that they were an instrument of the state with less power to make the larger decisions related to adaptation. In some areas, a regional approach to adaptation planning by local government has contributed to addressing these power inequalities. The existence of an uniform national adaptation policy would also assist in ensuring that decisions between and within government agencies are not overridden by minority agendas.

*Poor co-ordination, communication between both the vertical tiers and horizontal levels of government.*

The importance of cross-scale connectivity between governments was identified as a recurring theme through all the engagement processes. The results revealed that inconsistency in governance between federal, state and local tiers of government, together with poor communication between them had resulted in a disaggregated approach to climate change adaptation.

A significant underlying cause that was identified by participants included the lack of direct contact and communication between national, state and local government; local government was mainly viewed as an extension of the state government. This inhibited collaborative policy development and the flow of adaptation funding. Participants mentioned that in some cases, adaptation programs were designed by the state for local government rather than in cooperation or conjunction with local government.

*An inconsistent problem definition and appropriate climate change adaptation framework to use for planning.*

This challenge relates to the absence of a consistent method and framework to understand vulnerability and thereby design appropriate adaptation plans. Different councils respond to climate change and go about planning in different ways. The uncertainty in how climate change impacts will manifest at the local level, as discussed above, also plays a part in this challenge.

Without a clear definition of the problem and related jurisdictional responsibilities, the legal responsibilities remain unclear. The absence of a clearly defined mandate (legal and political responsibility), especially in relation to appropriate land use zoning to incorporate climate change, results in a poorly co-ordinated planning response. It is not clear whose role it is to plan for climate change impacts, or the extent of problem.

Further, participants explained that the absence of a consistent business case framework, using cost benefit analysis for example, hindered the documentation of the necessary arguments and evidence for the political support required for decisions to be made by elected officials.

*Competing priorities due to limited operational resourcing, such as staffing and funding, to plan and implement responses.*

A consistent theme across all international and local literature, as well as being a key challenge raised by the study participants, is one of constrained resources (financial and staff) faced by local governments together with competing priorities within their diverse portfolio of responsibilities (LGSA-NSW, 2010; Measham et al., 2011; Pillora, 2010; Pillora et al., 2009). However, participants confirmed that many of these challenges are more likely to be significant in smaller and isolated local councils, rather than in larger urban councils. Whilst these are predominately issues specific to local government internal operations, support from higher tiers of government to address these challenges was expressed as being constructive. Participants argued that in some cases, the criteria for resource allocation from the state to local government is not reflective of the circumstances in the local government area and are largely based on population size rather than economic, social and government capacity. Participants identified that limitations in adaptation funding was shaped by the various methods adopted in the prioritisation of funding at different tiers of government, together with competing priorities. Additionally, participants noted that adaptation

responses often require long-term and larger sources of funding that are often unavailable within councils own discretionary income.

## **4.2 Locating points of intervention for overcoming the cross-scale challenges**

Participants in workshops and interviews demonstrated a keen interest in moving beyond problem recognition and into identifying solutions. This study focused on cross-scale interventions which could enable councils to navigate or overcome challenges, or reduce the potential impacts of the challenges on their operations/services. It was not the intention of this study to develop action plans or allocate specific responsibilities to any agency, but rather to gain an understanding of the potential strategies that would enable local governments to overcome the cross-scale challenges facing them under a changing climate, as shown in Figures 1 and 2. The process of identifying the enabling strategies was guided by step 3 in the conceptual framework. The key enabling strategies included the following:

*Build community consensus on a shared understanding of the seriousness of climate change risks and the need to act, through training and the delivery of a consistent message from all tiers of government:*

It was generally accepted by the participants that local governments are best placed to communicate the relevant climate induced impacts to the community in their area. This could be supported from higher tiers of governments through which consistent messages based on sound and accepted data and information is provided. Allowing public access to this single source of information would reduce the level of misinformation and misunderstanding.

Participants noted that by framing the adaptation response as a risk reduction and management approach such as in the case of sea level risk and storm surge damage, is likely to produce limited resistance to adaptation planning and implementation..

*Allocate and agree upon priorities, roles and responsibilities at all levels of government for addressing climate induced risks for improved co-operative governance, co-ordination and communication:*

Adaptation at the local government level is generally considered to be a 'shared responsibility' which must be supported through collaborative efforts across the three tiers of government (Productivity Commission, 2012; Withycombe, 2009) which suggests that the roles and responsibilities between the tiers of government need to be clearly clarified. The recent discussion document released by the Council of Australian Governments (COAG, 2012) outlines the responsibilities of state and local governments in this regard.

The report acknowledges that local government are responsible for a broad range of services, the administration of a range of higher tier legislation, and the management of a substantial number of assets and infrastructure, and as such they are on the frontline in dealing with the impacts of climate change (COAG, 2012). The document further proposes that state governments have the role of delivering local and regional science and information at the local and regional scale, to assist both government and private parties in assessing climate risks and adapting to climate change, to support local government in facilitating building adaptive capacity in the local community, and to ensure



that policies and regulations are consistent with state government adaptation approaches (COAG, 2012).

*Improve the national climate change adaptation framework to guide complementary state and national level policy and legislation:*

Participants in the study suggested that by linking climate adaptation to sustainability planning within local government would allow for a consistent approach to policy and legislation at all tiers of government. Several participants noted that that methods of integrating the principles of sustainability within the work of local government has been established. These serve as opportunities to integrate adaptation measures alongside sustainability interventions to produce co-benefits that will, protect public and private assets and livelihoods.

The lack of consistency in the current planning and regulatory frameworks, which are in part driven by the inconsistent definition of the climate change adaptation issue, has resulted in an uncertainty about the legal liability of local governments (Funfgeld, 2010; Mustelin, 2011; Productivity Commission, 2012). The legal liability of local governments regarding climate change adaptation matters and the processes required to manage that liability need to be clearly defined (Productivity Commission, 2012).

*Utilise effective regional mechanisms / groups and initiatives to deliver regional priorities for climate change adaptation and establish a new one where necessary:*

In addition to cross-scale responses to the challenges identified in this paper, *cross-level* collaboration in the form of *regional scale* approaches were proposed by the participants as being viable mechanisms to deliver collaborative outcomes. The case examples demonstrated that Integrated assessments and responses conducted at the *regional scale* had several advantages over national and local approaches. Firstly, reliable data was available locally, system complexity was better understood and communication was usually better. Secondly, regional groups could be organised around various climate impacts such as flooding, bushfires, drought and storm surges that extended beyond a single local council's jurisdiction. Participants mentioned that co-ordination of these initiatives was pertinent to ensure a coherent approach to enhancing resilience.

Greater coordination and collaboration among local governments could also address some of the capacity and resource constraints they face – such undertaking common activities, or joint activities through resource sharing (Productivity Commission 2012).

*Develop a consistent business case framework to support local government to prepare their own adaptation investment plans and to improve the evidence to support business/ investment decisions:*

Participants stressed that a standardised approach to assessing the costs and benefits of proposed responses to projected climate induced impacts, would provide the necessary consistency, rigour and confidence in investment decisions made by all tiers of government. They noted that this was pertinent when considering the future uncertainty of the projected impacts. Whilst there were existing risk assessment frameworks which were utilised by local government, the use of transparent cost benefit methodologies in this context had not been fully described or trialled. This

would include processes for multi-criteria decision analysis for considering non-monetised benefits and costs, as well as the setting of boundaries.

*Establish a central mechanism for data management and sharing:*

A national repository for climate impact related data to be stored was suggested by the participants. This would be made available to state and local governments, with the ability for local governments and other agencies to upload and download data and information, such as audited or peer reviewed data sets for flood mapping, sea level rise etc. Hosting such a facility at the national level would avoid trans-boundary issues. An intergovernmental committee would determine the terms of reference of such a facility and the type of information to be made available. Such dependable and peer reviewed data and information would underpin investment decisions and support internal business cases for sustainable infrastructure.

*Make effective use of existing government funds and develop new funds for adaptation, to ensure continuity in the implementation of the plans:*

The current funding approach at the national level was viewed by participants as being fragmented, without any systematic follow through. To address this, a number of suggestions were made by the participants:

- Large long term adaptation projects that are not available within local governments' own discretionary income, need to be nationally funded on a priority basis.
- Investment in existing federally funded programs that have met specific success criteria, need to be prioritised to carry them through to completion, and to avoid abandoning viable projects after the initial planning phase.
- Grant funding should be used to build capacity among end-users who will be implementing outcomes at a local level.

Some participants were of the opinion that with an improved accountability and responsibility definition as discussed above, funding had the potential to be used more effectively, with targeted focus and less overlaps. It was suggested that by framing adaptation as a sustainability risk, asset management under a changing climate could possibly be addressed under existing budget and resources.

## **5 Conclusions**

Throughout the various stakeholder engagements undertaken in this study, a strong push has emerged for local governments' responsibilities to be recognised or acknowledged at state and federal levels, and for these responsibilities to be supported by appropriate resourcing. This is supported by the fact that the impacts of climate change are felt at the local level, thus needing to be managed by local governments. While local government representatives acknowledge there are some mechanisms for support, more needs to be done to ensure a response to the impacts of climate change that balances the likely environmental, social and economic impacts that are currently emerging at the local level.

While recommendations and enabling actions are aimed at the primary end users, i.e. local government, it is recognised that these actions cannot be taken by this stakeholder group alone. A cooperative and collaborative approach is needed where joint recognition of the scale of the issue and its inherent cross-scale complexities are realised. Leadership at all level of government will be needed to ensure progress towards adaptation at the local level is achieved.

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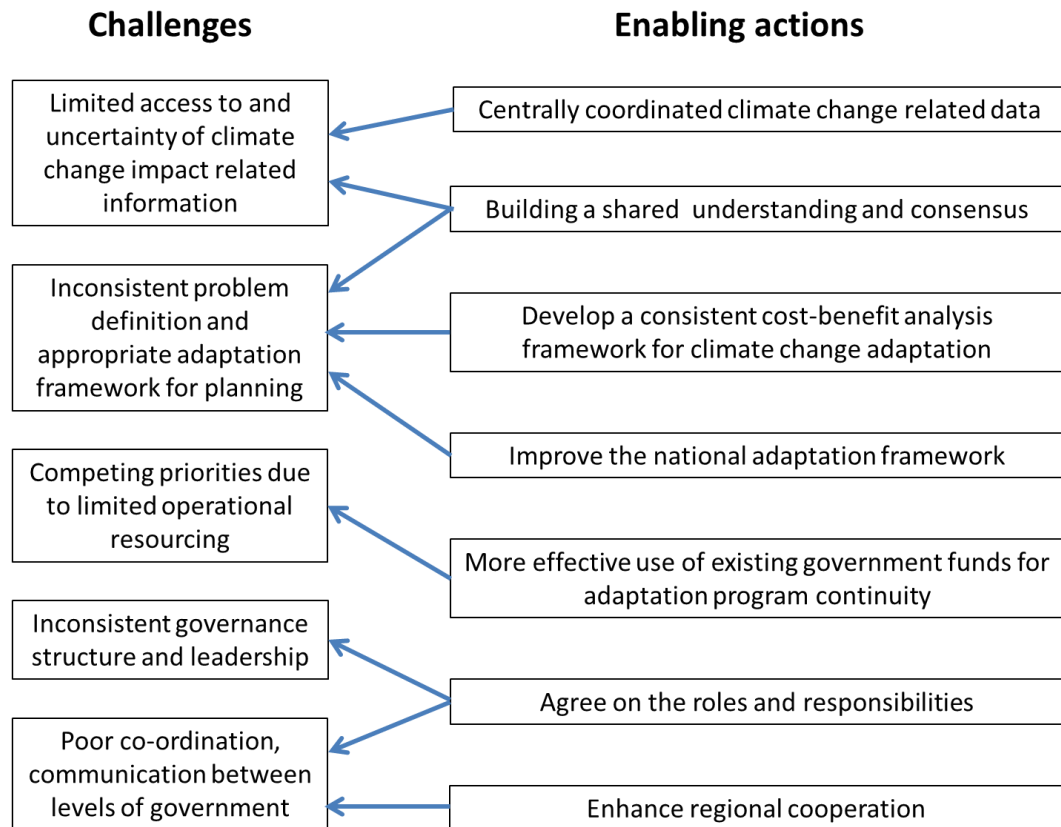
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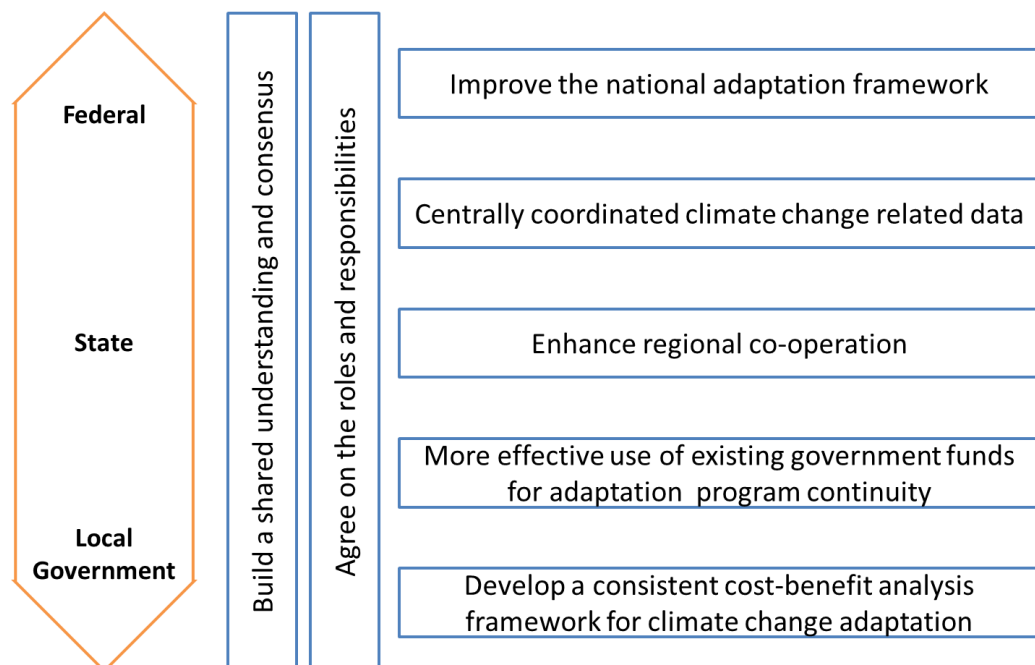
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**Figure 1: Mapping of the seven enabling actions with the challenges**



**Figure 2: Seven enabling actions and their relationship to the responsible tier of government**

**Table 1: Summarised challenges and associated causes against the three stages of the adaptation process**

| Understanding                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Planning                                                                                                                                                                                                                                                                    | Implementation & Monitoring                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>1) Lack of information and knowledge</b></p> <ul style="list-style-type: none"> <li>• No investment in the collection of data over the long term</li> <li>• Poor data sharing between tiers of government</li> <li>• Inconsistency of the available data and climate projections – lack of “certainty” of the data and availability of the “latest” data.</li> <li>• Scale of the problem has not been made relevant at the local government level</li> <li>• Misinformation by the media and strong industry lobby groups</li> <li>• New issue for some</li> <li>• Climate skeptics in some government structures</li> <li>• Inadequate training for engineers, planners and councilors</li> </ul> | <p><b>2) Lack of definition of problem and planning</b></p> <ul style="list-style-type: none"> <li>• Lack of guidance and consistent frameworks – planning and regulatory.</li> <li>• Unclear who’s role it is to plan</li> <li>• Legal responsibilities unclear</li> </ul> | <p><b>3) Limited funding</b></p> <ul style="list-style-type: none"> <li>• Prioritization of funds at different tiers of government, due to competing priorities, which is exacerbated by short vs long term agendas</li> <li>• Funding constraints at local government level for large capital adaptation projects, partly due to rate capping at state level.</li> <li>• Limited funding for RD and pilots</li> <li>• “cost” of already sunk capital in existing infrastructure that is now viewed as vulnerable under CC impacts.</li> </ul> |
| <p><b>4) Poor leadership from above (Cross cutting)</b></p> <ul style="list-style-type: none"> <li>• No Statutory obligations</li> <li>• Lack of ownership of the implications of CC impacts</li> <li>• Short political timeframes, agendas and cycles – which do not coincide with planning time frames, reluctance to make long term decisions</li> <li>• Lack of incentives to do now – rather defer cost to future office bearers or other arms of governance</li> <li>• No acknowledgement that the issues cut across all tiers of government</li> </ul>                                                                                                                                             |                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p><b>5) Limited co-operative governance (Cross-cutting)</b></p> <ul style="list-style-type: none"> <li>• Poor communication between tiers of government</li> <li>• Inconsistent messages</li> <li>• Local decisions over-ridden by higher tiers</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |