ADAPTATION FINANCE CHALLENGES: Characteristic Patterns Facing California Local Governments and Ways to Overcome Them

Faced with increasing climate extremes and emerging climate change impacts, local governments in California are eager to advance their preparedness and adaptation measures and take action to build local resilience. However, as previous studies and day-to-day interactions with local leaders make clear, determining how to fund adaptation planning and implementation is frequently a significant barrier to progress. This study aims to answer one overarching research question: What is the nature of the funding challenges local communities in California face as they attempt to adapt to climate change? To comprehensively answer this question, it aims to better understand (1) the adaptation funding gap, (2) the nature of the finance challenges faced by local governments, and (3) potential finance solutions. Using a multi-methods approach, including a broad literature review, an online survey, multiple stakeholder workshops and documentary analyses, the study presents multiple findings, intended to be useful to local, regional and State actors, but may also be useful to philanthropy and federal agencies. The study finds financial barriers to be among the most significant adaptation barriers; determines adaptation to be extremely cost-effective; describes 15 unique “archetypes” of adaptation finance challenges (or clusters of interacting barriers) along with possible interventions; and develops an organizing framework of adaptation finance mechanisms that provides an overview of potentially available funding sources. Solutions and future research directions to address adaptation finance challenges are proposed.

This study constitutes an innovative, detailed and in-depth social science study of California local governments’ adaptation finance challenges and potential solutions. A better understanding of the nature of these challenges constitutes a necessary precursor to developing incisive and appropriate solutions that are tailored and applicable to the wide variety of circumstances in which local adaptation investments need to be made. The study is the most in-depth research of local adaptation funding challenges produced for California and beyond, producing methodological and conceptual advances, and pointing to numerous practical opportunities for alleviating funding challenges.

Key highlights include:

- Funding and financing barriers are among the top barriers to adaptation.
- Many adaptation-related costs are high (though not all), but available evidence suggests they may be widely underestimated and incomplete. At the same time, the limited available data suggest that adaptation is extremely cost-effective compared to inaction.
- Local government staff and those supporting their adaptation efforts consistently bemoan the widespread inadequacy of available funds for adaptation-related activities. This concern prevails...
even today when most local governments have not entered the implementation stage which is
significantly more expensive.

- The study identified 15 characteristic patterns of adaptation finance challenges (here called
  “archetypes”), which we named as follows: Low Priority, Lack of Champion/Leadership, Conflict of
  Interest, Disproportionate Burden/Prior Disadvantage, Inappropriate Funding Scale, Disjointed
  Risk Structure, Inability to Make the Economic Case, Chronic Underfunding or Basic Lack, Siloed
  Government Syndrome, Lack of Capacity (I and II), Discontinuous Funding, Aversion of
  Innovation, Funding Biases, Lack of Knowledge About Funding Sources or Happenstance,
  Eligibility. Each requires not one “silver bullet” solution to be addressed but a range of
  complementary interventions to overcome the underlying drivers and barriers. Particular caution
  should prevail around “solutions” that might reinforce long-standing injustices and disparities.

- The focus on novel funding mechanisms and greater private-sector involvement in funding
  adaptation is necessary but insufficient and may reinforce existing fiscal capacity disparities.

- Future research should focus on the costs of inaction, the costs of adaptation, and on measures
  of success and progress to support proactive adaptation. Additional research is needed to
  deepen understanding of the precise challenges with particular funding mechanisms and how
  they might be alleviated.

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