

Call for Research Proposals

How Do Institutions Affect Adaptation to Climate Change in Developing Countries?

A Research Program of the Ronald Coase Institute

I. Objective

The Ronald Coase Institute seeks proposals from young scholars for research on the impact of institutions on adaptation to climate change. It will issue up to three grants for up to \$20,000 USD each. Proposals will address the question: how do institutions – the laws, customs, and norms that govern societies - encourage or hinder human adaptation to climate change in developing countries?

Most accounts of slow rates of adaptation focus on developed countries and explanations related to information, behavior and income. Although the influence of institutions on economic development is deeply documented, less is known about their effects on climate adaptation in developing countries.

We therefore seek proposals to advance concrete understanding of how institutions in developing countries hinder or enhance adaptation to a changing climate. Examples of topics might include:

- Barriers to trade in water or energy and their effects on climate adaptation;
- Weak property rights (whether in housing, farming, or industry) and their influence on investments in climate adaptation;
- The effects of barriers to internal migration (e.g., out of climate-affected zones) on climate adaptation;
- The effects of insurance, building, and housing regulations on individual decisions to respond to emerging risks presented by climate change;
- The effects of labor market regulations on climate adaptation;
- The effects of credit market failures on climate adaptation;
- The effects of institutions on infrastructure investments in response to climate risk;
- The effects of social arrangements, such as local practices based on long-standing conditions, hierarchies, and experiences, on resilience and climate adaptation;
- The interaction between institutions supporting climate mitigation and adaptation, including comparative analysis of the differences and degree of substitutability and complementarity.

II. Background

As the world reacts to climate change there are two primary paths of action: mitigation and adaptation. Mitigation refers to efforts and policies that reduce the amount of greenhouse gas released or that sequester carbon, and therefore mitigate the pace of climate change and the severity of weather events. Adaptation refers to policies and strategies that aid in adapting to a changing climate and its effects, such as rising sea level, more frequent and intense storms, drought, and other stressors.

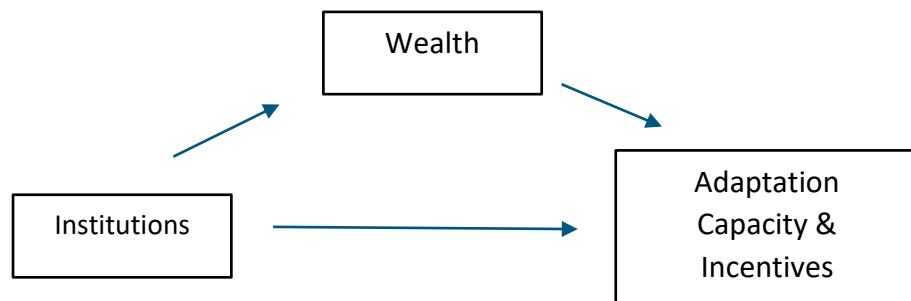
The climate adaptation puzzle we seek to understand is illustrated by the following. Individuals, families, farmers or firms confront two investment, production, or location options. One delivers higher expected welfare when not adjusted for climate risk, while the other delivers higher expected welfare when adjusted for climate risk. The climate risk is present in both cases; hence, the second option maximizes welfare. Yet because of some institutional factor, the investor chooses the first option. The public sector puzzle is the same: governments neglect policies and investments that could make their citizens better off, after taking climate risk into account. Most research focuses on information or behavioral explanations for this puzzle. Individuals (voters) or firms, do not understand the climate risks, or discount them heavily. However, institutions also influence adaptation. They shape property rights, the rule of law, and the competitiveness of markets (e.g., restrictions on entry and exit), all of which are expected to affect adaptation decisions directly or indirectly.

Countries, societies, firms, and individuals adapt to climate risks through different actions including migration, changes in land and resource use, trade, as well as investing in resilient infrastructure, production methods, and associated innovations. Human migration entails movement from high-risk areas to lower risk areas (e.g. from a floodplain to higher elevations), land use changes (e.g., switching to more heat resistant crops), trade (in goods such as air conditioners and inputs such as water), and infrastructure investments (such as floodproofing or fireproofing homes) to reduce risk exposure.

Directly, regulations might artificially raise the costs of these actions, for example if they prohibit farmers from using drought-resistant seed varieties. Regulations may also fail to solve market failures, such as information asymmetries that make it difficult for consumers to make resilient investments (e.g., to distinguish hurricane-resilient homes from others). Institutions also

directly interfere with climate adaptation when they prevent the movement of people, goods, and services away from areas or activities that are more affected by climate change.

Institutions might also distort adaptation decisions indirectly (see Figure 1), by influencing the development of credit and insurance markets; private sector incentives to invest and innovate; and the location decisions of individuals and firms. Institutions also shape public sector adaptation: directly, weak institutions are likely to undermine the climate resilience of infrastructure, while indirectly, poor quality education and health services could undermine the capacity of households to make appropriate adaptation decisions themselves. (The indirect effects are not the subject of the call for proposals.)



In summary, the literature is beginning to identify institutions as a key factor in explaining if, how, and when societies adapt to climate change, but many questions remain. Studies in developing countries are particularly uncommon, as are studies of how informal institutions affect adaptation. These are important literature gaps because climate change poses a much greater threat to economies and livelihoods in developing countries.

III. Guidelines

This Ronald Coase Institute project will fund up to three studies that examine the direct effects of institutions on adaptation to climate change in developing countries in the issues outlined under “Objectives”. Proposals should aim to provide rigorous evidence from developing countries about links among property rights, regulation, competition, governance, and adaptation behavior such as migration, land use, trading shifts, and infrastructure investments, private and public.

This can include descriptive studies that systematically describe institutional obstacles to adaptation in particular contexts. Examples of the range of proposals that we seek are:

1. *Case studies of institutional obstacles to adaptation (e.g., in a city, region, country, or industry or of a segment of a society)*. Proposals to conduct case studies will be considered if they are theoretically rigorous and include strategies for understanding mechanisms and the consideration of competing explanations (e.g., behavioral distortions rather than institutions).
2. *Correlation analyses*. We welcome proposals that include the construction of data sets that allow us to correlate differences between groups of households, firms, or regions, or over time within these groups, in the institutional arrangements governing them and their decisions regarding adaptation. Such proposals are more interesting to the extent that the units of observation are of broader interest.
3. *Causal analyses*. We are most eager to fund proposals that identify the causal effects of institutions on adaptation.

IV. Selection Criteria

Who is eligible:

PhD students, post-docs, and early-career assistant professors and related scholars.

Requirements for proposals (five pages or less):

1. Research question clearly stated at the beginning.
2. Motivation: brief explanation of how it will inform our broader effort to understand the relationship between institutions and climate adaptation.
3. Literature: Confirm that there is no prior work addressing the question and mention any closely related papers;
4. Data: Identify the data and likelihood of getting access to these data. If some data for the analysis are straightforward to obtain and other data are more difficult, indicate in point 6 below whether the more accessible data will allow for partial answers to the research question.
5. Theory and specific hypotheses to be examined.
6. Methodology to be used, assuming accessibility of the data.
7. Budget and time line.
8. Expected outputs.

V. Proposal Submission

The following information will be required for submitting your proposal:

- The five page proposal that meets the requirements mentioned in this call for proposals.
- The name and curricula vitae (two pages maximum) of the researchers involved. These should contain sufficient information to demonstrate the team's ability to meet the objectives of the project, including relevant experience.

A more detailed bibliography can be submitted as an annex to the proposal.

For details on how/where to submit your materials. see the summary call for proposals:

<https://www.coase.org/researchprogram.htm>

VI. Financial Aspects

The Ronald Coase Institute (RCI) will contribute up to **US\$20,000** USD depending on the scope of the work proposed. The payment schedule is as follows:

- **25 percent** within 30 calendar days upon the date of the last signature of the letter of agreement between the RCI and the researcher.
- **25 percent** within 30 calendar days upon receiving and approval by the RCI of the progress report.
- **30 percent** within 30 calendar days upon receiving and approval by the RCI of the first draft of the research paper.
- **20 percent** within 30 calendar days upon receiving and approval by the RCI of the final research paper and delivery to the RCI of the databases and code utilized in the study.

VII. Publications

Final papers will be considered for dissemination as Ronald Coase Institute Working Papers. All raw data and properly documented programming code (i.e., do files) should be submitted with the final draft. The project coordinators may explore the possibility of having the papers published in an academic journal, in which case they would be subject to a system of standard peer review. Authors have the option to submit the manuscript for publication to the journal of their choice with written authorization from the RCI, but they must mention that the paper was financed with the support of the RCI.