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INSTITUTIONAL CAPACITY FOR NATURAL DISASTERS: FINDINGS FROM CASE STUDIES IN AFRICA

EXECUTIVE SUMMARY

CCAPS research has aimed to document natural disaster response capacities in Africa and explore what drives government investment in disaster preparedness and response. The research shows that the two clearest predictors of investment in preparedness activities are economic strength and perceived risk of natural threats. However, these factors explain little when there is limited electoral incentive to invest in disaster management or minimal bureaucratic capacity to implement preparedness programs. Electoral conditions and political development affect whether governments have the incentive to invest in preparedness activities and the institutional capability to do so. In addition, domestic civil society and external actors often offer important support to governments, and it is the explicit focus by these non-state actors on both preparedness and response that seems to limit the risk that international funding for disaster preparedness would reduce domestic spending on that goal in the majority of cases considered here. These findings have important implications for understanding the relationship between national governments and international aid agencies. Both domestic and international actors need to know what characteristics of states must be supported to encourage the development of vulnerability-reducing institutions in the face of dynamic natural hazards. This study attempts to shed new light on these issues and to inform debates over the most appropriate and efficient uses of aid and national resources for addressing natural shocks.

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The CCAPS program's research on institutional capacity for natural disasters aims to document natural disaster response capacities and explore the causes of variation in government policies to reduce the risk of, prepare for, and respond to natural disasters.[1] This research focuses on ten case studies within Africa, but the findings should be relevant to a broader set of cases, particularly developing countries.

The study provides evidence both for and against a number of potential explanations for disaster investment, while also offering a more nuanced perspective on the ways in which characteristics of states interact to affect policy choices and institutional robustness.[2] This has important implications for understanding the relationship between national governments and international aid agencies in the face of natural shocks. Both domestic and international actors need to know what characteristics of states must be supported to encourage the development of vulnerability-reducing institutions in the face of dynamic natural hazards. This study attempts to shed new light on these issues and to inform debates over the most appropriate and efficient uses of aid and national resources for addressing natural shocks.

EXPLANATIONS FOR DISASTER INVESTMENT

As detailed in CCAPS Research Brief No. 9 on this study's methodology, the study conducted empirical testing of existing arguments for why governments vary in their approaches to natural disaster management.[3] The alternative explanations chosen for inclusion in this study, based on an extensive literature review, are summarized here.

- **Perceived risk:** If governments perceive that the risk of a natural hazard is high, then they will invest more in preparedness.
- **Economic strength:** If a country has greater economic resources overall, then it will spend more on disaster preparedness.
- **Electoral incentives and democracy:** If a government perceives disaster preparedness to be electorally beneficial, then it will spend more on preparedness.
- **Political development:** If a government is more developed in terms of the quality of its politicians and the quality and independence of bureaucrats, then it will prepare better for natural hazards.

- **Foreign aid:** If governments anticipate that other actors will spend on preparedness or response, then they will spend less on preparedness
- **Civil society:** If there is a strong civil society, then there will be greater investment in preparedness.
- **External actors:** If a government has greater exposure to disaster preparedness from the actions of external actors, then it will invest more in preparedness.

FINDINGS ON INVESTMENT INCENTIVES

Each of the potential explanations is reviewed here in the context of the ten countries included in the project: Ethiopia, Kenya, Gambia, Senegal, Ghana, Togo, Zambia, Zimbabwe, Malawi, and Mozambique. The ten case study countries face varied hydrometeorological threats (see Table 1). The countries have equally varied capacity to respond to those risks. The Hyogo Framework for Action, established at the World Conference for Disaster Reduction in 2005, provides a framework for comparing these countries' current capacity and level of preparedness.[4] The research team assessed the progress made by each country on the five priorities outlined in the Hyogo Framework as steps to prepare countries to respond to natural disasters (see Table 2).

Table 3 summarizes the findings of the ten case studies across all of the potential explanations for variation in countries' disaster management. This study also considered the ways in which mechanisms underlying each explanation interact with each other, not displayed in the table but discussed below, recognizing that the dynamics of policy making are considerably more complex than can be understood through a single argument.

Perceived Risk

Evidence from the study makes the strongest case for explanations emphasizing a relationship between the perceived risk of a natural hazard and the likelihood that a government will institute policies to prepare for this hazard. The most dramatic cases of perceived risk among case study countries are Ethiopia and Mozambique. Mozambique has historically faced somewhat regular flooding, but it was not until dramatic floods in 2000 that the extreme threat of this hazard became clear. Since 2000, Mozambique has developed a focused disaster management agency, and the interviewees contacted for this project confirmed that the risk of severe flooding has helped to ensure that this body receives clear support from the central government. In Ethiopia, interviewees also linked the long history of droughts and expectation that droughts will continue in the future with the national government's efforts to invest in its preparedness and response capacity.

In Zambia, the regular threat of floods and droughts has been linked by government officials to a consistent level of attention to natural hazards over the last two decades. The government's efforts have become more sophisticated since 1994, when initial disaster management policies were put into place (and subsequently revamped in 2010). However, in general, disaster management has been a consistent part of government policy that is incorporated into overall development efforts.

The Gambia, flanking the Gambia river, also faces the persistent threat of natural hazards, in this case flooding. While the government has invested minimal financial capital in disaster preparedness, it has made a concerted effort to develop a disaster management agency that is tasked with designing and implementing policies.

Ghana is a case in which persistent historical flooding has been met with a recent increase in the severity of floods. While international observers have in the past classified the state as highly reactive and not focused on improving the country's preparedness,[5] approximately half of this study's interviewees in the country noted a recent shift toward policies attempting to develop a more proactive stance toward disasters.

The cases that offer little evidence in favor of the perceived risk explanation are Togo and Kenya. In Togo, natural shocks have typically been less frequent than in other countries considered here, offering a potential explanation for lack of attention to these issues in national policy. However, since severe floods in 2007, flooding has become more common to the extent that interviewees acknowledged a need for a comprehensive disaster management agenda. Such an agenda has yet to take shape. For Kenya, the most dangerous type of hazard historically is drought, which has been a threat on a regular basis for many years. It was not until the drought of 2011 that the national government implemented a revised drought management plan that non-state actors had been advocating for several years. The introduction of the policy in the wake of a particularly destructive drought—but one that followed years of similar occurrences—suggests that it was the result of factors other than simply perceived risk.

Economic Strength

In general, the case study evidence supports an argument stressing the importance of strong economic conditions for spurring investments in disaster preparedness and response capacity. Unfortunately, the bulk of the evidence highlights the difficulty African states face to invest in disaster-related policy initiatives due to their weak economic positions. Countries including Ghana, the Gambia, Malawi, Senegal, Zambia, Zimbabwe, and especially Togo have invested relatively low levels of their own capital in preparedness activities. This does not imply that all of these countries are doing nothing with regard to the risks of natural hazards. Indeed, they are often making important policy strides with the support of external actors, but they are most likely doing less than would be feasible with stronger economies.

Two countries that highlight weaknesses in the economics argument are Kenya and Ethiopia. On one hand, Kenya, despite the highest GDP per capita in its region, has invested very few of its own resources in preparedness activities for natural disasters;

Table 1. Types and Levels of Hydrometeorological Threats in Case Study Countries

	FLOOD	CYCLONE	DROUGHT
ETHIOPIA	Low/Moderate	Minimal	Severe
KENYA	Low/Moderate	Minimal	Severe
GAMBIA	High	Minimal	Low
SENEGAL	High	Minimal	High
GHANA	High	Minimal	Moderate
TOGO	High	Minimal	Low
ZAMBIA	Moderate	Low	Moderate
ZIMBABWE	Moderate	Low	Moderate
MALAWI	Severe	Moderate	Moderate/High
MOZAMBIQUE	Severe	Severe	Moderate

Scale: Minimal, Low, Moderate, High, Severe.

Source: Scoring is based on country case reports, supplemented by data from the Global Risk Data Platform and UNEP/GRID-Europe.

Table 2. Progress in Meeting Hyogo Framework Priorities for Disaster Response Capacity

	PRIORITY 1 Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation	PRIORITY 2 Identify, assess, and monitor risks and enhance early warning	PRIORITY 3 Use knowledge, innovation, and education to build a culture of safety and resilience at all levels	PRIORITY 4 Reduce the underlying risk factors	PRIORITY 5 Strengthen disaster preparedness for effective response at all levels
ETHIOPIA	4.3	4.3	2.7	3.7	3.3
KENYA	3.0	4.0	3.4	2.6	2.3
GAMBIA	4.0	2.0	2.8	1.9	2.4
SENEGAL	3.5	2.8	3.2	2.0	3.1
GHANA	3.3	3.2	2.9	1.9	3.4
TOGO	2.5	1.3	2.3	1.1	1.7
ZAMBIA	4.3	3.3	2.8	2.1	3.3
ZIMBABWE	2.1	3.0	4.1	1.8	3.0
MALAWI	3.4	3.5	3.4	3.4	3.2
MOZAMBIQUE	3.8	3.3	2.9	3.6	4.3

Scale: 1 to 5, with higher scores implying greater progress on each goal. Scores are relative to other case study countries.

Source: Case study teams' deliberations after country visits produced country scores for each Hyogo priority.[6]

Table 3. Overall Findings

Potential explanations for why governments vary in their approach to disaster management	ETHIOPIA	KENYA	GAMBIA	SENEGAL	MALAWI	MOZAMBIQUE	GHANA	TOGO	ZAMBIA	ZIMBABWE
PERCEIVED RISK	+	_	+	+	+	+	+	_	+	+
ECONOMIC STRENGTH	_	_	+	+	+	+	+	+	+	+
ELECTORAL INCENTIVES & DEMOCRACY	_	+	+	?	+	+	+	+	+	+
POLITICAL DEVELOPMENT	+	+	+	+	+	_	+	+	+	+
FOREIGN AID	_	+	_	_	_	_	_	_	_	+
CIVIL SOCIETY	?	+	_	+	+	_	+	+	?	_
EXTERNAL ACTORS	+	?	?	+	+	+	+	_	?	?

A "+" sign indicates that the evidence from that country largely supports a given explanation, either in its stated form or in the reverse. For example, in the case of economic strength, a "+" would indicate that the country is reasonably well-endowed economically and is investing in disaster preparedness, or that it is relatively poor and is not investing in preparedness. A "-" sign indicates evidence against a given explanation, and a "?" denotes that there was conflicting or insufficient evidence to determine whether or not the case supported the explanation.

the Kenyan state relies primarily on external parties for disaster preparedness and response. On the other hand, Ethiopia, a relatively poorer state, has made a much stronger commitment to investing its own resources in efforts to reduce the threat of natural hazards. In these cases, factors other than economics must be considered to explain the outcomes of natural disaster policies.

Electoral Incentives and Democracy

The relevance of democracy and electoral incentives to policy making in the face of natural hazards has been an important focus of recent work in this area and has helped to shed light on political dynamics that potentially affect the lives and livelihoods of individuals living in disaster-prone regions.

Ghana, one of the most democratic countries in the study, offers evidence to support the argument that electoral incentives often encourage governments to spend more on disaster *response* activities than on preparedness. The Ghanaian public perceives the national disaster management body to be a source of relief and supplies in the wake of natural disasters and has responded positively to these actions.[7] However, when the agency has attempted to engage in risk reduction by moving at-risk populations to less vulnerable parts of the country, the result has been clashes between citizens and the government and the return of many individuals to their original home areas.

Senegal, another relatively democratic country, provides additional support for the argument that disaster response activities are perceived to provide greater electoral benefits than disaster preparedness. The Senegalese government is more likely to invest directly in response and often does so in the wake of public outcry about a flooding situation. In contrast, in those areas where there is little media attention to floods, such as in the slum areas of Dakar, floodwater often remains present for months at a time with no government assistance.

The Senegalese case also provides support for a secondary explanation linking disaster spending and electoral incentives. Multiple interviewees noted the politically motivated allocation of disaster relief funds to sub-national regions aligned with the central government. During the municipal elections of 2009, opposition parties took control of a substantial number of local governments. Subsequent to the elections, the national government decentralized responsibility for flood management, which many newly elected leaders felt was an attempt to shift responsibility for a delicate issue to the opposition.[8] Then, when acting on their new responsibilities, many local governments held by the opposition, such as that of Saint-Louis, the "most flooded" city in the world, found it difficult to acquire resources from the central government.

In Zambia, the most obvious expression of electoral relevance in terms of natural hazards was in the 2011 presidential election, in which the governing party used its experiences responding to recent disasters to discount the expertise and planning abilities of the opposition candidate. The incumbent Vice President Kunda on multiple occasions criticized the candidate Michael Sata and his Patriotic Front party for having no vision for the country while highlighting his own government's efforts to build infrastructure and institute agricultural policies that would protect the country in times of crisis.[9] These comments highlight the government's perception that disaster issues are of relevance to the voting public.

Countries with more authoritarian regimes, such as Togo, The Gambia, and Zimbabwe, are also among the most limited in

their investments in disaster preparedness and response. This is consistent with the electoral explanation, though it might not be strong evidence for this explanation *per se*, as these are also some of the poorest countries in the sample, so this limited investment could also stem from having limited economic resources to invest.

Political Development

In general, countries with higher levels of political development—more meritocratic bureaucracies, less political interference in the bureaucracy, and lower levels of corruption—are expected to have stronger programs to prepare for and respond to natural shocks. Overall, the findings suggest that this is the case and, perhaps even more importantly, that low levels of political development can reduce the chances for implementation of quality disaster management programs even where other factors should encourage such programs.

Kenya is perhaps the most striking case in which low levels of political development have contributed to minimal effort by the government to respond to challenges from natural hazards. The bureaucracy is highly politicized and in the cases in which there have been some successes in disaster management, such as with regard to droughts, interviewees attribute these outcomes to the involvement of agencies led by high-ranking politicians. In most cases, however, the bureaucracy is reactive to natural hazards, at best, with non-governmental organizations playing a more predominant role in response efforts.

Similarly in Togo, the development of the bureaucracy is very low and corruption levels are quite high.[10] However, the quality of the bureaucracy seems to be less of an issue than the lack of funding for disaster-related programs in general. As one interviewee noted, there is little corruption in the disaster management arena at least in part because there is no funding from which administrators could skim. In neighboring Ghana, while the bureaucracy is generally more developed than in Togo, high levels of corruption are seen to have impeded implementation and enforcement of disaster preparedness efforts to date. Ghanian government officials noted that district-level planning agencies and government building officials are seen to be willing to take bribes that make enforcement of disaster risk reduction measures, such as building codes, extremely difficult.

In contrast to these cases, the Ethiopian bureaucracy is reasonably well-developed and able to implement disaster preparedness activities well and without substantial interference from politicians. Additionally, despite Ethiopia scoring poorly on international indicators of corruption,[11] a number of interviewees expressed the belief that the bureaucracy was relatively uncorrupt and that skimming of resources intended for natural hazard-related programs was not a substantial problem in the country.

Zambia and Mozambique present a middle ground in which the bureaucracy has become more developed over the last two decades and is seen to be gaining greater capacity to prepare for and manage disasters. At the same time, the agencies for dealing with natural shocks in both countries are politicized and therefore not insulated from political maneuvering. As evidence of this in Zambia, one government official noted that the agency feels pressure to spend its limited resources on visible disaster risk management projects, such as infrastructure, despite the fact that its main priority is to complete district-level vulnerability assessments. In Mozambique, the bureaucracy is tightly linked to the governing party and interviewees noted that it was difficult, if not impossible, to acquire a bureaucratic post without being a member of the governing party. These cases highlight a potential link between the nature of electoral incentives and political development in shaping disaster policy outcomes.

Foreign Aid

For the majority of the countries considered here, the findings suggest that states' perceptions about foreign aid provide little explanatory value for understanding the behavior of states regarding disaster preparedness and response. In Ethiopia, a country that has received substantial international aid in response to natural disasters in the past, the receipt of aid has not minimized government investment in preparedness and response activities and, in contrast, seems to have increased the national government's desire to invest in ways that minimize its dependence on external actors. Similarly in Mozambique, past experience with substantial international intervention during the floods of 2000 helped to instigate activity within the national government to insure both that the country would not face such devastating natural disasters in the future and that the government would not be reliant on external actors in responding to hydrometeorological hazards.

In Ghana, despite a clear increase in international funding over the last decade, the government has developed a national contingency plan (in partnership with the UNDP) and allocated $500 million to disaster response. Malawi provides an even more striking case against the influence of foreign aid. The government adopted a disaster preparedness plan in 1991 and has continued to develop its capacity to deal with natural hazards over subsequent decades. Currently, the majority of funding for disaster risk management (DRM) programs is from external sources, but the Malawian government also contributes to these efforts and plays an important role in the overall shaping of disaster-related policy.

The evidence suggests an interaction of foreign aid and electoral effects in Senegal. With regard to disaster preparedness, the government has invested very little relative to international actors such as the World Bank. At the same time, the national government has a reasonably strong record of responding in the wake of natural shocks, such as the flooding that occurred in 2008 for which the state allocated $13 million for recovery.[12] This is less surprising in light of the relevance that electoral considerations seem to have in Senegal. Because citizens are more likely to respond positively to disaster response spending, rather than disaster preparedness,[13] the Senegalese government has incentives to allocate spending on response activities, particularly given the willingness of international actors to invest in preparedness.

Kenya provides the strongest evidence in support of high foreign aid having a negative influence. The country receives substantial international aid, $3.5 billion overall in 2009, and natural disasters play an important role in perpetuating this assistance. In particular, this research shows both that the national government invests very little in its own preparedness and response activities and that the presence of aid for people living in arid regions of the country reduces incentives for these individuals to adapt and move away from otherwise unlivable areas.

The Gambia provides evidence for the reverse of this hypothesis, or the "pariah" hypothesis, whereby countries that do not anticipate aid are expected to be more likely to invest in preparedness themselves. Here, many government officials reported that they did not expect to receive substantial aid, particularly relative to the neighboring country of Senegal, and they are investing, generally, in building capacity. In contrast, in Togo, there is little evidence to support such a pariah state explanation. Togo has been considered an "aid orphan" since the early 1990s, when electoral irregularities and human rights violations caused international donors to withdraw aid support from the country.[14] While aid has increased in the last five years, the government continues not to expect to receive substantial assistance. Yet, despite substantial increases in flooding since 2007, the government has invested little in disaster preparedness and response. Thus, the expectation that the state will not receive support during a disaster has not led to increased investment in disaster risk management.

The overall evidence from this set of countries suggests that the relevance of foreign aid levels is limited, at best, and that other characteristics of national environments are more relevant for determining the extent to which national governments will be at risk of underinvesting in disaster preparedness.

Civil Society

Civil society, made up of the non-state and non-market actors involved in civic and social activities, is expected to play both direct and indirect roles in influencing the nature of disaster preparedness in a given country. Overall, there is mixed evidence to support civil society explanations. The states that provide supporting evidence for an argument about the role of civil society are Ghana, Kenya, Malawi, Mozambique, Senegal, and Togo. Perhaps the most striking case is Kenya, where the government itself has done relatively little to establish a comprehensive framework for disaster preparedness and response, and what it has done—such as the creation of a Drought Management Authority and the National Drought Contingency Fund—are seen to be the result of substantial pressure from civil society. At the same time, the predominant role of civil society can mean that the government itself is less technically prepared than civil society organizations (CSOs) themselves or community actors in areas supported by CSOs. Thus, a strong civil society does not always result in parallel capacity within the government.

In contrast, the Ethiopian case provides an example where civil society organizations play multiple roles within the state's framework. CSOs pressure the state to engage in disaster preparedness activities, implement their own programs, and implement government programs as part of a disaster risk management program led by the national government. As a result, the state has developed a reasonably strong capacity to implement programs, often through CSOs.

Togo supports an argument about civil society by providing evidence for the reverse of the explanation: if a country has minimal civil society presence, then it will invest less in disaster preparedness, all else equal. The non-governmental organizations (NGOs) that exist in Togo are perceived to have contributed to government-organized preparedness activities since the creation of a national disaster plan in 2007, but they have done little on their own to further the capacity of the state.

The civil society explanations received mixed support from Mozambique and Zambia. In Mozambique, the presence of domestic civil society is minimal, but many international non-governmental organizations have established long-standing domestic presences. These actors work closely with the national disaster agency during natural shocks, including daily meetings to coordinate response activities. Similarly in Zambia, a recent NGO Act requires registration of all non-governmental organizations and constrains activities to approved areas. At the same time, NGOs often implement programs for the government and are incorporated into the Disaster Management Consultative Forum, in which they can raise concerns or provide information from local sources on areas or communities that may be vulnerable to natural shocks. Thus, while they do not strongly pressure the government to act in certain ways, they can inform policy and play an important role in its implementation.

The Gambia and Zimbabwe provide evidence against the civil society explanations. In the Gambia, non-state actors seem to place minimal pressure on the state, most likely due to suppression of civil society organizations by the semi-authoritarian government. CSOs tend to adopt an apolitical stance and do not pressure the state on policy issues, so as to maintain their ability to engage in non-political activities. Local organizations do play a role in disaster-related programs, but only under the guidance of the state. Similarly in Zimbabwe, non-governmental organizations are allowed to act within the country, but they must work within the framework established by the state. While non-state actors may contribute to the government's activities, there is no evidence that they are able to pressure the state to engage in additional disaster preparedness investments.

External Actors

In contrast to the domestic focus of the civil society explanation, explanations based on the impact of external actors concern the role of parties outside the country, such as neighboring states, regional organizations, and aid agencies. Explanations concerning external actors and foreign aid are related. In the case of foreign aid, investment—or expected investment—by international actors in disaster *response* is expected to reduce the degree to which states

invest in *preparedness* activities. Here, investment by external actors in *preparedness*, either in their own domain or within the country in question, is thought to *increase* the likelihood of domestic preparedness spending. Overall, there is either supporting or mixed evidence for the influence of external actors.

The most common way in which external actors have influenced national preparedness activities is through partnerships between international organizations (IOs), international non-governmental organizations (INGOs), and state actors to develop disaster risk management plans and institutions. In Ghana, the National Disaster Management Organization (NADMO) has a close working relationship with the United Nations Development Programme (UNDP), which has helped the government develop a disaster risk reduction plan and implement a range of prevention activities. The UNDP played a similar role in the Gambia, working with the government to develop a national disaster management framework and to create the National Development Management Agency. In Ethiopia, the government frequently draws on the international community for preparedness information and resources. For many years, international organizations and NGOs led preparedness activities, but recently the Ethiopian government has taken more of a leadership role, while still relying on external actors to support their activities.

In other countries, such as Zimbabwe, the national government has less exposure to international actors with an interest in natural disaster management. While there are many INGOs acting in the country, only a small number have an explicit focus on preparedness, thus offering few examples from which government actors can learn. The efforts that the Zimbabwean government has put forth with regard to disaster preparedness, then, should not be attributed to the influence of external parties.

Only in Togo is there clear evidence against the role of external actors in shaping preparedness investment by the state. For the most part, external actors lead the minimal preparedness activities that do occur in Togo. Despite these investments, the government has not pursued additional preparedness activities of its own.

NUANCED EXPLANATIONS FOR DIVERSE OUTCOMES

It is key to consider the ways in which an evaluation of this range of alternative explanations provides a more comprehensive understanding of the opportunities and constraints faced by countries attempting to build their disaster management capacities. No single hypothesis offers a consistent and deterministic explanation for observed policy outcomes. However, the combination of characteristics emphasized by multiple hypotheses investigated here can provide what is likely to be a reliable set of expectations regarding the propensity of states to invest in disaster preparedness.

The two clearest predictors of investment in disaster preparedness activities are economic strength and perceived risk of natural threats. States that expect to face natural hazards in the future, particularly as a result of having faced them in the past, such as Mozambique, and that have the economic resources available to dedicate toward these risks, are more likely than their less threatened and poorer peers, such as Togo, to invest in disaster preparedness.

However, economic strength and perceived risk on their own are apt to mean very little when there is limited electoral incentive or bureaucratic capacity to implement substantial preparedness operations. Funds will be wasted, or misdirected, if there is not an institutional structure to facilitate the implementation of disaster management programs. Thus, the nature of electoral conditions and political development shed light on whether governments have the *incentive* to invest in preparedness activities and whether they have the institutional *capacity* to do so. Where these conditions do not hold, such as in Kenya, there will likely be fewer efforts to invest in disaster management, even where financial resources are available. Where they do hold, there will likely be greater efforts to invest in preparedness than might otherwise be expected if perceived risk and financial resources are low. Efforts to promote preparedness should be multiplied when there are also economic resources and perceived risks.

In addition, the acts of governments cannot be fully understood without attention to the role of non-state actors. In many poorer countries, governments are still often attempting to build capacity to prepare for natural threats. In these cases, domestic civil society and external actors often support preparedness activities. It is the explicit focus by these non-state actors on *both* preparedness and response that seems to limit the relevance of the foreign aid argument in the majority of cases considered here. In particular, when international agencies engage with national governments to promote preparedness, this effectively nullifies the risk that foreign aid will inhibit government investment in *response* by requiring countries to invest in preparedness, rather than simply relying on external actors to provide aid for response.

These findings highlight the complex nature of disaster risk management policies and programs. While this study finds evidence to support the majority of explanations in the literature, understanding broad patterns of disaster preparedness requires a more comprehensive view of the ways in which a country's diverse characteristics and experiences combine to produce a particular set of disaster management outcomes. It is this more integrated view of the ways in which expectations of natural shocks, economic and political conditions, and relationships with non-state actors combine to shape government investments that should offer the best insights into how to build future capacity to reduce the risk of, prepare for, and respond to natural shocks.

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ENDNOTES

1 It is important to clarify that natural hazards are physical processes, but whether or not exposure to a hazard becomes a disaster depends a great deal on the social and political circumstances in a country. It is these social and political dynamics that are the primary focus of this study.

2 Where not otherwise noted, findings reported here are based on field interviews with more than 125 individuals in the ten case study countries from December 2011 to January 2012. The research team interviewed politicians, government officials, non-governmental and international organization representatives, academics, and civil society representatives.

3 See "Institutional Capacity for Natural Disasters: Methodology for Case Studies in Africa," *CCAPS Research Brief No. 9 (Austin: Robert S. Strauss Center for International Security and Law, 2013).*

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6 For a detail discussion, see CC*APS Research Brief No. 9.*

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