

WORLD RESOURCES REPORT

Published on *World Resources Report* (<http://www.worldresourcesreport.org>)

[Home](#) > [WRR 2010-2011](#) > [Research](#) > [Expert Perspectives On...](#) > Expert Perspectives

Expert Perspectives

Effective decision making that helps societies around the world adapt to a changing climate will require answers to a number of complex, unresolved policy questions.

World Resources 2010 is commissioning short papers from thought leaders and prominent practitioners which seek to answer, or inform, these key questions. Four or Five experts will give their perspective on each question, drawing on lessons they have learned and opinions they have drawn from firsthand research and/or decision making in the field. A separate group of experts will act as commentators on each set of commissioned papers. Both authors and commentators will be drawn from developing and industrialized countries and from a range of backgrounds including national and local government planning, risk analysis, climate adaptation policy and ecosystems conservation.

We hope the exchange - all of which can be accessed on this website - will provide significant input to the adaptation policy community, especially in the developing world. It will also inform the policy guidance in the WRR summary report.

Key Questions

Question One [1]



Does climate change require new approaches to making decisions? [1]

Is the way we currently plan for the future and react to unexpected change sufficient to accommodate the uncertainty, scale, long lead time, and complexity associated with climate impacts? As a result of the unprecedented rate of human-induced climate change, there is now widespread consensus that unless a range of adaptation efforts are embraced, the risks posed by climate change on people and ecosystems are likely to be more disruptive and damaging. The question policymakers, planners, and investors are increasingly facing is: is the way we currently plan for the future and react to unexpected change sufficient to accommodate the uncertainty, scale, long lead time, and complexity associated with climate impacts? For example, do current decision-making processes allow an energy planner in South America take into account future glacial meltwater loss that may not manifest itself for years - when planning new hydroelectric plants to meet future electricity needs? Sector Examples of Decision Types that will Need to Incorporate Short- and Long-term Climate Risks Agriculture National Agriculture Plan Crop Management Plan Energy National Energy Policy/Strategy Natural Resources Management Coastal Zone Management Plan Forest Management Plan Protected Areas Plan National Invasive Species Management Plan Management Plans for Marine and Recreational Fishing Urban Planning/Infrastructure National Transportation Plan Road Maintenance Finance Plan National Highway Plan Water

National Water Policy Integrated Water Resource Management Plan The arguments in favor of new decision-making practices revolve primarily around the distinctive characteristics of the climate change problem itself and the perceived inadequacies in current planning processes. Impacts are not only unique in time and space, but also can present conditions never experienced before. Even though some impacts will not be felt for several decades, there is the need to address the risks they may present well in advance of their onset. In addition, the uncertainty, the surprises, and the heightened change and variability posed by climate change can present significant challenges to existing modes of planning and policymaking. The nature of possible interventions themselves also poses challenges to decision makers. Some will be controversial, especially when faced with balancing short- and long-term goals. Interventions could also result in unintended, unanticipated results, and yet due to the irreversible nature of some potential climate impacts, the decision maker has little opportunity to retry solutions. The lack of any central decision-making authority for climate change in some governments themselves may also hinder effective preparation for climate risks. On the other hand, the unique characteristics of climate change risks may be overstated or misrepresented. A number of other environmental challenges, such as the persistence of toxics or ecosystem degradation, also have long-term consequences that are difficult to fully predict or anticipate, and yet do not seem to pose great obstacles to decision makers. Other potential disruptions, such as those posed by earthquakes, present significant uncertainty and require upfront investments, and decision-making processes have been established to contend with such risks. From this perspective, the major difference between addressing climate risks and other problems is perhaps a matter of scale, with climate change manifesting itself globally and across all sectors. Additionally, one might argue that since climate change has been recognized as a problem for over 20 years (to one degree or another), many decision-making processes have already had the opportunity to begin to incorporate climate risks. Instead of a failure of decision-making processes themselves, perhaps a lack of institutional capacities (especially for implementation) or other factors may explain why some governments are relatively farther along than others. Or perhaps it is simply too early to tell. Given that most adaptation efforts are in their infancy, we need more operational history before we are able to judge whether new processes for decision making in a changing climate are necessary. These differing viewpoints raise important questions for discussion: are current decision-making practices used by governments able to incorporate the long-term nature, surprises, heightened change and variability, and the uncertainty of a changing climate, or does such decision making require an entirely new approach? If so, what needs to change? And why? If not, how should current practices be harnessed to plan for and react to climate risks today and in the future?

[...Read more](#) [1]

Question Two [4]



How can we balance today's pressing needs with long term risks? [4]

How can public officials, especially in low income countries, address today's short- term pressing needs while preparing for tomorrow's climate-related impacts and surprises? Government officials at the national level charged with incorporating climate change risks into plans and policies face a daunting array of challenges. The world is already experiencing early impacts of climate change in physical, hydrological and ecological systems, exacerbating enduring development challenges. Even if the global community commits to substantial reductions in greenhouse gas emissions, significant impacts will continue long after atmospheric concentrations of these gases have stabilized. The impacts of climate change are predicted to grow in frequency and strength and compound one another. Under such circumstances, government officials will face increasingly difficult decisions on how to prioritize interventions to address climate change, spur economic growth, and meet social and political objectives. Decision makers will face a continual balancing

act, contending with short-term development challenges and climate risks while at the same time preparing adequately for future needs and risks, some of which are uncertain and will only manifest themselves in decades to come. To do this effectively will require early planning and proactive decision making, approaches which human society has historically found difficult to embrace and implement. To date, our decision-making processes have often been slow to react to, learn from, and foresee change. The most vulnerable countries face the greatest difficulties. With few resources, their governments must not only deal with multiple near-term development challenges but also consider long-term policy objectives to address future climate-related, and other, risks. How are decision makers, especially in low income countries, to address pressing needs today while preparing for climate-related surprises and eventual impacts? If decision makers are motivated to incorporate long-term climate risks into decisions only when there is a reasonable certainty that risks will materialize, action may come too late and opportunities to manage some impacts may have passed. This is particularly problematic in vulnerable countries, where economic growth and development goals are unlikely to be achieved if future climate risks are not also taken into account in the near term. Some illustrative examples of the dilemmas facing decision makers in balancing short-term and long-term risks include: There is a high probability that sea level rise will pose significant risks to many coastal communities in the future. How should decision makers prioritize among various policy objectives and approaches, especially if resources are limited? For example, should they cease development of coastal areas and relocate communities at risk, or develop coastal areas with early warning systems and greater resilience to withstand sea level rise and fiercer storms? At what point are the risks great enough that they should choose the former policy over the latter? Rainfall in the Sahel region of Africa may increase or decrease in the next several decades, and there is still uncertainty with regard to where and when those changes may occur. But the consequences, no matter what the timing, location and direction of the impacts, are huge for an area already suffering from food security problems and for which agriculture is still a significant part of many nations”™ GDPs. How should a decision maker prepare for eventual changes in variability and mean climate, especially when resources are limited and the decision maker is facing urgent needs today? In addressing the question at the top of this prompt, we ask authors to discuss how decision makers can balance the need to address short-term and long-term policy making objectives. Below are some issues you may wish “” but are not obliged - to consider or incorporate in formulating your response. Examples of the kinds of interventions that fulfill both short-term and long-term policy making objectives. Situations in which decision makers might prioritize mitigation of short-term risks over addressing long-term policy objectives. Examples of conditions in which long-term investments of scarce resources to adapt to future long-term, high consequence impacts might be justified, and of hurdles that might block the prioritization of such investments and actions. Types of economic or other incentives that could be used to foster decision making that balances short-term and long-term priorities. (For example, changes to cost-benefit analysis, discount rates and other economic tools). Other types of tools that might aid decision makers in considering risks that will manifest themselves long after they have left their positions. Means of engaging the public and civil society engage in weighing short-term and long-term policy/planning objectives, and determining acceptable risks. Informative examples of any parallels in other areas of risk management that can inform those charged with prioritizing among short-term and long-term climate-related decision making.

[...Read more](#) [4]

Question Three [6]



How can development agencies help vulnerable countries adapt effectively? [6]

What are appropriate roles for development agencies in supporting national-level decision-making processes for a

changing climate? Specifically, how can they promote planning and policies that are robust, durable and sufficiently flexible to respond to and prepare for the many challenges posed by climate change, including its uncertainties, long-term impacts and surprises? In international discussions on how to counter the effects of climate change on developing countries, most of the focus so far has been on how development can support adaptation interventions. Much less attention has been paid to the more specific but vitally important question of how development agencies can support effective decision-making processes for adaptation by national governments. Climate change presents extraordinary challenges both to preserving current progress in the developing world, and for fulfilling global anti-poverty objectives such as the Millennium Development Goals. Vulnerability to climate change impacts is greatest in poor countries and their capacity to manage this complex problem will be critical to economic and social progress and effective adaptation. Key sectors including water and forest management, agriculture, electricity production and coastal zone management will all be affected by climate change impacts. Not only are development goals unlikely to be achieved if future climate risks are not also taken into account in the near term. Past expenditures may become less effective and previous investments may become obsolete. In other words, the way decision-making processes are designed to integrate climate risks will be a key determinant in a country's ability either to mitigate or to exacerbate current and future climate-related impacts. Development agencies, including bilateral and multilateral donors and multilateral development banks, will of necessity play a major role in supporting decision-making processes for addressing climate change risks. In doing so, agencies will need to grapple with pressing real world questions such as the following: In drought-prone countries such as Niger, how can development agencies assist in developing and strengthening institutions and processes that can effectively respond to and prepare for more prolonged dry periods? How can development agencies assist planners to prepare for the eventual transition of entire sectors that will no longer be viable in a changing climate? How can development agencies help put in place fast-reacting institutional mechanisms to deal with climate-related surprises, such as a non-native pest migration that results in novel disease patterns and demands on health resources? What initiatives can assist decision-making processes to prepare for projected changes in precipitation, when modelers are uncertain whether a region will receive more or less rainfall in future? Aid agencies are already pursuing capacity building, sectoral investments and policy reforms to promote broad-based economic growth in developing countries. In many cases such initiatives will also enhance their resilience in a changing climate. For example, efforts to foster the social, environmental and economic resilience of communities have laid useful groundwork for adapting to climate impacts. How can such investments and initiatives be enhanced and augmented to promote governments' abilities to make decisions in a changing climate? Some of the key elements that will be required for successful decision making for a changing climate include the following: Decision makers will have to contend with changes in the mean state of the climate system and its variability. Some of these changes are uncertain and won't become manifest for decades, but require early planning. Decision-making processes must, therefore, be proactive if planning and policy objectives are to be met in a changing climate. Decisions must also be robust - given the uncertainty surrounding climate risks - if they are to enable communities and ecosystems to prepare for a range of impact scenarios. Since climate change will bring unforeseeable surprises, decision making must also be designed to be responsive and flexible in order to adjust to changed circumstances and new information. And, given the long-lasting nature and magnitude of climate change's impacts, decision-making processes must be durable. Against this background, in this third expert paper series for World Resources 2010: Decision Making in a Changing Climate, we ask authors to delve into the critical question of what are appropriate roles for development agencies in supporting national-level decision-making processes for a changing climate? Are there innovative examples/good practices of development agency initiatives that support the types of decision making outlined above? Do certain types of development assistance impede or stymie such decision making, presenting hurdles to contending with climate change's surprises, uncertainty, long-term nature, heightened change and variability? If so, which? What recommendations or guidance would you give to development agencies to enable them to adequately support national-level decision making in a changing climate? What has the development community learned from similar efforts to manage other types of risks?

[...Read more](#) [6]

[Question Four](#) [8]



[Must we fundamentally change course to conserve ecosystems in a changing climate? \[8\]](#)

Do we need to adopt a fundamentally different approach to conserving ecosystems and their services in a changing climate? Ecosystems - Earth's natural capital - provide services such as clean water, food, climate regulation, fiber and fuel that are vital to the well being of human society. Over the past five decades, according to the Millennium Ecosystem Assessment, ecosystems have undergone more transformation than at any other point in the past, primarily driven by increased human consumption and the demand for, and overuse of, ecosystem goods and services. Ecosystem degradation has continued at the expense of the long-term conservation of the vital services that ecosystems provide to human communities and has resulted in an unprecedented rate of species loss. These trends are now being exacerbated by climate change, even as recognition grows that ecosystem conservation and sustainable management techniques will play critical roles in improving the resilience of communities to climate impacts. While ecosystems will naturally adapt and evolve in response to climate change, this adaptation may not occur in a form that enables the continuation of existing ecosystem services for people and maintains existing species diversity. This is especially true if ecosystems are so degraded by non-climate factors (such as habitat fragmentation) that they do not have the capacity to adapt in a manner that will preserve existing properties. Such circumstances are of particular concern for the rural poor who overwhelmingly depend on natural resources. The absence of concerted efforts to conserve ecosystems and their services in a changing climate could threaten tens of millions of livelihoods and even lives. The 2010 World Resources Report is focusing upon how governmental decision-making at the national level can contend with a changing climate, and specifically how policymakers and planners can better react to and prepare for climate change's uncertainty, surprises, time lags, and heightened change and variability. The conservation and sustainable management of ecosystems and their services can assist in the design of long-term approaches to climate change adaptation. Such efforts can also assist communities in preparing for and reacting to climate-related risks (for example, via mangrove conservation to protect against sea level rise). Yet, the world has long failed to adequately conserve ecosystems and their services even in the absence of climate change risks. We know already exactly what barriers need to be overcome to conserve ecosystems and their services: divided oversight or management responsibilities, short planning horizons, uncertainties surrounding ecosystems valuation and inadequate incentives for conserving ecosystems, among others. The real issue is this: in the face of climate change impacts, is overcoming such barriers enough? Or do we need wholesale changes in managing ecosystems if they and their services are to be protected in a changing climate? This leads us to pose the following critical question in this paper series: Do we need to adopt a fundamentally different approach to conserving ecosystems and their services in a changing climate? This question seeks insight into whether we should continue, with more urgency, to pursue existing practices for incorporating ecosystems into decision-making processes and overcome related barriers or whether we need to adopt radically different approaches in the way we contend with the additional stress of climate change on ecosystems. We ask authors to consider the following issues in their responses. Please do not feel limited by them or required to address them all. Where possible, please provide relevant examples on the ground. Please take some time to explain your views on the role of ecosystems in adaptation including benefits and limits. What are approaches for communicating this role to government decision makers and communities? Today we use a combination of command-and-control, incentive-based, voluntary, and other types of policy instruments. Does the additional stress that climate change poses on ecosystems place a premium on command-and-control measures that can lead to explicit controls and limits on access to resources (e.g. rezoning to prohibit further development of marshlands)? If so, given that command-and-control instruments do not explicitly maximize cost efficiency, how can governments justify such decisions to their citizenry? Given incomplete information with regard to how climate change will interact with other drivers of ecosystem degradation and how it could potentially trigger irreversible change, how do decision makers determine the acceptable risk to an ecosystem? To what extent does climate change place a premium on the precautionary principle - as opposed to cost-benefit analysis and risk assessment

methods - justifying more significant action? At what point should decision makers accept ecosystem change and attempt to cope with it rather than take proactive measures to slow down and halt such transformation? How should they make such decisions?

[...Read more](#) [8]

Question Five [10]



How can information for adaptation decision making be collected and disseminated so as to advance integration of climate risks into plans and policies and be useful for those who need it most? [10]

Timely, relevant and targeted information is the lifeblood of effective decision making. In this expert paper series on information for adaptation decision making, we ask authors to focus on innovative means for collecting and distributing the information required for countries to take effective national-level actions for climate change adaptation. Merely having the “right” information does not ensure that a policy or plan will adequately address risks or opportunities presented by a changing climate. To successfully implement such policies and plans, information must also be collected and disseminated in ways that serve those who need it, such as affected local communities and government decision makers. In addition, enabling societies to adapt to climate change will require establishing systems that transfer relevant information both from the national to the local level and vice versa. Of course, many countries will not have adaptation-relevant information. As a result, critical information gaps may affect some countries’ ability to maximize efforts to achieve climate resilience. The importance of filling these gaps should not be minimized. In this question, however, we seek specifically to assess the following: when useful information on climate risks and vulnerability does exist – even if incomplete or imperfect – how can this information be effectively collected and disseminated? Collection of Information As climate change intensifies, collecting relevant information will become increasingly urgent and will expand in scope and scale. Both the increased variability that will result from a changing climate and the long-term nature of many climate-related impacts suggest that information for adaptation will need to be continually updated over long periods of time. Previously uncollected types of information may also be necessary to promote adaptation efforts. Both long-term political will and community buy-in will be needed to provide the capacity and support for such expanded collection activities. As climate-related surprises are also likely to trigger the need for rapid information collection in affected areas, vulnerable countries will need to develop both institutions and incentives accordingly. Dissemination of Information To be useful, information, once collected, needs to be analyzed and distributed to those who need it in a relevant and timely manner. For example, a farmer in the Sahel may not have much use for a spreadsheet of average regional rainfall over the past 100 years. However, if he or she has forewarning of when to expect reduced rainfall in the future and how that may affect yields, then a farmer can make potentially livelihood-saving interventions. Adding to the challenge facing governments, information for climate adaptation must reach all those who need it. New, innovative methods of information distribution will be crucial in a changing climate. A central online clearinghouse of data may not be accessible for a rural community in developing countries, but members of that community may be reachable by cell phone text message. Information collection and dissemination is a mammoth task that will require significant support from local populations. Incentives for collection of information at the local level – as well as distribution of information across governance levels and communities – may therefore be needed to ensure ongoing provision and delivery of accurate data. It is in the context of these imposing challenges to information collection and dissemination that we ask authors in this series to shed light on the question: How can information for adaptation decision making be collected and disseminated so as to advance integration of climate risks into plans and policies and be useful for those who need it most? In responding, we ask authors to draw upon real-world examples of innovative processes for information

collection and dissemination, whether from a climate context or another context that presents a similar need. We also invite authors to take into account any or all of the following sub-questions: What models and incentives can enable effective information collection? Given the long-term nature of climate impacts, how can these models and incentives be sustained to continuously gather information? Given the need for updating of information as climate risks evolve, what are effective models and incentives for ensuring continuous updates of information? What are models and incentives for information gathering in response to events/surprises such as weather-related disasters? How can information effectively be translated into a form that fits users' needs? Who should be the target when translating information? What national-level processes and incentives can enable effective information dissemination? [1] We have also commissioned an expert series of papers looking at what types of information are needed for integration of climate risks into planning and policymaking.

[...Read more](#) [10]

Question Six [13]



What types of information are needed for adaptation decision making? [13]

Any decision maker advancing climate change adaptation interventions will need adequate and accurate information to make effective choices. In particular, they need the right types of data and knowledge about the climate risk at hand, the vulnerability of exposed populations, adaptation options, and a number of other factors. Specific information needs will vary from situation to situation and are likely to be shaped by the type of climate risk being addressed and the response it requires. Some risks will come as a surprise (e.g. weather-related disasters) and will require responsive efforts. Others will occur over a longer time scale (e.g. eventual sea level rise) and will require proactive policies and plans. And while some risks will be well understood, others will be highly uncertain and will require robust approaches that can handle multiple possible futures. We present three examples below which are representative of these different types of climate risks. For each, we ask authors to reflect upon the information needs for advancing adaptation efforts in that situation. We are curious to hear your thoughts on how information needs vary according to the nature of the risk at hand, as well as what information may be needed regardless of the type of risk being addressed.

1. Information needs for responsive policymaking/planning Recent flooding in Pakistan during the summer of 2010 displaced millions, killed almost 2000 people, and set back numerous development goals. While this one event cannot be directly attributed to climate change, extreme events like this are likely to become increasingly frequent. Decision makers will need to respond quickly to such surprises. What information sets are most useful in responding to such changes? Please also consider non-climatic data in your response. How much/what types of information are sufficient before an adaptation intervention can be advanced? What stakeholders should be involved in determining these information needs? How can decision makers strike a balance between an inclusive, participatory approach to defining information needs – which will lend legitimacy to response activities – while reacting quickly to the situation at hand?
2. Information needs for proactive policymaking/planning Three West African coastal cities are each projected to hold more than eight million people by 2015. Sea level rise is projected to significantly impact these megacities (Boko et al. 2007). Even if risks from sea level rise manifest themselves decades later, policymakers will need to take steps today to enhance the resilience of these coastal inhabitants. For example, urban areas may need to be redesigned to reduce vulnerabilities of concentrated populations to projected storm surges and floods, and planners may need to prepare for the restructuring of entire sectors (such as aquaculture) that are no longer viable in a changing climate. What information sets are most useful in preparing for such likely eventual changes? Please also consider non-climatic data in your response. How much/what types of information are sufficient before an adaptation intervention can be advanced? What stakeholders should be involved in

determining these information needs? 3. Information needs for robust policymaking/planning In Europe, large glaciers are projected to lose between 30% and 70% of their volume by mid-century (Schneeberger et al., 2003; Paul et al., 2004), which will significantly affect spring and summer water discharge levels. Water users and planners will have to be prepared for both extremes within this range. Given the uncertainty inherent in the projected impacts, what information sets are most useful in preparing for such eventual changes? Please also consider non-climatic data in your response. How much/what types of information are sufficient before an adaptation intervention can be advanced? What stakeholders should be involved in determining these information needs? In addition to the above questions, we ask authors to reflect upon the extent to which information needs vary among the above examples. In other words: Do information needs vary depending on whether the risk is a surprise versus a long-term threat? Do information needs vary if there is less certainty about the risk?

[...Read more](#) [13]

Question Seven [16]



Thought leaders explore how to meet both today's development challenges and tomorrow's climate risks[16]

The world is struggling to overcome pervasive development challenges including hunger, water scarcity and lack of basic human services. In Africa and Asia many countries are set to fall far short of meeting the 2015 anti-poverty Millennium Development Goals; worldwide 2.6 billion people still subsist on less than US\$2 a day. Yet overcoming these challenges will only become more difficult as climate change and its impacts intensify. Already, the world is experiencing the destructive effects of rising global temperatures, altered rainfall patterns and extreme weather, including more frequent droughts and heavy precipitation events. In the short term, such impacts are creating pressing needs for disaster relief and reactive climate adaptation measures. But in the medium and long term, the effects of climate change will almost certainly be much more disruptive. Wide-ranging impacts, including on agriculture, ecosystems and human habitation, will continue for decades and many will grow in frequency and intensity. To date, global average temperatures have risen by 0.8°C above pre-industrial levels. By the end of the century, the IPCC projects temperature increases between 1.6°C and 6.9°C above pre-industrial levels, with commensurately greater consequences for human society and for ecosystems. Likely impacts include the inundation of deltas and low lying islands and droughts and floods triggered by altered rainfall patterns on a scale not seen today. Agriculture and water resources will be especially hard hit. Availability of freshwater in Asia is projected to decrease significantly as a result of climate change and other stressors, negatively impacting more than 1 billion people in the next four decades. By mid-century, cereal yields in South Asia could decrease by 30% with obvious implications for food security. In addition, as global temperatures rise, the impacts around the world will also include unforeseeable surprises difficult to plan for. This stark reality raises tough questions for governments, multilateral institutions, civil society and communities, as they seek to build the resilience of both current and future generations to the inevitable yet unpredictable fallout of climate change. Of these questions, perhaps the most critical is the following: given the limited resources at their disposal, how can governments strike a balance between responding to pressing needs today versus preparing for tomorrow's likely even greater climate-related risks and challenges? How should countries whose populations suffer from hunger and lack of basic services or from joblessness and poor education, weigh action on these priorities against the likelihood of dried-up water supplies and threatened coastal communities 20 years down the line? How, on the one hand, can they cope with increasingly severe disasters, as witnessed by the recent devastating floods in Asia and heatwave in Russia—while, on the other, managing the uncertainty of future climate-related risks, including some which won't materialize for decades and others which may not materialize at all? To conduct the required balancing act effectively will require early

planning and decision making that takes the long view. Yet historically human society has not been good at such approaches; our decision-making processes have often been slow to foresee and prepare for, change. How can or should we adapt this entrenched, comfortable but increasingly risky way of planning for the future? What tools and approaches might be employed? What historical examples of societies managing both short- and long-term risks might be applied to decision making for contending with climate change impacts? What would be the trade-offs involved? The World Resources Report is seeking insight on these critical issues from some of the world's leading thinkers and practitioners in the fields of development, environmental governance, and climate adaptation.

[...Read more](#) [16]

Question Eight [19]



How can national-level governments learn from the private sector and encourage investment and decision making to promote the public good in a changing climate? [19]

As adaptation needs intensify around the world, and investment and implementation costs become apparent, there is growing interest in engaging the private sector in these efforts. With the potential to increase investment capacity, creativity and innovation, the private sector is a prospective partner who can multiply the impact of government, development agency and civil society efforts. Corporate experience and practices in managing risk may also help inform decision making for climate adaptation by these other actors. For example, whilst companies require certainty to make long-term investments, some have developed tools and approaches to moderate the risks of an uncertain economic environment, such as volatile fossil fuel prices, exchange rate fluctuations, and other market instabilities, and have become adept in managing change. These provide lessons from which the public sector might usefully draw. In addition to bidding on government-led adaptation investments, such as new infrastructure projects, the private sector will play a major role in shaping adaptation efforts by integrating climate risks into their own planning processes and investments. For example, companies could, by adapting their own operations, help protect critical global markets from disruption—especially those sectors that utilize natural resources and depend on critical ecosystem services, such as steady water supplies. Some may even find new business and investment opportunities that promote economic development by incorporating climate adaptation priorities into growth strategies. To what extent, and precisely how, the private sector will respond to a changing climate, is at present an open question. Corporate responses may strengthen vulnerable communities. Or they may ignore or misinterpret adaptation needs, resulting in activities and investments that instead run counter to the public good. As governments seek to build climate-resilient societies, their efforts to facilitate behavior and activities by companies that promote ‘positive’ adaptation can help shape the direction of private sector actions. This paper series for the World Resources Report asks expert authors to consider the overarching question: How can national-level governments learn from the private sector and encourage investment and decision making to promote the public good in a changing climate? Within this context, we pose the following sub-questions as possible areas to explore in your responses. - How does your company manage risks, especially risks characterized by uncertainty, like impacts from climate change? - What public policy incentives would enable your company’s adaptation program to support and enhance a developing country's national strategy to adapt to climate change impacts?

[...Read more](#) [19]

Question Nine [21]



[How can civil society best support, and hold accountable, national-level governments in their efforts to integrate climate change risks into planning and policy-making processes? \[21\]](#)

Civil society organizations (CSOs) form an essential bridge between the national-level public officials who are tasked with integrating climate change risks into sectoral and development planning and citizens and local communities that are on the frontline of climate impacts. Depending on their mission, they can deliver essential services and/or play a critical role on behalf of citizens in holding government accountable for lack of action or unwise or ineffective decision making. Their role is particularly important in developing countries where there tends to be a high turnover rate among government officials, limited resources for action, and governance gaps. At the national level, effective CSOs can accelerate government responsiveness to climate adaptation needs, and act as repositories of knowledge and informal advisers to government. They can also promote good governance in decisions made to address climate adaptation. For example, CSOs can pressure governments to balance decision-making processes that can react quickly to change with the need for engaging, and being accountable to, affected citizens and constituencies. At the local level, CSOs can build community understanding of, and support for, the development of adaptation initiatives such as information gathering and distribution and early warning systems for extreme events. In some developing countries, where governments are hampered by resource and capacity constraints, CSOs can complement the efforts of national ministries, for example in delivering services, such as disaster relief, to communities. The World Resources Report has commissioned papers exploring how CSOs can potentially act both as an effective partner and, when necessary, as an effective critic, ensuring that government is taking climate change risks into account. Our question to expert authors is how can civil society best support, and hold accountable, national-level governments in their efforts to integrate climate change risks into ongoing planning and policy-making processes? In their responses, we suggest that authors may like to address the following sub-questions: What is the role of civil society in decision making to address long term climate risks, and in engaging citizens in support of such decisions? How can CSOs assist governments in reacting quickly to climate change's surprises, including extreme weather events? And how should government officials balance inclusiveness via stakeholder processes and the need to react quickly given the urgency that some climate change impacts might present? Or is this a false choice? How can governments provide the conditions for CSOs to be effectively involved in climate change adaptation planning processes?

[...Read more](#) [21]

Source URL: <http://www.worldresourcesreport.org/expert-perspectives>

Links:

- [1] <http://www.worldresourcesreport.org/expert-perspectives/question-one>
- [2] <http://www.worldresourcesreport.org/category/research-agenda/key-question>
- [3] <http://www.worldresourcesreport.org/comment/reply/107#comment-form>
- [4] <http://www.worldresourcesreport.org/expert-perspectives/question-two>
- [5] <http://www.worldresourcesreport.org/comment/reply/108#comment-form>
- [6] <http://www.worldresourcesreport.org/expert-perspectives/question-three>

- [7] <http://www.worldresourcesreport.org/comment/reply/109#comment-form>
- [8] <http://www.worldresourcesreport.org/expert-perspectives/question-four>
- [9] <http://www.worldresourcesreport.org/comment/reply/110#comment-form>
- [10] <http://www.worldresourcesreport.org/expert-perspectives/question-five>
- [11] <http://www.worldresourcesreport.org/category/key-questions/question-five>
- [12] <http://www.worldresourcesreport.org/comment/reply/277#comment-form>
- [13] <http://www.worldresourcesreport.org/expert-perspectives/question-six>
- [14] <http://www.worldresourcesreport.org/category/key-questions/question-six>
- [15] <http://www.worldresourcesreport.org/comment/reply/320#comment-form>
- [16] <http://www.worldresourcesreport.org/expert-perspectives/question-seven>
- [17] <http://www.worldresourcesreport.org/category/key-questions/question-seven>
- [18] <http://www.worldresourcesreport.org/comment/reply/344#comment-form>
- [19] <http://www.worldresourcesreport.org/expert-perspectives/question-eight>
- [20] <http://www.worldresourcesreport.org/comment/reply/361#comment-form>
- [21] <http://www.worldresourcesreport.org/expert-perspectives/question-nine>
- [22] <http://www.worldresourcesreport.org/comment/reply/404#comment-form>