Briefing

Climate change, policy and planning

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Policy pointers

The design of a global adaptation goal should take account of national experiences of measuring adaptation and its effectiveness.

National experiences show it is useful to assess both institutional capacity and changes in vulnerability/resilience.

Adaptation successes differ in different contexts, so any global goal should allow flexibility.

A national theory of change can help define successful adaptation and appropriate metrics, which could then be aggregated for a global goal.

National experiences can inform a global goal for climate change adaptation

Parties to the UN climate change negotiations are considering how to define a global goal for adaptation. Such a goal could form a key part of the new international climate agreement, which parties are due to adopt in Paris in December 2015. The international discussions coincide with efforts by governments in the global south to develop national adaptation plans and strategies, and evaluative frameworks to measure progress. Lessons from these national experiences could help ensure a global adaptation goal supports and encourages effective adaptation for the climate-vulnerable poor. However, such lessons have not yet been fully considered in the international discussions. This briefing seeks to address this gap by relating research on adaptation effectiveness and measurement to proposed formulations of a global adaptation goal.

Proposals for a global adaptation goal

Parties to the United Nations Framework Convention on Climate Change (UNFCCC) are discussing how to define a global goal on adaptation. Such a goal could catalyse support and ambition around effective adaptation for the climate-vulnerable poor. To achieve this, however, a global goal must be meaningful for national governments and must support their existing efforts.

Several parties to the UNFCCC have submitted proposals for an adaptation goal that have the backing of large negotiating blocks. These proposed goals fall into three broad types: quantitative, aspirational and qualitative (see Table 1). All of the proposals call for the further development of methodologies for assessing adaptation efforts. However, several countries in the global south are already using such methodologies. This briefing therefore draws lessons from these national experiences and related research to support negotiations on the global goal for adaptation.

Measuring adaptation and assessing effectiveness: experience and evidence

As investment in adaptation has increased, so have efforts to evaluate whether adaptation projects or policies are effective. Some national governments with climate change plans and strategies have, for instance, worked to assess the effectiveness of their adaptation efforts by

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developing results frameworks and indicators of progress (see Box 1). There has also been growing research on methods for achieving this.[1] National experiences can therefore inform decisions about a global adaptation goal.

Other initiatives to assess or monitor adaptation effectiveness include:

- **The Pilot Program for Climate Resilience (PPCR).** This Climate Investment Fund has supported countries to develop institutional mechanisms and processes to assess their climate change activities, including by developing national results frameworks. As part of the programme's monitoring and evaluation, pilot countries were asked to assess themselves on five core indicators using institutional scorecards and national tables. This evidence, supported by narratives and other information, has been aggregated to assess the programme as a whole. Each indicator was developed and defined so that national experiences could be reported at the global level with a degree of comparability.
- **Tracking Adaptation and Measuring Development (TAMD).** Since 2012, eight countries have piloted the TAMD framework for evaluating the effectiveness of adaptation. The framework first assesses aspects of institutional capacity needed to manage climate risks and reduce vulnerability. These aspects, which can be tracked and monitored, are: integration, coordination, budget and finance, institutional knowledge and capacity, awareness, participation, use of climate information and planning for uncertainty. Governments using the TAMD approach then develop a 'theory of change' (see Box 2).[2] This describes the ways the government thinks changes in institutional capacity can improve resilience and wellbeing. From this theory of change, indicators are developed to assess short term changes in resilience and longer term changes in wellbeing. Indicators of resilience, vulnerability and adaptive capacity all seek to capture the ability of people and systems to anticipate, avoid, plan for, cope with, recover from and adapt to (evolving) stresses and shocks.[2]

Ultimately, adaptation is about keeping national development on track. Success can also be measured with indicators of the costs climate change imposes — in terms of assets, livelihoods or lives, or with indicators of other aspects of human wellbeing that climate change could affect. One approach would be to interpret, in the context of climate data, standard development indicators already used to track changes in areas such as poverty, inequality, health and nutrition.

Linking national learning to the international discussion

From national experiences, we draw the following initial lessons for international discussions around the adaptation goal.

1. Measuring the costs of climate impacts may seem simple in some respects. Evidence shows, however, that increased finance does not guarantee effective adaptation or increased national resilience. It is important to also consider how the benefits of climate investments are

Box 1. National experiences of measuring adaptation

Cambodia is developing a system to track both the enabling environment for adaptation and progress in reducing vulnerability. The system uses a national-level vulnerability index and scorecards that assess progress in institutional readiness.[3]

Ethiopia is developing a results framework to assess progress toward the main objectives of its Climate Resilient Green Economy strategy.

Kenya has developed a system called MRV+ to evaluate adaptation and mitigation policies and interventions in its National Climate Change Action Plan. This involves top-down indicators on adaptive capacity and bottom-up indicators on vulnerability. Kenya has also piloted a framework to assess adaptation at the county level.[4]

Mozambique has integrated an evaluation into Local Adaptation Plans and has developed a results framework for its national strategy.

Table 1. A comparison of proposed global adaptation goals that different negotiating blocks support

Type of goal	Supported by	Main points
Quantitative goal	Africa Group of Negotiators (AGN)[5]	• Seeks to quantify the global costs of adaptation • Presents a four-step methodology for determining adaptation costs during each commitment period of the 2015 agreement • The methodology infers a global cost of adaptation from the probability of climate impacts associated with different levels of warming and the cost of these impacts by region (based on average costs of disasters) • This global cost would reflect, in quantified terms, the global obligation to support developing country adaptation actions
Aspirational goal	Mexico and the Independent Association of Latin America and the Caribbean (AILAC)[6]	• Proposes the establishment of a global vision of a climate-resilient world, and a global goal to accomplish this vision • The global goal would recognise links between factors, such as that between the extent of collective mitigation action by parties to the UNFCCC and the resulting temperature increase and climate impacts • Parties would implement the global goal through collective and country contributions • The UNFCCC would launch a process to further develop adaptation assessment, metrics and indicators that would facilitate understanding of country contributions and aggregate efforts
Qualitative goal[7]	The European Union (EU) Environmental Integrity Group (EIG)[8,9]	• A collective commitment to low-carbon and climate-resilient sustainable development • Calls for all parties to integrate adaptation into national policies and programmes • Seeks to increase the quality of national adaptation actions and capacity to adapt to climate-induced hazards via domestic policy • Includes provisions to strengthen international cooperation and coordination, enhance expertise through the sharing of best practices and facilitate the mobilisation of support to developing countries • Seeks to facilitate the reporting and improved monitoring of the effectiveness of adaptation efforts at the national level

distributed and to ensure that the climate-vulnerable poor are included in these benefits.

2. It is also important to consider both institutional capacities for climate risk management and changes in vulnerability/resilience. Work in the PPCR and TAMD pilot countries offers a logical set of institutional capacities that could be tracked, at even a global level. This could give each country a numeric score that reflects their capacity to manage climate risks. Emerging experience on using scorecards to assess institutional climate risk management could support the development of this approach as part of a global adaptation goal.[10]

Box 2. What is a theory of change?[2]

A theory of change is a model or chain that links actions with results via mechanisms and pathways to try to explain how a desired change will come about. It can be used at the national level to identify:

1. The assumed mechanisms and pathways through which specific climate-related hazards experienced within a country lead to consequences for national development and targets
2. The adaptation processes and mechanisms — such as better climate risk management and improved resilience — that are expected to result in a decrease in the consequences of hazards for national development and for the climate-vulnerable poor
3. How the changes that are expected to result from adaptation could be tracked using indicators.

3. Examples such as Cambodia show that it is possible to measure changes in vulnerability and/or resilience. However, the approach for doing so will depend on each national context. A global goal with one metric for vulnerability may therefore fail to capture variation among national contexts. By using a national theory of change, each government could define success in their context and choose indicators of resilience and/or wellbeing. Progress against national indicators could then be assessed on a comparable scale globally and/or aggregated for a global goal.

4. It is important to consider how the international climate change agreement can avoid putting the burden of monitoring and evaluation on the most vulnerable countries. Any agreed goal must come with support for integrating such a framework, or for strengthening frameworks that countries are already developing through their national adaptation plans or low-carbon resilient strategies. This is a crucial aspect of climate-finance readiness and effective adaptation.

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Knowledge Products

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Notes

[1] Dinshaw, A et al. (2014) Monitoring and evaluation of climate change adaptation: Methodological approaches. OECD Environment Working Papers No. 74. OECD Publishing, Paris. / [2] Brooks, N and Fisher, S (2014) Tracking Adaptation and Measuring Development: A step-by-step guide. IIED, London. http://pubs.iied.org/10100IIED / [3] Rai, N et al. (2014) Developing a national framework to track adaptation and measure development in Cambodia. IIED, London. http://pubs.iied.org/17259IIED / [4] Karani, I et al. (2014) Tracking Adaptation and Measuring Development in Kenya. IIED, London. http://pubs.iied.org/10101IIED / [5] Africa Group of Negotiators (8 October 2013) Submission by Swaziland on behalf of the African Group on adaptation in the 2015 Agreement. UNFCCC Submission. https://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_african_group_workstream_1_adaptation_20131008.pdf / [6] AILAC and Mexico (18 October 2014) Adaptation in the ADP. UNFCCC submission. http://www4.unfccc.int/submissions/Lists/OSPSubmissionUpload/39_99_130581311840849856-Adaptation%20Submission%20AILAC-Mexico%20vf.pdf / [7] Though they contain slight differences, when contrasted with the quantitative and aspirational adaptation goals discussed above, the proposals of the EU and the EIG are similar enough to be considered as a single proposal type / [8] The Environmental Integrity Group's members are Liechtenstein, Mexico, Monaco, the Republic of Korea and Switzerland / [9] Environmental Integrity Group (5 June 2014) EIG's views on the elements of the 2015 Agreement. UNFCCC Submission. http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp2-5_submission_by_eig_20140605.pdf; European Union (28 February 2014) The 2015 agreement - priorities for 2014. UNFCCC submission. http://unfccc.int/files/bodies/application/pdf/el-02-28-eu_adp_ws1_submission.pdf / [10] Rai, N and Nash, E (2014) Evaluating institutional responses to climate change in different contexts. IIED, London. http://pubs.iied.org/17271IIED