
FROM

MARGINS

TO

MAINSTREAM?

**STATE CLIMATE
CHANGE PLANNING
IN INDIA AS A
'DOOR OPENER' TO
A SUSTAINABLE
FUTURE**

RESEARCH REPORT

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CENTRE FOR POLICY RESEARCH
CLIMATE INITIATIVE

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The Climate Initiative seeks to generate research and analysis on the global climate negotiations, and on the links between the global climate regime and domestic laws, policies and institutions in India. It also seeks to create a platform from which scholars and activists can engage in policy and academic debate on climate change. For more information on the Climate Initiative's project on State Action Plans on Climate Change, please go to <http://state-climate-plans.cprindia.org/>.

EXECUTIVE SUMMARY

State Action Plans on Climate Change hold potential as an important intervention in the development process. They provide an institutional platform to mainstream concerns of environmental sustainability into development planning and, if done properly, to update ideas of sustainability to include climate resilience. This platform provides a potential opening to enterprising and committed bureaucrats, but is also an opening with which development practitioners, academics, business, and civil society at large could productively engage.

At the moment, this promise is not being adequately realised. As discussed in this study, there are shortcomings in approach, process, formulation of outcomes, and implementation efforts. These shortcomings are united by a common thread – a tendency to prematurely view state climate plans as

vehicles for generating implementable actions rather than an opportunity to re-direct development toward environmental sustainability and climate resilience. Thin conceptual frameworks, processes that provide no space for generating a vision of change, limited state capacity, and truncated time frames all reinforce this outcome. While concrete actions are indeed important, these may be of limited value unless informed by a broader vision of future directions in key climate-related sectors such as agriculture, water, and energy.

State plans are viewed as the beginning of a complex process rather than as an end in themselves, they provide a foundation upon which to build. The recommendations contained in this report suggest specific measures that the central government, state governments and donor agencies

could adopt. In addition, if climate plans are indeed used as an opportunity to re-direct development, then they require a much more robust process of engaging civil society and business stakeholders in envisioning alternative futures on a sector-by-sector basis and corresponding interest and engagement from these stakeholders. The path forward requires iterating climate plans with an eye to a more robust framing, a process that enables broader dialogue within and outside government, structured outcomes at different levels of specificity, and staged implementation that prioritizes internalization of sustainability and climate resilience into sectoral departments.

FINDINGS	RECOMMENDATIONS
Approach	
<ol style="list-style-type: none"> 1. State climate change action plans are treated synonymously with sustainable development planning. This approach usefully injects environmental issues into development planning, but represents a lost opportunity to internalize climate resilience. 2. Climate plans are inadequately rooted in relevant scientific knowledge on climate change, with negative implications for their salience and usefulness. 3. Plans appropriately balance national direction and local concerns, but state issues may be more salient in the long run. 4. Plans focus more on adaptation than on mitigation; states perceive mixed signals about the appropriate role for mitigation. 	<ol style="list-style-type: none"> 1. Inform the plan process with a conceptual framework elaborating the links between climate resilience (adaptation and mitigation), and sustainable development in order to avoid a business as usual approach. (Centre, States, Donors) 2. Science-based and downscaled predictions of state-specific climate impacts need to be readily available to states, which the centre can play an important role in providing. (Centre) 3. Include mitigation in the framework for state plans, as the links between sustainability, adaptation and mitigation are strong and pervasive, and because states have interests in energy-related actions. (Centre, States)

FINDINGS	RECOMMENDATIONS
Process	
<ol style="list-style-type: none"> 1. Climate change plans have occasionally received high-level political support in an effort by states to project a green image, which has translated to bureaucratic attention. 2. The process of developing plans shapes whether they follow existing departmental action or result in creative integration, and also affects the degree of departmental 'ownership' of plan outcomes. 3. Several states sought external inputs, but the consultation process was insufficiently robust to materially shape plans. 4. Capacity constraints limited states' ability to develop plans in-house. The assistance of donors and use of consultants largely failed to adequately enhance states' long-term capacity or enable integration of climate expertise and local context. 	<ol style="list-style-type: none"> 1. Design internal processes to prioritise creativity and new understandings over short term action items; cross-departmental dialogue is a useful approach. (States) 2. Structure well-designed processes of ex ante and ex post consultation with stakeholders to generate new ideas, appropriately sequenced with plan formulation. (States) 3. Donor intervention should facilitate informed and integrative interaction across departments and stakeholders; initiation workshops and studies should avoid precluding creative framings and new issues. (Donors, States) 4. Allow adequate time for climate planning; truncated time frames work against creativity and reinforce a return to existing trajectories. (States)
Outcomes	
<ol style="list-style-type: none"> 1. Recommendations are not based on a systematic framework for formulation or prioritisation but are a mix of broad statements of objective and specific actions—the result is neither a clear vision nor a clear plan. 2. Recommendations are incremental rather than transformational because of the process chosen for plan formulation, although there are pockets of innovation driven by individual initiative. 	<ol style="list-style-type: none"> 1. Sequence plans around a vision, major objectives, and specific actions, understanding that progress may be uneven along this sequence for different sectors. (States) 2. Develop an explicit basis for prioritizing objectives and actions to help make better use of scarce capacity and finance, and enable implementation. (Centre, States, Donors) 3. Plans should be used as an opportunity to engage transformational questions, organized around large integrative themes that cut across sectors; initial plan iterations should focus on ideas for a 'directional shift' in development trajectories with specific actions to follow. (States)
Implementation	
<ol style="list-style-type: none"> 1. The existing capacity of dedicated state climate change units is insufficient for stimulating and monitoring implementation. 2. Successful implementation requires mainstreaming of recommendations into the functioning of line departments; there is little clarity on how to accomplish this mainstreaming. 3. Budget estimates in plans vary widely. They do not adopt a consistent methodology across states, and should be considered indicative at best. 	<ol style="list-style-type: none"> 1. Improve the capacity of nodal agencies to serve as conduits for climate science, facilitate linkages across departments, and enable deliberation on sustainable development in the context of climate change. Playing these roles requires multiple skills and staff continuity over time. (States, Donors) 2. Experiment with creative implementation mechanisms, including the use of analysis and information based instruments to 'nudge' action, and coordination with state planning agencies. (States) 3. Developing credible estimates of additional financial costs may be premature. Costing should be limited to areas where plans are well fleshed out and based on a consistent methodology across states. (States, Centre)

MOTIVATION

For much of the last two decades, climate change has largely been considered an esoteric issue in India, to be discussed in international negotiations, but not one of much salience to domestic development imperatives. This has always been a flawed understanding, because climate change impacts can make the task of developing in a sustainable manner much harder (See Box: Climate Change and Sustainable Development). More recently, however, there has been growing awareness of the relevance of climate change for India, both within government, and within other sectors of society, such as civil society, business and media.¹

Notably, in August 2009, the Prime Minister asked all states to develop State Action Plans on Climate Change (SAPCCs), as an extension of the National Action Plan on Climate Change NAPCC process.² The rationale was to decentralise action beyond the eight missions of the NAPCC, particularly given that many subjects covered – especially those like water and agriculture – are actually state subjects. The Centre developed a “Common Framework Document,” with the assistance of some donor agencies, to guide this process, stressing that it be participatory, build capacity, develop a vulnerability assessment, and draw on experts and donors for guidance and support.³ A number of states embarked on ambitious plan formulation processes. As of December 2013, over 22 states and Union Territories had completed drafts of their plans, and 9 had been ‘endorsed’ by the Ministry of Environment and Forests (MoEF).⁴

BOX: CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change provides several findings relevant to climate change and sustainable development linkages:

Climate change is projected to impinge on the sustainable development of most developing countries of Asia, as it compounds the pressures on natural resources and the environment associated with rapid urbanisation, industrialisation, and economic development. SPM WGII, p. 13

Climate change can slow the pace of progress towards sustainable development, either directly through increased exposure to adverse impact or indirectly through erosion of the capacity to adapt. SPM WGII, p. 20

‘Making development more sustainable can enhance both mitigative and adaptive capacity, and reduce emissions and vulnerability to climate change. Synergies between mitigation and adaptation can exist, for example properly designed biomass production, formation of protected areas, land management, energy use in buildings and forestry. In other situations, there may be trade-offs, such as increased GHG emissions due to increased consumption of energy related to adaptive responses’ SPM WGIII, p. 22

Source: Intergovernmental Panel on Climate Change, 2007: Summary for Policymakers, Working Groups II and III. (http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml#1).

To what extent do these newly forged state climate plans and the underlying process of their creation shift climate change from the margins to the mainstream of India’s development debate? This is an important question to ask for several reasons. First, in the light of challenges posed by climate change, a business-as-usual approach to

sustainable development is likely to be increasingly ineffective. Second, state planning for climate change affords an intriguing opportunity to revisit existing development planning in ways that prompt more explicit attention to environmental sustainability. Third, and most pragmatically, SAPCCs are unlikely to be a one-off exercise; the current round of plans will have to be reviewed, updated, and improved upon in an iterative process. Given this, it is important to document the lessons of experience.

A summary response to the overarching question above is that state climate plans have been a 'door opener,' as one official put it, to a more in-depth engagement with the concepts and implementation challenges of sustainable development. But they have not, as yet, provided an opening for transformative change – the 'directional shift' called for in the NAPCC.⁵ To elaborate on this answer and suggest practical ways forward, this report further explores:

- I. What approach have states taken to state plans and how are plans understood by the people who lead them as well as those who engage with the process?
- II. What is the process through which they are put together and how does this process affect the outcomes?
- III. What sorts of outcomes result and will these recommendations add up to a re-envisioning of sustainable development?
- IV. And what, ultimately, are the prospects for implementation of ideas arising from state plans?

After briefly outlining the research approach and methods, the remainder of this report spells out the principal findings and recommendations of the study, with the intent of contributing to ongoing policy debates and processes on climate change and development.

APPROACH AND METHODS

The study draws on an analysis of state climate plans⁶ in five states: Karnataka,⁷ Himachal Pradesh (HP),⁸ Madhya Pradesh (MP),⁹ Odisha,¹⁰ and Sikkim.¹¹ The states were primarily chosen to represent geographic and agro climatic spread, and variability in donor organisations involved, with additional attention to agro-climate variability, size and, economic prosperity. Further, only states that had completed a draft report were considered. As of January 2014, the climate plans of MP and Sikkim had been endorsed, whereas HP, Karnataka and Odisha were awaiting approval.

The report is based on interviews with officials from nodal and department ministries in each state, civil society actors, consultants and donors. The interviews are complemented by close analysis of state plans and supporting documents. The approach is primarily qualitative and interpretive. Preliminary findings were presented and discussed with state representatives at a feedback workshop in 2013, and comments were solicited from each state, although the authors bear entire responsibility for the content and interpretations.¹²

Detailed findings are reported in state chapters, which are available at: <http://state-climate-plans.cprindia.org/>

THE APPROACH

State climate change action plans are treated synonymously with sustainable development planning. This approach usefully injects environmental issues into development planning, but represents a lost opportunity to internalize climate resilience.

Climate change planning in India – as elsewhere – has been unexplored terrain. Accordingly, the initial understanding of the aims and objectives can determine what follows. What was this initial understanding and how was it shaped?

In many states, climate change action plans were approached as sustainable development action plans. A low level of initial knowledge about climate change in some states, a lack of a conceptual framework with which to link sustainability and climate change, limited access to appropriate state-level climate science projections, and, in some cases, pressures on time, all led to a default approach of broad sustainability planning. In the words of a consultant who worked on several plans including Sikkim, "...in most cases there is a very thin line between a climate action plan and a business-as-usual development plan. There is a line, but a very thin line."¹³

Interviews with state officials suggest that while climate change is often a little understood abstraction, there is greater motivation to address concrete local issues of sustainable development, which is also likely to bring greater political support for action (See Dialogue Box 1). Viewed thus, state climate change plans may be understood, as one state official put it, as a useful 'door-opener' to consideration of long standing sustainable development concerns, since there is a considerable overlap between sustainability and climate resilience.

On the other hand, understandings of sustainable development are incomplete without taking account of future climate change impacts. For example, changes in

future rainfall trends have impacts for the trajectory of hydropower development, and sea-level rise carries implications for infrastructure development along the coast. Even efforts at climate mitigation may have implications for sustainable development, such as the implications of biomass-based energy on land-use.

The incomplete framing of sustainable development in the context of climate change is partly due to limitations at the initiation stage of plans. As an official from MP put it, "SAPCCs [are] not climate change plans but good development plans. States were thrown into the process without

capacities to understand the process or the product."¹⁴ Most states held inception workshops, but these were focused around technical presentations on climate change from experts rather than internal deliberations that allowed state officials and experts to draw links between local understandings of sustainability and the challenges posed by climate change. Even in Sikkim, where bureaucrats in charge had previously made efforts to understand the implications of climate change, and independently produced a volume on the subject, the workshop was limited to technical presentations from experts to other working group officials.¹⁵

DIALOGUE BOX 1

"Politicians and people cannot understand what will happen after 30 years. Environmental issues are already taken up with lots of difficulty... We should take up practical things... because of intensive agriculture the Arkavathi River [in Bangalore] is almost dry. There is severe ground water depletion ... so many dying industries throw their sewerage there."

- Official, Government of Karnataka

"We started the SAPCC on a scientific note but got no buy-in from the departments, especially when we told them that the climate was going to change that way in the next 20 years. We talked to farmers, women groups, unemployed youth, then the SAPCC came to life. People started to say women will not have access to water, the springs will dry up, Rabi crop suffer. People started realising there are some real life problems that we need to solve."

- Official, Government of Sikkim

"Is there a conceptual understanding [of an SAPCC]? I don't think so; there is no common approach despite having a common framework."

- Consultant, Odisha Climate Change Action Plan

Climate plans are inadequately rooted in relevant scientific knowledge on climate change, with negative implications for their salience and usefulness.

State plans make limited use of relevant scientific knowledge on climate change, in large part because of difficulties accessing such knowledge, which is an important reason why they fail to upgrade sustainable development to include climate resilience (See Dialogue Box 2).¹⁶ While many plans carry a section on climate trends and forecasts based on available regional studies, this information was often drawn from a report by the Indian Network of Climate Change Assessment (INCCA) in 2010 that provided trends for four climate sensitive regions and sectors in India.¹⁷ This is an inadequate scale for state planning. The problem of inadequate information and was exacerbated by time pressure. Officials in HP and Odisha for example, felt that any initial investment in climate science such as commissioning model-based climate forecasts specific to the state would delay the SAPCC process.¹⁸

All states conducted a vulnerability assessment (VA), but the effectiveness of these was limited by lack of adequate regional level climate predictions and adequate scientific capability. The Odisha and Sikkim state plans for instance, derive

sectoral and region-wise climate sensitivity from current climate trends rather than future projections.¹⁹ In some cases, such as in MP and Karnataka, the vulnerability assessment was conducted as a separate project, rather than as an integral part of the climate plan.²⁰

Consequently, even where such information is available, there is little evidence that final plan recommendations reflect priority areas based on science. For example, in MP, which was not featured in the MoEF based INCCA study, climate specific information was added later after the first iteration of the report was ready.²¹ Odisha, which prepared a draft in just three months, did not include any climate forecasts. Karnataka represents a partial exception, as the state was able to draw on climate research from a non-governmental research consortium (See Case Study 1). Thus, Karnataka's recommendations for agriculture for instance, include specific district-wise crop changes based on forecasts of future temperature and precipitation projections.²² As Table 1 suggests, a linkage between climate science and recommendations is the exception rather than the rule, with Karnataka being the only exception.

DIALOGUE BOX 2

"We are a small state. A 50x50 vulnerability assessment at the district level is of no use to us with just four districts. It's like you outsource a study to find out the biggest room in your own house."

- Official, Government of Sikkim

"To get 30-year data for temperature and rainfall for 50 districts, we ran between several regional IMD [India Meteorological Department] offices; Bhopal, Pune, Delhi... It would have been better for MoEF to ask IITM [Indian Institute of Tropical Meteorology] to prepare information brochures or leaflets and provide it to all states stating this is what your state will look like 30 years hence."

- Official, Government of MP

CASE STUDY 1: USE OF CLIMATE SCIENCE IN KARNATAKA

Intervention

A consortium of research and scientific organisations prepared a scientific assessment of the implications of climate change for Karnataka, which was used as a basis for analysis and recommendations by the nodal agency.

Outcome

The Karnataka climate plan is arguably the only plan examined that has been able to draw on science and research outcomes specific to the state.

Details

Reputed research institutes – Indian Institute of Science, Centre for Study of Science, Technology and Policy, University of Agricultural Sciences, Bangalore, and Institute for Social and Economic Change – came together under the Bangalore Climate Change Initiative – Karnataka (BCCI-K). Their report is predominantly science-focused, and includes state specific climate projections, vulnerability assessment, GHG inventory, and chapters on forests, water, agriculture, and adaptive capacity, and mitigation options.

Limitations

Although the study provided a level of scientific detail that is relatively rare in the SAPCC process, priority actions were driven more by the state's immediate development and environment concerns.

Source: Karnataka climate plan by EMPRI and Climate action plan by BCCI-K

Table 1: Links between climate science and final recommendations

State	Science and Research Findings in Climate Plans	Linkages with Final Recommendations
HP	The vulnerability assessment provides a district-wise vulnerability profile of the state based on current trends and future climate projections.	Recommendations do not specifically target any of the vulnerable districts.
Karnataka	Plan states that, “projected increase in rainfall and temperature is expected to cause changes in the cropping pattern and production... of the state.”	Recommendations include a state level policy body for the “region wise redistribution of existing subsidies to promote cropping patterns” based on future climate projections.
MP	Climate forecasts chapter predicts a 1.25 fold increase in monsoon rainfall in all but four districts in 2021 and 2050.	Recommendations for agriculture focus on a water-stressed scenario, suggesting dry land farming, drip irrigation, dry flooding, and adoption of drought-resistant crops.
Odisha	The plan carries no model based regional projections. The vulnerability assessment is not scientifically analysed, nor does it offer any spatial or temporal vulnerability trends.	Recommendations are not linked to any climate specific research.
Sikkim	The VA chapter suggests “village specific adaptation packages” because of the high degree of climatic variability within districts.	Recommendations do not address any specific district, region, or village cluster.

Source: HP climate plan, p. 65; Karnataka climate plan, pp. 16 and 25; MP climate plan, pp. 24, 99, and 104; Orissa Climate Plan, pp. 11-18; Sikkim climate plan, p. 30.

Plans appropriately balance national direction and local concerns, but state issues may be more salient in the long run.

In India’s federal system, there is an inevitable tension between the consistency obtained by a centrally directed approach and the gains of tailoring policy to the local context when states take the lead. Following the guidance from the MoEF, states largely followed the template of the eight missions laid out under the NAPCC.²³ Indeed, even the recommendations sections of some plans followed the sub-categories listed under the missions.²⁴

At the same time, local concerns did play a role in shaping both the content of the plans and some additional emphasis on certain sectoral areas (See Dialogue

Box 3). For example, the Odisha climate plan was seen as a way to bring much needed funds to reduce transmission and distribution losses in the state’s privatised electricity sector even though this is not a major theme in the NAPCC.²⁵ Indeed a third of the plan budget is set-aside for this purpose.²⁶ In Sikkim, water issues dominate state concerns around glacial retreat, given the dependence of the state on mountain springs for water supply.²⁷ Consequently, this sector represents the best-developed portion of the Sikkim plan.²⁸ The HP climate plan was drafted around the time the then Chief Minister announced a carbon neutrality target for

the state.²⁹ And even though the plan does not directly commit to that goal, a third of the actions in the plan focus on mitigation.³⁰

The climate plan process has, therefore, found a balance between laying out a broad framework and leaving space for state direction. In the future, it may be advisable to tilt the balance in favour of state initiative for at least three reasons: many climate relevant issues are state subjects; implementation chances are heightened if states can focus on issues that are politically salient locally; and experimentation at the state level is more likely to lead to creative new ideas than a fixed central diktat.

DIALOGUE BOX 3

“Nothing was moving in the [energy] sector. This was an opportunity for us to impress on private sector, regulator and government...In the name of climate change, highlight that the sector needs support...we would not have got support without the climate document.”

- Official, Government of Odisha

“Water is scarce in the Himalayas, last few years winter rains reduced, springs dried up...adaptation is a major concern for the state.”

- Official, Government of Sikkim

“In Himachal, climate change started with CDM [Clean Development mechanism], to get credits for hydropower.”

- Official, Government of HP

Plans focus more on adaptation than on mitigation; states perceive mixed signals about the appropriate role for mitigation.

Among some state officials, there was a clear sentiment that it was appropriate for state plans to focus on adaptation issues, one backed by the MoEF (See Dialogue Box 4). Adaptation, it was felt, was clearly tied to development concerns, and given India's stage of development and relatively limited contribution to historical emissions, mitigation should take a back seat.

However, there were some confounding factors that led to mixed signals on the relative balance of plans on adaptation and mitigation. First, the NAPCC, which served as the guiding document for state plans, includes several missions focused on mitigation.³¹ Second, the Common Framework Document issued by the MoEF explicitly states that each plan should include a Greenhouse Gas Inventory (GHG), which by its nature is mitigation focused.³² Finally, some states had an interest in pursuing energy related issues in their plans.

In such states where local importance was given to mitigation issues, mitigation related actions formed a substantial component of final SAPCC recommendations. Examples include Odisha's focus on reducing losses in the electricity system, Karnataka's efforts to restructure agricultural power tariffs and HP's exploration of payment for ecosystem services as well as acquiring more carbon credits through the CDM process.³³

However, as Table 2 shows, while some states conducted a GHG inventory not all chose to include these in the final plan. Interviews in four states suggested that feedback from the MoEF (contrary to the guidance initially presented in the Common Framework Document) advised against inclusion of these inventories on the grounds that it might unnecessarily

expose India to international pressure. As a consultant to Sikkim and MP put it, “The MoEF is not encouraging it [inclusion of GHG inventories] at this point even though it's in the framework since bi-laterals and multilaterals can pick up state numbers and informally push their cause [for India taking on emission cuts].”³⁴

DIALOGUE BOX 4

“When we started, there was a clear directive from state government, Steering Committee, and Chief Secretary, to focus on vulnerability and adaptation,”

- Official, Government of MP

“We would only engage in mitigation activities if it offered a win-win situation for the state's development agenda.”

- Retired Official, Government of MP

“India's climate change policy is already mitigation heavy. We need to build resilience as a first priority based on people's economic needs (in HP).”

- Official, Government of HP.

“On the SAPCC, the template was clear. States can make it as comprehensive as possible but mitigation activities can only be mentioned in line with policies at the national level. They can take up renewable energy, transport initiatives, but can't take on a trajectory of their own.”

- Official, Ministry of Environment and Forests, Government of India.

In the future it would be better to avoid mixed signals about the desirability and need for including mitigation-related issues as part of state planning processes. While concerns about opening the door to international obligations may be understandable, these concerns are alleviated by the NAPCC focus

on a co-benefits framework for Indian action, which places an emphasis on development first, and the fact that many states appear to have their own interests in pursuing energy related actions in a co-benefits context.³⁵ Moreover, a failure to integrate mitigation comes at a cost,

because energy supply and demand is a key aspect of sustainable development and because there are linkages between adaptation and mitigation that need to be part of the framework for climate plans.

Table 2: Relative Focus on Adaptation and Mitigation in Prioritised Recommendations of State Plans

SAPCC	GHG Inventory	Prioritised actions	Adaptation	Mitigation	Other
HP 'Indicative Action Plan 2012-2017'	Yes	148	85 (57%)	46 (31%)	17 (12%)
Karnataka 'Priority actions and entry points'	Yes	100	66 (66%)	27 (27%)	7 (7%)
MP 'Strategies and Budget'	Yes, but not included in the plan	337	207 (62%)	109 (32%)	21 (6%)
Odisha 'Key Priorities'	Yes	142	72 (47%)	65 (43%)	5 (10%)
Sikkim 'Actions' list in sector chapters	No	224	159 (71%)	43 (19%)	22 (10%)

NOTE: All proposed activities (including research and capacity building outcomes) have been categorised under mitigation or adaptation action. 'Other' includes actions that could not be categorised exclusively under one or other category, often pertaining to broad sustainable development activities.

The Sikkim plan lists time bound targets. Actions under the five-year target are taken as the priority list for this analysis.

Source: HP climate plan, p. 224; Karnataka climate plan, p. 25 and 165; MP climate plan, p. 97; Orissa climate plan, p. 118; Sikkim climate plan, pp. 43-163.

RECOMMENDATIONS ON FRAMING STATE PLANS

- 1. Inform the plan process with a conceptual framework elaborating the links between climate resilience (adaptation and mitigation), and sustainable development in order to avoid a business-as-usual approach.**
- 2. Science-based and downscaled predictions of state-specific climate impacts need to be readily available to states, which; the centre can play an important role in providing.**
- 3. Include mitigation in the framework for state plans, as the links between sustainability, adaptation and mitigation are strong and pervasive, and because states have interests in energy-related actions.**

THE PROCESS

Climate change plans have occasionally received high-level political support in an effort by states to project a green image, which has translated to bureaucratic attention.

The process through which a state develops its climate plan can either open doors to creative ideas or close off opportunities, empower voices outside the mainstream or silence them. Accordingly, exploring the process followed by states is an essential precursor to looking at their outcomes.

The Chief Ministers of several states, notably Sikkim, HP and Odisha, have been reported as being keen to project their state as environmentally forward-thinking. While in Sikkim the plan was directly tied to climate concerns because of the state's dependence on glacial springs, in HP and Odisha the motivation was to build on the state's green credentials and receive additional finance. The Sikkim Chief Minister for instance, constituted a 'State Council on

Climate Change', well before the SAPPC process, and also established a 'Glacier and Climate Change Commission'.³⁷ HP hosted a Climate Change Conclave and announced a climate neutral target for the state to be addressed with assistance from the World Bank.³⁸

High levels of political attention have translated to bureaucratic energy and have proved helpful in mobilising bureaucrats from other departments (See Dialogue Box 5). In the case of Sikkim and Odisha it has also led to some focus on implementation. The Odisha government has reportedly decided to implement the climate plan without waiting for central funding, perhaps in reaction to super cyclone Phailin.³⁹ Although in-principle support from the top is certainly necessary, it is not sufficient for an effective plan.

DIALOGUE BOX 5

"We wanted to make sure though these [climate initiatives] that HP had a good track record of proactiveness with respect to environment matters."

- Senior official, Government of HP

"This [Sikkim climate plan] fits the CM's larger green Sikkim image."³⁶

- NGO representative, Sikkim Action plan on Climate Change

"The involvement of all the secretaries [in the climate plan process] was important. The CM [Chief Minister] and CS [Chief Secretary] took a couple of meetings, so the entire system was energised."

- Senior official, Orissa Climate Change Action Plan

Table 3: Summary of the State Planning Process

State	Internal Process	External Participation and Consultation	Donor and Consultant role
HP	Plan drafted entirely by Department of Environment Science and Technology. Some inputs gathered from line departmental officials.	Peer review group of senior academics vetted research and draft plan outcomes.	No formal donor engagement in the plan. Consultation and feedback from a donor agency in the context of a concurrent Development Policy Loan.
Karnataka	Plan drafted by the Environmental Management & Policy Research Institute based on interviews with officials in line departments using a structured questionnaire.	No formal external consultation process but considerable information available from a report prepared by a consortium of Bengaluru-based research organisations.	No formal donor engagement. Research organisation hired as a technical partner in the later stages to assist in drafting.
MP	Plan drafted by the Climate Change Cell at the Environmental Planning & Coordination Organisation based on inputs from sectoral workshops.	10 sectoral workshops with participation from line departments, academics, and retired line department officers. 11 regional workshops including farmers, local government officials, and academics in different agro-climatic zones.	Minimal involvement of donor agency in the process. Some background papers prepared by consultants. Regional workshops organised by local NGO. Independent consultant later drafted the climate trends and projections chapter, and reworked the final draft.
Odisha	Plan drafted by Department of Forest and Environment. Sectoral working groups with cross-departmental composition responsible for initial sectoral chapters. Each working group coordinated by a representative of the Department of Forest and Environment.	Five regional and sectoral workshops. Extensive review and consultation of the draft report with the civil society, followed by a revision.	Donor agencies brought in consultants, as well as national and international experts to brief working groups. Consultants actively involved in working groups and synthesising the plan.
Sikkim	Plan drafted by Department of Environment Science and Technology. Sectoral working groups led by departments responsible for initial sectoral chapters.	Participatory rural appraisals in six villages to gauge local perceptions of vulnerability. Non-governmental organisation (NGO) representation in some working groups.	Donor involved as part of a larger "Climate Change Adaptation in Rural Areas" project; provided initial framework and guidelines for the plan. Sectoral consultants acted as experts: provided inputs to working groups.

Source: Interviews and document scrutiny of HP, Karnataka, MP, Odisha and Sikkim climate plans.

The process of developing plans shapes whether they follow existing departmental action or result in creative integration, and also affects the degree of departmental ‘ownership’ of plan outcomes.

The process of formulating state plans followed one of two broad models. In Karnataka, HP, and MP, the plan was drafted by the nodal department, after obtaining inputs from relevant departments. In Odisha and Sikkim, the plan was drafted by sectoral working groups, formed by the nodal agency.

The nodal group-led model provided almost no scope for cross-departmental input or new ideas from within the process. In all three states though, state plans were able to draw on external ideas; the expert-led the ‘Bangalore Climate Change Initiative – Karnataka’ process in Karnataka; the peer-review group consisting of

academics and chancellors from several universities in HP; and sectoral workshops in MP involving line-departments and retired government officials.⁴⁰

Done well, the working group focused model can provide the basis for new ideas and breaking of silos. For example, a stakeholder commenting on the Odisha plan remarked, “...it is not often that you find forest officers sitting face to face with mining officials to discuss environmental sustainability.”⁴¹ But as a senior official also explained, representatives of the nodal agency were strategically placed in each group to ensure progress: “As convenor of all the 11 teams I put officers who

are directly responsible [for coordinating meetings and taking notes]... so I’m his boss, he’s answerable to me, he has to show the result and put it in place quickly.”⁴²

These experiences suggest that a plan process must be carefully designed to both foster interaction (and avoid silos) but also build ownership. This is a challenge, since there is a possible trade-off across these objectives. Ensuring interaction through cross-departmental discussion, using a nodal agency to stimulate discussion rather than own the process, and allowing time for new understandings to emerge are all important ingredients of a good process.

Several states sought external inputs, but the consultation process was insufficiently robust to materially shape plans.

In addition to cross-departmental deliberations, external input commissioned from academics or consultants, or consultation with stakeholders from business and civil society can provide sources of creative input. For example HP set up a peer review group comprising Vice Chancellors of universities as well as eminent scientists to vet the draft plan (See Case Study 2). Their most significant intervention was guiding the nodal department in preparing a new district level vulnerability assessment study using climate-based variables to replace an existing environmental vulnerability assessment study.⁴³

In several states, the formal process was supplemented with either *ex ante* or *ex post* consultation, but these were highly variable in quality and effort, and there is only limited evidence that consultation had a tangible effect on outcome. The most ambitious example of *ex ante* consultations is in Madhya Pradesh (See Case Study 3), resulting in a synthesis of sector-wise concern areas and recommendations for each agro climatic zone.⁴⁴ However, since the main report writing proceeded in

CASE STUDY 2: PEER-REVIEWING THE HP CLIMATE PLAN PROCESS

Intervention

The Department of Environment Science and Technology (DEST) established a peer-review group of experts.

Outcome

By providing external inputs the group added climate-relevant capacity to the process.

Details

The peer review group comprised Vice Chancellors of universities and eminent scientists from regional organizations such as the Forest Research Institute, Himachal Pradesh Agriculture University, and the Himalayan Forest Research Institute. The group asked the DEST to prepare a vulnerability assessment based on exposure, sensitivity and adaptive capacity of various districts in HP, because they felt that the existing Tehsil level vulnerability assessment produced for the Environmental Master plan was inadequate from a climate lens.

Limitations

The peer review group added expert input, but the process failed to provide space to civil society voices.

Source: HP climate Plan; Interview with a senior official, Government of HP.

parallel there is no indication of the impact of these consultations on the final plan. In Sikkim, state officials credit participatory rural appraisals in six villages with raising their awareness of how climate variability was affecting local communities and helping to ground truth the vulnerability assessment. Officials also included some Non-governmental organisation (NGO) members in their working groups.⁴⁵ Odisha followed an ambitious year-long process of ex post review and consultation with civil society organisations, which led to some key changes in the report. The Odisha plan also contains an annexure based on this consultation, with external comments, and the state's reaction to these comments.⁴⁶

Commissioned work or other forms of outside input can also be a source of new ideas. The work by a coalition of academic institutes and think tanks in Karnataka provided a solid base of information for the Karnataka plan.⁴⁷ MP also made a concerted effort to commission local academic research, but this work did not ultimately play a big role in the final report.⁴⁸

There is an important time planning dimension to the state planning process. In Odisha, the first draft of the plan was prepared in just three months, facilitated by tight time management, providing little scope for external input.⁴⁹ In MP, the ambitious consultation process was inadequately sequenced with the main report process to ensure cross-fertilization.⁵⁰ However, doing so would have extended the plan process considerably. To be effective, external input needs adequate time, appropriate sequencing with plan preparation processes, and the inclusion of both ex ante and ex post elements.

CASE STUDY 3: AGRO CLIMATIC ZONE WORKSHOPS IN MP

INTERVENTION
The Climate Cell organised regional workshops in 11 agro-climatic zones.

Outcome
Public participation and communication on climate change at the regional level was enhanced.

Details
The consultation was managed by the Centre for Environment Education. Input material included Hindi booklet providing sector-wise information on climatic impacts in MP and listing priorities for each sector. A range of 40 to 110 participants turned out for the workshops, with overall representation as follows:

	48% Government
	21% Academic
	16% NGOs
	9% Others
	7% Farmers
	5% Industry
	5% Media

Limitations
Consultation outputs were not considered by working groups, and did not appear to inform sectoral recommendations in the SAPCC draft.

Source: MP climate plan; Proceedings: Agro-climatic Zone Stakeholder Consultation by Government of MP and UNDP.

Capacity constraints limited states' ability to develop plans in-house. The assistance of donors and use of consultants largely failed to adequately enhance states' long-term capacity or enable integration of climate expertise and local context.

State climate planning processes are typically housed in environment and forests or science and technology departments with limited capacity to conceptualise and develop climate plans.⁵¹ In all the states studied, there was considerable concern

that the state plan be locally driven; in practice, states drew on external technical ability in a variety of ways (See Table 3). In some cases, donor agencies were explicitly involved in the process, as in Odisha, while in other cases, donors were engaged

indirectly, through support for larger, related programmes, as in Sikkim, HP and MP.

Donors can usefully bridge capacity shortfalls by providing technical expertise, and facilitating a conversation on climate change

with knowledgeable local bureaucrats, academics and NGOs. For example, most states conducted an inception workshop and/or prepared an initial scoping document with donor assistance. However, the impact of these efforts varied. In Odisha, for example, the scoping report drafted by a UK-based academic consultant provided a list of recommended sectoral actions. This was ultimately used by working groups as a 'first-cut' toward drafting the plan, arguably short-circuiting local discussion of priorities.⁵² In Sikkim, state officials suggested that an initial scoping workshop conducted by senior academics and other experts from around India was of relatively limited use, as it was framed around broad climate change issues, without an explicit effort to build a conceptual bridge from local realities to climate threats.⁵³ Ultimately, the inception workshops and other consultations supported by donors showed little signs of usefully facilitating a conversation about climate change in a manner that allowed for engagement with local concerns.

A second role that external actors can usefully play is building capacity. In many states, Indian consultants often took on a substantial role in plugging knowledge gaps and providing assistance in coordinating and drafting the plans (See Dialogue Box 6). For example, local sectoral consultants assisted working groups in Sikkim, played a coordinating role in Odisha, and assisted in drafting the final reports in MP and Karnataka. Unusually, in the HP climate plan, no external consultants were employed

DIALOGUE BOX 6

"Departments needed to give us what they had done so far and the road ahead, but we had to also incorporate external consultants. Departments had no clue what had to be done, we had to give them some background."

- Senior retired official, Government of Karnataka

"There was a sense among officials that consultants should drive this... [They said] we would give the ideas and they should write it... I don't have the authority to go to other officers and collect data."

- NGO representative, Sikkim Action Plan on Climate Change

"In consultation with MoEF we have developed a framework for SAPCC which can serve as a guidance and orientation... The framework recommends to first set up a governance or steering structure... In a second step the framework suggests to identify relevant sectors which are affected by climate change."

- Donor agency representative, Sikkim Action Plan on Climate Change

(though they were involved in other environment and climate projects in the state such as the vulnerability assessment for the Environment Master plan and the Community Led Assessment, Awareness, Advocacy and Action Programme for Environment Protection and Carbon Neutrality).⁵⁴ However, there is little evidence that the net effect of the process was a sustainable long-term enhancement in the capacity of state government agencies. In all the states studied, capacity for ongoing work on climate change was limited to a very small group of people.

The challenge for effective state climate planning processes is to mesh external specialised knowledge of climate change with detailed local knowledge in ways that can mainstream climate change. To do so requires building local capacity over time, both within the government and in networks of local academic and civil society institutions. In most states, the process was geared substantially more to production of a report, than to long-term building of capacity to work on integrating climate change into development practice in a sustained way.

RECOMMENDATIONS FOR IMPROVED PROCESS

1. Design internal processes to prioritise creativity and new understandings over short term action items; cross-departmental dialogue is a useful approach.
2. Structure well-designed processes of ex ante and ex post consultation with stakeholders to generate new ideas, appropriately sequenced with plan formulation.
3. Donor intervention should facilitate informed and integrative interaction across departments and stakeholders; initiation workshops and studies should avoid precluding creative framings and new issues.
4. Allow adequate time for climate planning; truncated time frames work against creativity and reinforce a return to existing trajectories.

OUTCOMES

Recommendations are not based on a systematic framework for formulation or prioritisation but are a mix of broad statements of objective and specific actions – the result is neither a clear vision nor a clear plan.

Recommendations for sectoral actions are at the heart of what the state climate plans finally communicate. A systematic understanding of these recommendations and their import are stymied by the numbers and diversity of approaches to generating recommendations (Table 4). However, a comparison of recommendations suggests at least three broad themes, discussed below.

States diverge in the extent to which they offer broad objectives or specific actions, but no state offers a clear, consistent and well argued set of recommendations that amount to either a vision or an action plan (see Table 4). One reason for this variation is lack of up front agreement and clarity on exactly what the plans were meant to deliver. As one consultant involved in multiple states noted: “Earlier officials said that SAPCCs need to include specific actions, now they want it to be more of a knowledge document: Let it evolve, not all of it needs to be immediately actionable.”⁵⁵ A clear signal from the leadership can also determine how specific the recommendations are. In Odisha, the Secretary in charge sought clear, actionable recommendations around which to generate new programmes: “If you look at the climate plan, it has thrown up some 300 to 400 different programs. For the government as a whole, it gives a spark to new activities. It helps climate, it helps other sectors also.”⁵⁶

DIALOGUE BOX 7

“The articulation of priorities has been simplified, but in fact it’s not so simple. Prioritisation can be constraint based, time-frame based, or growth based.”

- Consultant, Odisha Climate Change Action Plan

“The SAPCC is too generic compared to work being done in the forestry department. Interventions include just two paragraphs on developing a forestry action plan under the National Mission... Any nodal agency cannot bring all the wisdom together only to highlight broad problems.”

- Official, Government of HP

Another factor is the relatively thin information base on which recommendations rest; specific action items need detailed information. Notably, recommendations include many ideas for future research, several of which are actually prerequisites to constructing an informed climate plan (See Table 4). Climate plans, therefore, are more appropriately viewed as the first step in an iterative process, rather than the launch pad for implementing policies.

Table 4: Overview of plan recommendations

State and Relevant Section	No. of Proposals	No. of Proposals for Future Research (% Of Total)	Example of Broad Recommendations	Example of Specific Recommendations	Comments
HP 'Indicative Action Plan 2012-2017'	287	35 (12%)	Promote native forest management and recovery.	Bio energy - waste to energy - pilot modelled projects.	As many as six strategy and action lists present. No stated basis for prioritisation of the indicative action plan.
Karnataka 'Priority actions and entry points'	100	21 (21%)	Formulate a plan to execute large-scale vaccination of livestock.	Department of Urban Development to make reuse of treated wastewater mandatory in public buildings.	31 priority actions (containing 100 implementation arrangements) - no stated basis for prioritisation
MP 'Strategies and Budget'	337	30 (9%)	Promote integrated farming practices.	Mandatory water use audit for industries and allied sectors.	Strategies provided in each sectoral chapter. No stated basis for prioritisation of the final "strategies and budget" list.
Odisha 'Sector wise Table of Key Priorities'	148	38 (26%)	Fire management program.	Dredging and widening of river mouths to facilitate speedy discharge of flood water which otherwise aggravate the flood situation.	A six-point template created for selection and prioritisation.
Sikkim 'Actions' list in sector chapters	224	50 (22%)	Plans for river bank protection.	Relocating the bus terminal from SNT and the private bus stop to the lower reaches of Gangtok, in Sokaythang.	Sectoral actions tagged to 5, 10 and 15-year time-lines. No stated basis for selection of actions.

Source: HP climate plan, pp. 228-229; Karnataka climate plan, pp. 117 and 171; MP climate plan, pp. 101-102; Orissa climate plan, pp. 80,103, and 118; Sikkim climate plan, pp. 43-163.

The relative mix of general objectives and specific actions is also, in part, shaped by the process through which recommendations are developed – either led by nodal agencies or through sectoral working groups. Typically, states that develop recommendations through sectoral working groups have a mix of general and specific recommendations, depending on sector dynamics in a given state. For example, in Sikkim, water and urban planning have detailed specific recommendations but for different reasons – the water sector because of its central significance to Sikkim’s climate concerns, and the urban planning sector because existing detailed planning recommendations were reproduced – while other sectors have more general recommendations.

Where a nodal agency coordinated report writing, such as in HP and MP, recommendations tend to be general, perhaps because the authors have limited detailed sectoral knowledge (See Dialogue Box 7). Karnataka is somewhat of an exception due to detailed inputs provided by the ‘Bangalore Climate Change Initiative – Karnataka’. However, in some cases even general statements do not rise to the level of broad vision statements, but can be as vague as a call to “promote integrated farming practices” (Table 4).

With both approaches – nodal agency led or working group led – recommendations were derived through a bottom-up process. While this approach has the potential benefit of allowing for creativity and experimentation, it also resulted in a diversity of recommendations at different

scale and degrees of specificity. Only in Odisha was any sort of framework for preparing recommendations adopted (See Case Study 4), but even in this case it is unclear if the framework was employed by working groups. Most states further tried to categorise their recommendations (See Table 5). In each case, however, there was no basis provided or discussed for prioritisation. The approach is, perhaps, best summed up by the candid statement by an official in Karnataka that actions and their priorities were “ocularly” decided.⁵⁷

An appropriate framework to guide recommendations would help ameliorate several of the weaknesses of the current approach. A framework would limit the problem of multiple scales and objectives versus action items and the linkage between the two. It could set the basis for prioritisation across objectives and action items – perhaps using the NAPCC emphasis on a co-benefits approach – thereby making large numbers of recommendations more manageable, and facilitating more effective implementation.

CASE STUDY 4: FRAMEWORK FOR PRIORITISING CLIMATE ACTION IN ODISHA

Intervention

Nodal department officials and consultants developed a template to help working groups prioritise sectoral actions.

Outcome

Odisha is the only state examined that uses a framework for selecting and prioritising recommendations.

Details

Each working group was required to categorise activities along seven parameters:

- Objective of the activity
- Type of activity (mitigation or adaptation);
- Scale (state-wide, district-wide or particular area);
- Nature of activity (research study, policy action, pre-investment study, etc.);
- Importance of activity (high, medium, low);
- Constraints (technology, operation, financial);
- Overall priority level (high, medium, low).

Limitations

The framework is taxonomic, but fails to provide an analytical framework for prioritization. Moreover, it is unclear if working groups used the template as the basis for selecting actions or if the information was added after recommendations were finalised.

Source: Odisha climate plan, p. 92.

Recommendations are incremental rather than transformational because of the process chosen for plan formulation, though there are pockets of innovation driven by individual initiative.

Academic literature notes the important role of federal units as ‘laboratories of innovation.’⁵⁸ Understood thus, state plans could contribute significantly to realising the NAPCC’s call for a “directional shift in the development pathway” of India in response to climate change. To what extent do they do so and what determines the ability of plans to be transformative?

The process in most states – organised around sectoral working groups and chapters – was not conducive to re-thinking development pathways, since it tended to reinforce existing approaches by departments (See Dialogue Box 8). This approach may have been indirectly promoted by the Centre’s Common Framework Document, which called for state plan recommendations to

align with the NAPCC’s various missions.⁵⁹ Thus, a study of the water sector, for example, revealed that in the states studied, the recommendations closely follow the objectives of the National Water Mission, leaving relatively little scope for creative re-framing of the water-climate linkage.⁶⁰ On the other hand, the Common Framework Document also allowed states to define

locally specific issues, and some states indeed did so – Karnataka included a working group on coastal issues, Odisha one on mining, and MP has a chapter on health.⁶¹

On both NAPCC issues and state concerns, a process that aimed at identifying and thinking through major climate-related issues for a state would, perhaps, have been more suited to identifying pathways to transformation than one focused on sectors. In some cases, politically sensitive but potentially transformative issues salient to climate change have simply been side-stepped. The Sikkim plan takes cognizance of the impact of climate change on hydro power, but does not offer any substantive reflections on re-thinking this critically important sector for the state.⁶² Similarly, MP simply recites the long-standing aim of constructing large numbers of dams on the Narmada River, without actively exploring water-energy, water-urbanisation or water-agriculture linkages, all of which are salient to this proposal.⁶³

Where potentially transformational issues do emerge, they are inadequately explored in the formal process. For example, a controversial and debated statement introduced by the official in charge of the Odisha plan in its second phase calls for a cap on thermal power projects: “In the power sector I asked what is the carrying capacity of Odisha in power; the outer limit of coal-based power? I brought some scepticism into the development trajectory of the power sector.” However,

DIALOGUE BOX 8

“Poverty is a big issue, urbanisation, migration: NAPCCs don’t capture all developmental issues. The alignment is happening only for budgetary reasons.”

- Donor agency representative, Odisha Climate Change Action Plan

“It’s the level of capacity that exists within the states. In some of the states, people may be working on areas relevant to climate change, but they don’t understand how it all links up.”

- Donor agency representative, MP State Action plan on Climate Change.

“It’s alright if states borrow [text] from each other in their respective plans. The idea is to get the process going.”

- Official, Government of India.

The question is: are SAPCCs addressing climate change through transformational stuff?”

- Consultant, Odisha Climate Change Action Plan

this statement did not come out of deliberation, nor was it engaged with in the plan process, but, as the quote suggests, was promoted by one individual. In the case of Himachal Pradesh, the former Chief Minister announced a rather ambitious carbon neutrality target for the state by 2020, but the plan itself does not seriously engage with this commitment.

While the state plans may not have systematically explored directional shifts, they did provide an institutional vehicle for pursuit of some innovative ideas. In many cases, these ideas could be traced back to enterprising individual bureaucrats, who

saw state climate plans as an opportunity to make creative linkages. For example, Sikkim has used funds from the MGNREGA to implement hill-top water harvesting.⁶⁴ Odisha used the opportunity of the climate plan to seek financing for efficiency improvements in its privatised electricity sector, for which central government funds are not forthcoming.⁶⁵ In the current round of plans, innovation, creativity and the potential for transformation are driven by individual initiative. In the future, the challenge will be to structure the process to systematically explore transformative change.

RECOMMENDATIONS FOR IMPROVED OUTCOMES

1. Sequence plans around a vision, major objectives, and specific actions, understanding that progress may be uneven along this sequence for different sectors.
2. Develop an explicit basis for prioritizing objectives and actions to help make better use of scarce capacity and finance, and enable implementation.
3. Plans should be used as an opportunity to engage transformational questions, organized around large integrative themes that cut across sectors; initial plan iterations should focus on ideas for a ‘directional shift’ in development trajectories with specific actions to follow.

IMPLEMENTATION

The existing capacity of dedicated state climate change units is insufficient for stimulating and monitoring implementation.

In most states, the focus thus far has been on preparation of plans; discussion of implementation is largely preliminary. However, it is possible to examine the extent of preparedness for implementation, in particular, the institutional capacity for implementation, implementation mechanisms being established, and issues of finance.

The process of preparing state plans has contributed to the creation and entrenching of dedicated climate change institutions in all states except Karnataka (Table 5). Sikkim and MP had climate change institutions in place before they undertook their plans; HP and Odisha proposed creating such institutions in the course of developing their plans.⁶⁶

In all cases, the institutional capacity within these agencies remains limited (See Dialogue Box 9). While exact information on staffing and experience is unavailable, interviews suggest both number of staff and the experience and qualifications of staff were a concern.⁶⁷ Even while in most states implementation is likely to happen through line departments rather than directly by climate change units, Table 5 suggests that dedicated climate units will play an important monitoring and evaluation role. This will require greater institutional capacity than currently exists. In addition, given the reality that climate plans are better thought of as an iterative process than a one-time exercise, the coordinating and steering role of these units for future refinements of climate plans will only increase over time, further calling for capacity enhancement.

DIALOGUE BOX 9

“Since climate change is a new field we don’t have as much experience on the ground implementing programs on climate change.”

- Senior Official, Government of Sikkim

“We are a weak institutional sector, whether environment or climate change. Our strengths don’t lie in institutional capacities.”

- Consultant, Odisha Climate Change Action Plan

“The SAPCC is a statement of intent. It will be implemented at a different pace by different forces; some actions may be funded afresh.”

- Official, Government of HP.

Successful implementation requires mainstreaming of recommendations into the functioning of line departments; there is little clarity on how to accomplish this mainstreaming.

There is broad convergence across state plans that implementation will have to happen through line departments (See Dialogue Box 10). Indeed most plans in their sectoral lists, mention specific departments and agencies responsible for that area of work.⁶⁸

However, there is no agreement on the mechanisms through which this implementation can be achieved. In Odisha, the process of working groups was explicitly aimed at creating ownership

among line departments, in the anticipation that they would take up aspects of the plan. To some extent this has already occurred in Sikkim’s Rural Management and Development Department, but this progress has been facilitated because the individual coordinating the plan is based in that department. Perhaps the most intriguing idea arises from MP, where the approach suggested is one of providing departments services such as advisories of progress toward goals and checklists, as a way of inducing or

‘nudging’ states toward action. As a senior MP official describes the approach “... we hope to make a checklist and send it to various departments for them to see how projects can be made more climate friendly and compatible. This would be a voluntary initiative. We would ask for their policy assessment reports but we won’t comment on it.”⁶⁹

These various indirect efforts to stimulate action arise from an acceptance that nodal agencies (typically environment

departments or science and technology departments) do not have the heft to insist on action. And that sufficient financing is unlikely to be available to serve as an inducement to other line-departments. Hence, building ownership over the relevance of the climate agenda to the work of the department is likely the only viable long-term solution, albeit one that is challenging to achieve in the face of competing demands and limited capacity. However, several officials involved with the state plans also noted the possible benefits of closer synergy with the state development planning process. For true mainstreaming of climate change, it is

DIALOGUE BOX 10

“A state climate action plan needs to have the buy-in of all the departments who contribute to the plan and have the final sign of the Principal Secretaries of each of these departments.”

- Consultant, Sikkim Action Plan on Climate Change

“Considering the apprehensions and general restraint of departments towards monitoring and evaluation, the approach [nodal departments] intend to take has to be very subtle and polite.”

- Official, Government of MP

Table 5: Dedicated climate institutions in states and mechanisms to monitor state climate plans

State	Existence of Dedicated Climate Change Institutions	Monitoring and Evaluation Mechanisms
HP	State Centre on Climate Change (2010)	A “reporting template” to monitor implementation of the plan, which will form the basis of an annual “Implementation Status Report,” to be prepared by the nodal agency and approved by the Legislative Assembly. State Level Governing Council on Climate Change led by the CM to “monitor the targets, objectives and achievements of the Eight National Missions.”
Karnataka	Environmental Management & Policy Research Institute (2002) looks at all environment and climate based initiatives in the state.	No
MP	Climate Change Cell, The Environmental Planning & Coordination Organisation (2009)	Cell will facilitate voluntary reporting of actions by line-departments based on an agreed set of “criteria and indicators.” It will monitor and evaluate the “progress of achievement of integration of climate concerns in various developmental policies”
Odisha	Climate Change Action Plan Cell (2011)	Table of specific climate impacts and action-led targets to monitor and related programs to evaluate in each sector.
Sikkim	Department of Science and Technology renamed Department of Science and Technology and Climate Change in 2009.	No

Source: HP climate plan, pp. 234 and 252; MP climate plan, p. 122; Orissa climate plan, pp. xvii and 80.

arguably counter-productive to have a development planning process and a parallel climate planning process that typically includes a wide range of departments, but rather to find ways to integrate these. As a consultant working in Odisha noted “we need to develop a SAPCC which is not an independent entity but linked to the state planning

document.”⁷⁰ This integration could potentially happen at two levels. One ex ante option is for state planning departments rather than environment departments to house climate plans. However, it is likely that planning departments would face even greater capacity shortfalls in climate change knowledge than environment or science

and technology departments. The second, ex post option is for a process through which state planning departments consider and integrate the outcomes of climate plans into the development planning exercise. The latter might be a more feasible form of integration, but, as yet, has not been attempted in any state.

Budget estimates in plans vary widely. They do not adopt a consistent methodology across states, and should be considered indicative at best.

The MoEF’s Common Framework Document requires that state plans estimate, “additional resource requirements” and explore, “existing and new and additional carbon finance potential.”⁷¹ However, officials across states conveyed their reluctance to include budgets for sectoral actions adding that stated numbers were estimates at best and had no technical basis (see Dialogue Box 11). Unsurprisingly, there is a great degree of variability in cost estimates put forth by different states (see Table 6) This spread in final numbers, along with the hesitation expressed by state officials, suggests that further thinking on approaches to costing actions, and refinement of methodology is required to come up with credible cost estimates.

Notably, the context for arriving at these numbers has changed over the course of plan development. At the time the centre requested states to develop plans, the context was the promise of substantial funds under the 12th Five Year Plan. Capturing this understanding, a consultant working in three states stated: “Initially states felt there would be special allocations and there will be some outlay in the 12th Five Year Plan.”⁷² Over time, it became clear that far more modest amounts would be available for states, and that this money would be tied to adaptation alone.⁷³ As a senior MoEF official put it: “Many states feel that there will be a separate window for funding SAPCCs but we’re saying draw up your requirements sectorally and project it as part of the state plan outlay. There will be a separate window for additional funding,

Table 6: Total budgetary allocations in SAPCCs compared to annual state budget estimates.

State	Budget (in Rs Crore)	State Plan Budgets 2011-2012 (in Rs Crore)
HP	1,560 (time period unclear)	3,300
Karnataka	No cumulative budget	38,070
MP	4,653 (five years)	23,000
Odisha	17,000 (five years)	15,200
Sikkim	No cumulative budget	1,400

**Budget figures are not available from Karnataka at the time of writing.*

Source: HP climate plan, p. xvii ; Karnataka climate plan; MP climate plan, p. 122; Odisha climate plan, p. 232; and Sikkim climate plan; Planning Commission, State Wise/Sector Wise Approved Outlays, Revised Outlays and Actual Expenditure (2011-2012).

but not very large, based on an incentive-based criteria.⁷⁴ Consequently, more recently greater emphasis has been placed on attracting donor funds to support implementation of state plans.

Finally, some states have initiated actions without seeking additional funds, suggesting a promising indication of ownership of results and recommendations. Sikkim, for example, has deployed MGNREGA funds to implement actions in the water sector (See Case Study 5). Indeed, in interviews, some government officials indicated that finances were not the key constraint, but rather clarity on what to do and the capacity to implement actions was the problem. As one senior official noted, “[the stated budget] is not a big amount. The issue is how and where to spend it...The state’s plan budget [in 2011-2012] was 15,000 crore Rupees, off that the state could not spend 2500 crore Rupees and it was surrendered at the end of the year. This was supposed to have been spent on energy, water, fisheries, rural development.”⁷⁵

While financing for state plans is undoubtedly important, greater emphasis on the basis for computing financing needs, and the interaction with currently planned expenditure would enhance the value of the exercise.

CASE STUDY 5: CLIMATE PLAN AS A PLACEHOLDER FOR ACTION IN SIKKIM’S WATER SECTOR

Intervention

Sikkim has implemented water sector recommendations using funds from an existing central scheme.

Outcome

The plan has mainstreamed climate concerns in a priority sector.

Details

Water availability is stated as a key concern in the Sikkim plan; 80% of rural Sikkim is dependent on Himalayan mountain springs for their water supply. The RMDD initiated work on recharging lakes and streams as well as reviving dried-up lakes on hilltops using funds from the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA).

Limitations

Other sectoral recommendations in the plan are not equally fleshed out or implemented. Since Sikkim had already produced a report on “Developing strategies for enhancing rural water security” in 2010, it is unclear how much additional impetus the climate plan added to implementation.

Source: Sikkim climate plan

DIALOGUE BOX 11

“If you look at the budgets in most states, it says ‘we need 10 crores, 50 crores, 100 crores,’ the crore has no meaning.”

- Consultant, Action Plan on Climate Change Sikkim

“We were asked to indicate some budgets, but it was without any basis. All of us were hopelessly finding out the means for the budget.”

- Official, Government of Odisha

“It [finance] is a weak link for all states. If we had left it [budgetary allocations] blank, it would have given the document more academic credibility... the costs are currently indicative.”

- Official, Government of MP

RECOMMENDATIONS FOR IMPROVED IMPLEMENTATION

1. Improve the capacity of nodal agencies to serve as conduits for climate science, facilitate linkages across departments, and enable deliberation on sustainable development in the context of climate change. Playing these roles requires multiple skills and staff continuity over time.
2. Experiment with creative implementation mechanisms, including the use of analysis and information based instruments to ‘nudge’ action, and coordination with state planning agencies.
3. Developing credible estimates of additional financial costs may be premature. Costing should be limited to areas where plans are well fleshed out and based on a consistent methodology across states.

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