Working Paper

Assessment of the Climate Responsive Budgeting Framework adopted by States in India





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Working Paper

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December 2022



Abbreviations

ACT Action on Climate Today

CPEIR Climate Public Expenditure and Institutional Review

CCIA Climate Change Impact Appraisal

CCIP Climate Change Innovation Programme

CCRS Climate Change Relevance Share

CCSS Climate Change Sensitivity Share

CRB Climate Responsive Budgeting

CSOs Civil Society Organisations

GBS Gender Budget Statement

GCF Green Climate Fund

GDP Gross Domestic Product

GHG Greenhouse Gas

IMF International Monetary Fund

INDC Intended Nationally Determined Contributions

IPCC Intergovernmental Panel on Climate Change

MoF Ministry of Finance

NAPCC National Action Plan on Climate Change

OECD Organisation for Economic Co-operation and Development

SAPCC State Action Plans on Climate Change

SAPFIN State Action Plan on Climate Change Financial Framework

SDGs Sustainable Development Goals

UNFCCC United Nations Framework Convention on Climate Change



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Section 1

1.1 Introduction

Context and rationale for Climate Responsive Budgeting (CRB) in India

The threat of climate change is no longer imaginary but very real, as the recently released IPCC 6th Assessment Report has shown. From wildfires to devastating floods to tropical cyclones, it is clear that the world may be racing towards a 1.5°C temperature rise by 2040, and that climate change is caused by human activities. People have lost their lands and livelihoods due to the debilitating impact climate change has had on their environment and turned into climate refugees. India is one of the country's most vulnerable to the climate crisis. In particular, climate change has had an adverse impact on its food production processes. The Economic Survey of 2017–18 (GOI 2018) lists three key findings. First, the impact of climate change in terms of temperature and rainfall is non-linear and is felt in the extreme. Second, these extreme shocks have highly divergent effects on unirrigated and irrigated areas, almost twice as much in the former compared with the latter. Third, with regard to agricultural yields, the Survey estimated that extreme temperature shocks reduce yields by 4 percent and 4.7 percent for kharif and rabi crops, respectively; extreme rainfall shocks reduce yields by 12.8 percent and 6.7 percent during the above monsoon and winter crop seasons, respectively.

Although climate finance¹ (funding towards climate mitigation and climate adaptation activities) in India is funded by both external (private or international) and public sources, public sources still account for the majority of funding. According to the August 2020 report, 'Landscape of Green Finance in India', released

by the non-profit research group Climate Policy Initiative, public financing accounts for 41 percent of climate finance in India. In addition to the fragmented landscape of climate finance in the country², concerns over inadequate funding, poor costing strategies and weak accounting frameworks surround climate change mitigation and adaptation interventions and their financing.

In 2015, the Indian government submitted its climate mitigation and adaptation targets via the Intended Nationally Determined Contributions (INDC) to the UN Framework Convention on Climate Change (UNFCCC). The INDC detailed the country's plan of action to combat climate change, estimating an expense of USD \$2.5 trillion between 2015 to 2030 to fulfil its commitments. India's commitments included achieving net-zero by 2070, increasing the share of non-fossil fuels in installed electricity generation to 50 per cent, enhancing its emissions intensity reduction target to 45 per cent, and working towards zero-emission vehicles. Meeting these targets would require resources and also require international processes to fulfil expectations on finance, technical support, and capacity building. However, major issues have been flagged by the government with regard to receiving the required funding from developed countries.

Certain events at the international level led to the growing prominence of CRB. One of them was the Paris Collaborative on Green Budgeting. This was a cross-country and cross-sectoral initiative formed at the One Planet Summit in Paris on 12 December 2017 to support governments in their efforts to "green3" their fiscal policies, and embed environmental sustainability commitments and green growth within

¹ Introduction to Climate Finance | UNFCCC

² A Primer to Climate Finance in India | LEAD at Krea University (ifmrlead.org)

^{3 &}quot;Greening" implies using national expenditure and revenue processes to support climate and environmental goals towards developing sustainable and resilient societies.



budget and policy frameworks. Subsequently, at the 2018 Annual Meetings of the World Bank Group and the International Monetary Fund in Bali, Indonesia, governmentsfrom39countriescametogethertoboost their collective engagement on climate action. On April 13, 2019, governments from 26 countries joined forces to launch the Coalition of Finance Ministers for Climate Action, which recognised the challenges posed by climate change, the unique capacity of the world's finance ministers to address them, and the ways in which these efforts could be strengthened through collective engagement. Since its launch, finance ministers from over 70 countries have signed the 'Helsinki Principles', a set of six principles that promote national climate action, especially through fiscal policy and the use of public finance. The Helsinki Principles are designed to be aspirational—they are non-binding and are not listed in any order of priority.

Even prior to these events, Nepal, Bangladesh and Cambodia had reviewed their public expenditure using the climate lens to better align their national budgets and attract international climate finance.

Indonesia implemented its climate budget tagging framework in 2016 and leveraged it in 2018 to issue sovereign 'green sukuks' (Sharia-compliant sovereign bonds) worth \$1.25 billion to finance climate projects. The Philippines has integrated an end-to-end system of climate response in its budget cycle, which includes training and technical support for line agencies. France and Britain have been building deeper institutional capacities in their public financial systems to deal with climate change in partnership with international organisations such as the World Bank and the International Monetary Fund (IMF).

The need for tracking climate expenditure and making governments accountable to the public has drawn attention amid the current situation of rising temperatures and extreme weather events. The

absence of climate budgeting prevents reporting on climate action, which makes it a challenge to track public expenditure.4 Climate budgeting can be used to track the flow of climate funds, develop a long-term strategy to combat climate change, attract finance from diverse sources, and mainstream the issue in policymaking. The National Action Plan on Climate Change (NAPCC) and State Action Plan on Climate Change (SAPCC) lay out the planned priorities for climate change at the national and state level respectively. However, only those NAPCC missions that are operated as Centrally Sponsored Schemes feature in state budget documents. State budgets rarely describe the budgetary allocation for financing of SAPCCs. This is despite the fact that the combined budgetary requirement is around Rs 11,33,692 crore for implementation of the 29 SAPCCs. There is an urgent need to begin tracking the flows of climate finance basis states' respective needs, as climate change-related disasters take lives and destroy livelihoods across the country. This will permit state governments to assess the climate relevance of funds spent on developmental projects as well as create accountability. For example, MGNREGA projects aimed at conserving water or irrigating fields have climate change significance, but they are not captured as outlays towards climate change mitigation or adaptation.

1.2 Objectives, Scope and Methodology

The objectives and scope of this paper are to (Refer to Table 1):

- Use CRB as a tool to identify the lack of cohesiveness of public policies in accelerating low-carbon development
- Review the existing framework of CRB and SAPCCs on climate change across states that have already adopted them. Highlight the

 $^{4 \}quad http://ifmrlead.org/wpcontent/uploads/2017/11/Financing\%20State\%20Climate\%20Actions_IFMR\%20LEAD.pdf.$



Table 1: Objectives, scope, methodology and sources of information

6. No. Organisat	on Scope	Me	ethodology	Sources of Information
Use CRB as a to identify the of cohesivenes public policies accelerating la carbon development.	ack of all the 29 sta s of budgetary prior in Change in 2022 w-	tes' policy and sec ities on Climate 2-23. Rev rele involve a liter that type of oles have such as equity, ation etc.) for imate change regard to the	view and analysis of condary literature view and analysis of evant climate change rature.	Online articles, latest reports on Climate change such as the IPCC 6th Assessment Report. Primers and policy briefs such as 'A Primer to Climate Finance in India', LEAD at Krea University (ifmrlead.org), and 'Introduction to Climate Finance', UNFCCC
2 Review the exi framework of and SAPCCs of climate change across states that have alree adopted them. Highlight the vaddition arisin the adoption of processes by t states.	creation control creations of creations. creation creations and creations of creations. creation creation creation creation creation. creation creation creation creation creation. creation creation creation creation.	v an inclusive star ive budgeting of v be developed h added And quity (such as ation, localism) action	alysis and scrutiny of te budget documents various years. alysis of SAPCCs, te SDG policies and tion plans, select state nate budgets	Budget documents of 30 states. SDG policy/ programme documents of 30 states. State government websites.
3 To adopt CRB a potential too identify climate relevant budge outlays as wel embed relevar strategies in the design of state investment play for climate chamitigation acti	explanation of he of Climate Respect Budgeting or grand has helped state adopted it in the years accelerate development.	now adoption reponsive varies that have last few odies and Bihar, porated a and Green vely since FY taken as understand y used and pe adopted by ework on	alysis of relevant ports and articles on rious CRB methods ch as SAPFIN etc. view and analysis of isha's Climate Budget	Climate Budget 2021-22, February 2021, Finance Department, Government of Odisha A Framework for Understanding Climate Change Responsiveness of the Union Budget in India, September 2017, CBGA



value addition arising from the adoption of CRB processes by these states.

 Adopt CRB as a potential tool to identify climate relevant budget outlays so that relevant strategies can be embedded in the design of state investment plans for climate change mitigation actions.

The paper will also attempt to answer some questions such as: What policies and budgetary priorities have states had on Climate Change in 2022-23? How has adoption of Climate Responsive

Budgeting or green budgets helped states that adopted it in the last few years accelerated low-carbon development? How can an inclusive climate responsive budgeting framework are developed with additional dimensions such as equity (gender participation, localism etc.) and just transition (e.g. creation of green jobs)?

A review of secondary literature has been carried out by analysing and scrutinising state budget documents of various years, SAPCCs, state SDG policies and action plans, select state climate budgets and relevant climate change literature.





Section 2

2.1 Review of select states on their Climate Finance strategies/Climate Responsive Budgeting initiatives

At the Union government level, no institutional review has been carried out of public expenditure on climate change. However, state governments, including those in Kerala, Bihar, Chhattisgarh, Assam, Maharashtra and Odisha, have been using various tools to assess the 'climate change relevance' of various interventions so as to estimate the extent to which a programme addresses climate change.

Other than that, some state governments follow the UNDP's CPEIR methodology. According to a report by Action on Climate Today (ACT), there are large differences in the level of climate change expenditure. For example, Bihar and Kerala have weighted climate change expenditure at 0.2 per cent to 0.3 per cent of GDP; Chhattisgarh, at 0.7 per cent to 0.8 per cent; and Assam, at 1.3 per cent. This shows that the differences in estimates are caused mainly due to differences in sectoral priority within the budget, and local climatic conditions. The Bihar government has allocated Rs 68,500 crore for climate change mitigation interventions in four sensitive departments in the current fiscal year.

Climate budgeting has been incorporated by some states into their public finance management systems. Chhattisgarh, Assam, Maharashtra, Bihar, Odisha and Kerala track the climate change relevance of

their developmental projects through budget coding. For example, Odisha's climate budget for 2020-21, by adopting and extending The State Action Plan Financing Framework (SAPFIN), measures the share of developmental programmes relevant to climate change. The spending is calculated on specific benefits that improve climate resilience as a percentage of the total outlay across eleven sectors. Additionally, the sensitivity of these benefits is measured vis-a-vis climate change in the absence of additional interventions.

The SAPFIN methodology for climate budgeting is in use in a few other states as well. Gujarat, the first state to establish a Climate Change Department (CCD) in India, adopted a different approach. Their CCD prepared a separate budget for climate change called 'Climate Change Budget Scheme', which earmarks funds for specific climate change programmes. Although its utilisation has come under scrutiny, such reforms must set the trend for other states while designing appropriate policies.

Conceived in the backdrop of the Jal Jeevan Hariyaali Yojana campaign, the government of Bihar also broughtouta Harit (Green) Budget statement in 2020-21 indicating the state's spending on programmes related to environment conservation and climate change. The Green Budget definition is as follows: "Every year, government agencies (Departments/ Directorates/Boards/Councils/Commissions) through the Annual Budget Circular, and by preparing Green Budget Statements, will highlight the quantum of public expenditure earmarked in the state budget for environmental sustainability initiatives and eventually

⁵ Mainstreaming, accessing and institutionalising finance for climate change adaptation, Learning Paper, Action on Climate Today, October 2017

⁶ Climate change: Gujarat spent less than 5% of Rs 1,048 crore budget allocated for climate change, Government News, ET Government (indiatimes.com)

⁷ Green Budgeting for the State of Bihar, Dr Shailly Kedia, TERI, 29th June 2020



reduce expenditure in unsustainable sectors."

Climate Budget Coding and Climate Budget Tracking

Climate Budget coding refers to the process of tagging climate-change related activities within budget items and assigning specific codes to programmes and projects so that climate relevant expenditure can be tracked (OECD, 2012). Climate Budget Tracking is a systematic way to trace and link budget ary allocations to their respective expenditures and outputs in climate-relevant activities within the Integrated Financial Management Information System.⁸

Climate Change Public Expenditure and Institutional Review' (CCPEIR)

The CCPEIR methodology has been adopted by India's neighbours Nepal, Bangladesh and Pakistan. CCPEIR analyses climate fiscal frameworks through the prism of policy development, institutional structures, and public finance management. It is crucial to examine climate financing in these spaces because climate change is all-pervasive. It has a massive impact on development and government expenditure across various sectors. This is where the notion of climate 'budgeting' becomes relevant. "Overall, except for a handful, state governments in India have been slow to initiate a climate budgeting process. The process has been driven by external agencies, either in the form of budget coding or directly earmarking funds and has not been institutionalized. Additionally, the Climate Change Finance Unit (CCFU)9 has been unable to address the fragmented structure of governance and coordinate the flow of climate finance". (Arjun Malhotra, The Bastion, October 19 2020)¹⁰ Consequently, financing for climate change mitigationmeasuresprecludesgovernmentoversight,

since there are various financing channels.

2.2 Climate Responsive Budgeting: The case of Odisha

Odisha is the first state in India to acknowledge the needtoidentifysectoralschemelevel/budgetaryneeds and make a public disclosure while mainstreaming climate change into the state's budget. The state has been devastated by climate change-induced events such as tropical cyclones, floods and water stress. Moreover, it has a population dependent on coastal livelihoods, such as fishing, which make them more vulnerable to such extreme weather. To address the issue of climate change, Odisha formulated its State Action Plan on Climate Change (SAPCC) in 2010. The SAPCC was revised for the 2018-23 period and is under implementation. It was revised again for the 2021-30 period, in line with commitments made in the SDG-NDC Report submitted by the Government of India to the UNFCCC, to achieve the 2030 targets. However, public expenditure has not received significant focus in the Indian context and budgetary allocation and spending on climate change issues still remain a challenge. To overcome this, Odisha undertook a rigorous cross-sectoral analysis to come up with a Climate Budget in Fiscal Year (FY) 2020-21.11 The aim of this budget is to track government expenditure on climate change and to support mitigation and adaption actions to address climate change.

The analytical framework to assess climate-relevant expenditure and make budgets climate change-responsive required two major steps: (A) identifying climate-relevant expenditure, and, (B) assessing the proportion of expenditure related to climate change.

⁸ file:///C:/Users/dell/Downloads/undp-ndcsp-kenya-training-handbook-climate-finance.pdf

⁹ An institution created to provide policy direction on climate finance

 $^{10 \}quad https://thebastion.co.in/politics-and/mainstreaming-climate-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting/limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-climate-budgeting-limits-change-in-india-through-change-in-india-through-change-in-india-through-change-in-india-through-change-in-india-throu$

¹¹ For a detailed understanding on Odisha's Climate Budget refer to Climate Budget 2021-22, February 2021, Finance Department, Government of Odisha



The method most in use to assess the proportion of expenditure relevant to climate change is the CPEIR Climate Relevant index, which categorises government interventions into four categories: High, Medium, Low, and Marginal relevance, based on the perceptions of various stakeholders and expert committees constituted for this specific purpose.

In Odisha, a comprehensive Budget Coding exercise across the 11 priority sectors identified under the SAPCC was undertaken to start Climate Budgeting¹². In Phase 1, the climate relevance of public expenditure was analysed, and in Phase 2, the vulnerability of public expenditure to future climate impacts was studied. It was observed that there are schemes in every sector providing greater climate benefits relative to others while also being sensitive to climate impacts, hence needing relevant design considerations to ensure that the benefits are not at risk. Similarly, schemes that were low in climate benefits could also be low in sensitivity, requiring changes to amass greater benefits with lower risk exposure.

Such an exercise could help states in general draw greater benefits out of schemes that are more tolerant of climate impacts. A two-fold analysis with effective design changes could also provide a holistic view of where climate preparedness stands currently vis- à-vis future requirements.

Coming back to Odisha, a phased Climate Change Impact Appraisal (CCIA) study was conducted by the state with technical support by the Climate Change Innovation Programme (CCIP). Under this, 11 stakeholder departments were taken into consideration.

Phase 1: Climate Change Relevance Share (CCRS)

 Assessment of how benefits from development programmes contribute to improving climate change resilience. This helps the state government to identify priority schemes/programmes in each Department to focus on climate-related planning. It also helps identify the schemes most relevant to climate resilience planning.

Phase 2: Climate Change Sensitivity Share (CCSS)

– Understanding how programme benefits are likely to be impacted by climate change in the absence of interventions based on climate change-specific planning. This helps in identifying the components of schemes/programmes that are more vulnerable and need additional scrutiny in terms of technical or financial intervention to augment the climatic relevance of the programme.

The result of the Phased CCIA analysis highlighted two major dimensions of programme-level linkages with climate change:

- i) How benefits from development programmes contribute to improving climate change resilience.
- ii) How programme benefits are likely to be impacted by climate change itself in the absence of climate change-specific planning interventions. A brief analysis of the top ten schemes (by budgetary allocation) has been presented for every sector on their relevance and sensitivity levels, indicating the scope for realignment of a significant portion of the department's expenditure. Additionally, all the schemes analysed have been ranked based on their CCRS for the purpose of prioritisation by policy makers at the time of budget allocations, to ensure maximum climate as well as welfare benefits.

Certain other factors aided in the uptake of the climate budgeting exercise in Odisha. Firstly, a paper presented by the Odisha Climate Change Cell on Odisha's Climate Finance Framework in 2019 was approved by the Joint Secretary, Climate Change Division, Ministry of Environment, Forest and Climate Change (MoEF&CC), Government of India. This helped incorporate Odisha's Climate Budget as

¹² Under2 Coalition Case Study, March 2021, www.under2coalition.org



an individual chapter in the state Budget for the first time in FY 2019-20. Subsequently, separate Climate Budget Documents were prepared and published in FY 2020-21 and FY 2021-22. Furthermore, the Revised Budget of FY 2019-20, the Expended Budget of FY 2020-21 and the Estimated Budget for FY 2021-22 were taken into consideration while preparing the Climate Budget Document for FY 2021-22.

Some of the challenges Odisha faced in developing its CRB are given below:

- Coordinating data compilation with all the stakeholders was initially a challenge for the state.
- It was also very difficult to identify and tag programmes and schemes to climate relevance and sensitiveness.

2.3 Climate Responsive Budgeting: The case of Bihar

The Green Budget/Harit Budget of Bihar was conceived in 2020-21 with the aim of developing a mechanism through which fiscal and economic policy reforms can be tested, identified and mapped from the perspective of environmental sustainability. The Green Budget document was inspired by the Gender and Child Budget statements that have been brought out by various states. Bihar's green budget has the following objectives:

- To develop and reinforce inter-departmental cooperation in order to better respond to environmental sustainability issues
- ii) To promote the formulation of environmentally sustainable policies to meet national-international commitments
- iii) To look at various environmental issues in the

context of various national and international goals/commitments. Conduct an evaluation of the state's overall performance on the basis of evaluation of outcomes of programmes

iv) To mobilise a plan for the distribution of resources for sustainable development and other environmental activities.

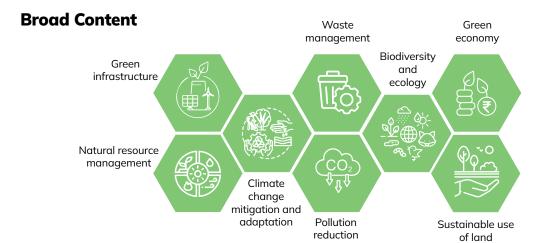
Since the process of developing a Green Budget in India and other countries is still in its initial stages, the Green Budget in Bihar has focused on the first two objectives. It was prepared in 2020-21 by separating the budgetary allotments for environmental conservation by various departments and then aggregating the proposed expenditure. The budget had two components: expenditure to be incurred on physical restoration after environmental degradation, and non-physical investments (such as publicity drives, public awareness and inclusion of environmental studies in the school curriculum). The focus areas of the green budget were issues related to climate change, bio-diversity, restoration of natural resources and the eco-system, as well as environmental conservation and pollution control, with the aim of improving the living conditions of people. (Refer to Annexure 1 for an outline of the Green Budget in Bihar)

Globally, there is no standard methodology available currently for the formulation of a green budget. The nature and scope green budget formulation is thus determined based on circumstances. In previous years, some countries formulated a Green budget by using various components of their national budget and resolutions. In most cases, the green budget is formulated by using expenditure on the environment by the government, from the main state budget. The two methods used in Green Budget formulation are:

a) Identification of spending and policy actions benefiting and promoting the environment

To define a green budget, it is necessary to identify





activities that will promote the environment. Such activities directly or indirectly support the following components.

Phase 1: Apart from the amount received from the Union government, many schemes are also run by the state government from its own funds. The schemes run by the state government (Central Sponsored, state schemes) were directly / indirectly reviewed.

Phase 2: With regard to the green component of the data received from various departments of the state government for the purpose of formulating a green budget, discussions were held on the activities carried out. The tagging and tracking method was adopted to reduce duplication and errors in expenditure-related data. Plan codes, along with the budget codes of Major Heads, Sub-Major Heads, and Minor Heads were also recorded to track the plans.

Table 2.1: Identification and Mapping of Activities Contributing to the Green Component

	Identification of departments contributing to activities that promote the environment, using SDG tools	Review of Annual Reports and websites of state departments and central ministries Counselling with representatives of State departments	
Budget allocation/ expenditure estimate	Identification of plans contributing to environment friendly activities	Review of demand-wise detailed expenditure statement and budget documents Counselling with representatives of relevant state	
towards promotion		departments.	
of the environment in Bihar	Budget for marked schemes allocation / consolidation of expenditure (collation)	Aggregation of total budget allocation/expenditure for each scheme.	
	Use of the estimation of the coefficients of environmentally relevant schemes	Revised RIO-Marker technology discussed with relevant departments	
		Estimates of green component provided by relevant departments	



b) Tagging and Tracking

Tagging and tracking technology is based on mapping tools linked to the SDGs and Rio-Marker technology. A detailed review of each scheme and its objectives and components is carried out for its categorisation. In the case of larger schemes, the scores of the various components of that plan are looked at to arrive at the plan's score. The evaluation of the plan's score is based on its action

plan and activities for India's SDGs, NAPCC, Bihar SAPCC, National Biodiversity Strategy and Action Plan (NBSAP), as well as existing literature on classification of activities (such as environmental protection activities and expenditure classification i.e., environmental activity classification-CEA and Biofin classification). In addition, evaluation also takes into account the alignment of each scheme with budgetary allocations and expenditures.



Section 3

3.1 Need for a Climate Responsive Budgeting landscape

The need for a climate responsive budgeting framework in the country is not only urgent but now an imperative. An increase in the frequency and intensity of extreme events such as floods, droughts, heat waves and forest fires has been attributed to climate change. The Inter-governmental Panel on Climate Change (IPCC), in its fifth assessment report, has elaborately documented these extreme events and their impact on human health, economic development and agricultural systems globally (IPCC 2014). The heat wave of 2015 over the Indian subcontinent has been ranked as one of the deadliest in the recent past, impairing human and agricultural systems (NOAA 2015; UNESCAP 2016). Satellite data suggests that there was an increase of around 1 degree Celsius (°C) in maximum temperatures across India over a 50-year period (between 1951-60 and 2001-10) and projections deeper into the future paint a far more alarming picture. Both adaptation and mitigation strategies that include monitoring of climate funds are key and the way forward.

3.2 Creating a Climate Responsive Budgeting Statement framework at the State Government level

As mentioned earlier, since there are multiple channels in climate finance and various methodologies to calculate climate budgets, a climate budgetary framework for states can help address these coordination failures to a large extent

by not only streamlining the flow of finance across various spending agencies, but also having an oversight agency, such as the national government, to direct and monitor. For this purpose a CRB statement / budget circular design can be adopted at the national and state level. A possible CRB statement format for various ministries to furnish information is provided below (Table 3.1). The format seeks separate statements on mitigation and adaptation-related programmes / schemes from the ministries.

3.3 Proposed framework for introduction of a Climate Responsive Budgeting Statement

After classifying climate relevant programmes as adaptation or mitigation programmes and assigning a proportion of budget outlays based on the perception of the expert group, the coordinating ministry could submit the statement on climate change budgeting to the Ministry of Finance following scrutiny by the expert committee/cell. Table 3.2 provides coordinates of the framework for introduction of a climate budgeting statement, featuring leading institutions, entry points, definition and criteria of climate-related expenditure, the level of information to be tagged, and the proportion of the budget for allocation as climate expenditure.

The following steps can be followed to institutionalise CRB in the budgetary process:

 Appointment of a centralised Expert Group Committee on CRB



Table 3.1: Proposed Format to furnish Information for a Climate Change Responsive Budgeting Statement

			Statement No
ormat to Furnish Info	rmation for a Climate Cha	nge Responsive Budgeting Sta	tement
Demand No.:			
lame of the Ministry /De	epartment:		
Part A Climate chang	e Mitigation (Interventions	to stabilise GHGs)	
are Are charige	- magation (interventions	to stabilise di lasj	
Name of scheme/ programme	Objective(s) of scheme/programme	Objective(s) of Rationale for considering scheme as	Budget outlays
		climate change relevant	
art B. Climate change	e Adaptation (Intervention	s to reduce vulnerability or inc	rease resilience to CC)
Name of scheme/ programme	Objective(s) of scheme/programme	Objective(s) of Rationale for considering scheme as	Budget outlays
p 9	, , , , , , , , , , , , , , , , , , ,	climate change relevant	

Source: A Framework for Understanding Climate Change Responsiveness of the Union Budget in India, September 2017, CBGA

- Finance unit under the Ministry of Finance (MoF) to discuss framework for climate budgeting and design institutional mechanisms to implement it at the level of coordinating ministries.
- Reporting of climate responsive spending to be made mandatory by all ministries and agencies from the following year in the Budget circular.
 Format to be provided for information to be

furnished on CRB.

 MoF to consolidate detailed Demands for Grants raised in the Budget circular on climate spending by ministries; MoF to prepare a statement on "climate change responsive budgeting", to be opened in the Expenditure Budget, Volume 1. This is to be followed by a debate in Parliament during the Budget Session.



Table 3.2: Proposed framework for introduction of a climate responsive budgeting statement

Coordinates	About	Guiding / Source document
Leading institution	Climate change Finance unit, Ministry of Finance	Their own assessment of climate relevance of programme supported by an international report such as the IPCC or India national action plan on climate change or nationally determined contributions to climate change (INDCs) or other assessment studies by think tanks
Entry Point	Climate Change Responsive Statement for Raising Demands For Grants	CRB Statement Format given in budget circular issued by Ministry of Finance every year in August
Definition and criteria of Climate-related Expenditure Identification of programmes / schemes supported through Union Budget as climate change relevant (adaptation and mitigation) Programme level		OECD Rio Marker definition Programme Design Document Outcome Document
		Programme Design Document
Proportion of budget to be allocated as climate expenditure	Estimated by expert committees/ climate budget cell operating under the aegis of the coordinating ministry for a CC relevant programme	 Programme design document Outcome budget Target set in annual plan IPCC assessment on GHG emissions National communication on climate change

Source: A Framework for Understanding Climate Change Responsiveness of the Union Budget in India, September 2017, CBGA

3.4 Conclusion and Way Forward: Making the Case for Climate Budgeting

Entrenching climate change within development requires an inclusive approach for a developing country such as India, where climate action aligns with the overall transition to sustainability and the social, economic, and ecological resilience for its citizens. The government is the only institution that has the potential and reach to get together various stakeholders from different sectors to combat the serious and expansive challenge of climate change.

Some of the ways in which CRB can be taken forward are listed below:

• Although, climate responsive budgeting is not explicitly mentioned by most states, in our review of planning and budget documents, we found that 28 states have some sort of policy and budget commitment to combat climate change in their State budget announcements for 2022-23 (Refer to Annexure 2). Additionally, states also have SDG budgets and SDG policies, which reflect their climate priorities (Annexure 3).



- The efforts made by Kerala, Bihar, Chhattisgarh, Assam and Maharashtra on CRB by using climate budget coding and SAPFIN are noteworthy and can be explored further in developing a concrete state-specific framework and methodology.
- With regard to Odisha, using the phased CCIA approach, the CCRS and CCSS scores of different schemes with different degrees of relevance and sensitivity to climate change can be compared within each sector. Integration of a simple yet relatively objective budget coding template with departmental budgets would be the way forward for the state if it were to measure the climate relevance and sensitivity of its expenditure. This would not only facilitate greater effectiveness of public expenditure in delivering welfare, but also lead to significant climate adaptation or mitigation benefits without much additional effort in planning.
- It is still too early to assess if the adoption of Climate Responsive Budgeting or green budgets have assisted states in accelerating low-carbon development. Since only two states—Odisha and Bihar—have brought out a climate budget and Green Budget (in the last two years), the next few years will be crucial to evaluate to what extent the targets for low-carbon development have been met.
- When it comes to the nature of funding in states where CRB is being adopted, more research and analysis is required to assess what type of inclusion principles have been followed (such as equity, gender, job creation etc.) to promote cobenefits in climate change mitigation. Given that this working paper is a scoping paper on CRB, the issue of inclusion principles will be taken up as a follow-up, in future research studies.
- Climate responsive budgeting as a process would require the complete involvement of

- the government (all three tiers). As the World Bank¹³ highlights, the prominent role of state actors in climate budgeting exercises implies that the success of budgeting frameworks rests on a government's willingness and capacity to take ownership of this process. Treating the environment as a global common requiring coordination by different stakeholders at all levels of government is one way of taking CRB ahead.
- To achieve this, India needs to build a climate budgetary framework to efficiently coordinate its actions by incorporating climate finance into the larger public finance management system. Such an exercise can inform future development plans and mainstream climate change as a policy issue at the state level. State governments, especially their respective Ministries/Departments of Finance, would need to play an important role in coordinating the entire process, starting from tracking government expenditure to generating funding from other sources. The outcome of this could be a sustainable and lucid body of work/effort on climate change that permeates every level of governance in India.
- The CRB adopted by Odisha is a well-defined and sound strategy that can easily be adopted by other states. However, one must be mindful of pre-existing conditions and the overall climate policy agenda in each state. Even if the entire method is not adopted, some elements of Odisha's CRB process can be adapted by interested states to suit their local needs. In addition, if the SAPFIN method followed by some states produces laudable results, it should be reinforced and continued on a sustainable basis. The exercise should not be a one-time effort led by donor-driven priorities but should instead be institutionalised within the state machinery.
- Although the Green Budget of Bihar is a comprehensive document that is easy to

¹³ World Bank Document



understand and implement, it has certain limitations. The analysis of budgetary expenditure is not sufficient to assess compliance with national/international targets/commitments on the environment. Moreover, environmental regulations have not been included in the scope of the budget. Further, green budgeting does not measure the efficiency of environmental expenditure.

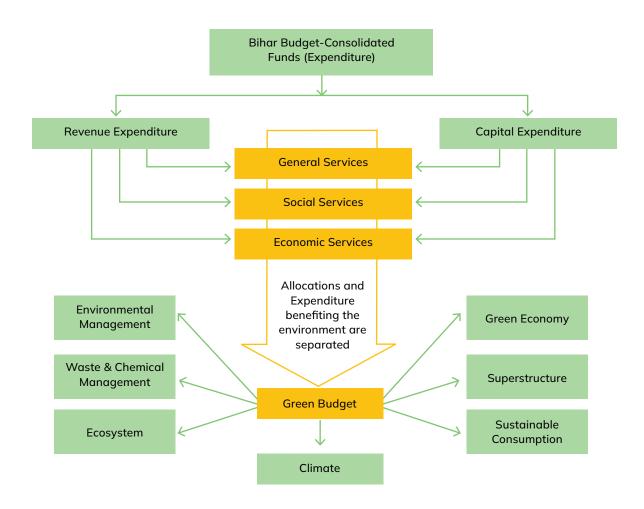
 For long-term and continued CRB outcomes, the policy engagement process should be oriented towards formulating "National Inclusive Climate Responsive Budgeting" and putting in place a "National Climate Investment Strategy". Recognising the importance of effective fiscal handling of climate change in the planning and management of domestic public finances, and taking note of the fact that India does not have a national framework to mainstream climate actions in government budgets, the strategy should focus on the need to adopt an inclusive CRB process. This will improve India's stand on climate finance in cross-country collaborations such as BRICS, the G20 climate agenda, etc. Further, the CRB findings can be shared with larger forums and spark a public discourse on developing a "National Strategy on Investment for Climate Projects"





ANNEXURE

ANNEXURE 1 Bihar Budget: Outline of the Green Budget





ANNEXURE 2

List of policy and allocation announcements on Climate Change in State budgets - 2022-23

Andhra Pradesh



No announcements towards climate-related activities or energy transition. The state's Finance Minister spoke about developing climate-resilient cities and expanding green spaces in urban areas but did not make any specific

scheme allocations. An allocation of Rs 685 crore in FY23 has been proposed for the Environment, Forest, Science and Technology Department—a 60% increase from the revised estimates for FY22.

Arunachal Pradesh



The following announcements were made: Solar Protective Fencing for oil palm plantations and other crops to deter wild animals. (Rs 1 crore). Introduction of e-Buses (Rs 5 crore).

Forest Guest House-cum-Nature Interpretation centre at Namdapha national Tiger Project, Deban (Rs 3 crore). Biodiversity conservation in development areas (BCDA) at Pasighat, Tawang and Ziro (Rs 3 crore). Creation of four Butterfly Parks at Pakke, Namdapha, Ziro and Pasighat at Rs 25 lakh per park (Rs 1 crore). Namdapha National Park and Tiger Reserve with community participation (Rs 1 crore). Tale Wildlife Sanctuary, Hapoli Forest Division with community participation (Rs 1 crore). Kamlang Wildlife Sanctuary and Tiger Reserve with community

participation (Rs 1 crore). Pakke National Park and Tiger Reserve with community participation (Rs 1 crore). Centre For Excellence at Van Vigyan Kendra, Chessa (Rs 1 crore). 6,000 Solar Streetlights for 700 border villages (Rs 16 crore). 'Golden jubilee Border Village Illumination Programme' for off-grid Micro-Hydels in remote border areas. 50 micro-hydel projects at an estimated cost of Rs 200 crore to be taken up under Phase I. Solar Electrification of eight remote villages in Tali circle in Kra Daadi district, in partnership with Sri Rural Development Trust, in which one third of the total expenditure of Rs 1.5 crore was contributed by the trust and the rest by the state government.

Assam



With a commitment towards creating a climate change resilient society, the Chief Minister has announced that the 'Science and Technology' department would be renamed as the 'Science, Technology and Climate Change' department.

- Increasing resilience to frequent and severe climaterelated shocks, consolidating funds earmarked for green initiatives, and catalysing public and private green investment.
- Seuj Axom Abhijan: Climate action as enunciated in the 'Panchamrit', announced by the Prime minister, is a reflection of the Assam government's strong commitment towards sustainable development, said the state's Finance Minister, Ajanta Neog. "It gives me immense pleasure to announce that we are launching the 'Assam Green Mission' to improve the green cover of the state from 36% to 38 % over a span of five years by adopting the Miyawaki model," the minister announced.
- Climate Resilient Agriculture: A proposal to carry out extensive training and demonstration for popularising natural farming among farmers.

- "Our state is gradually moving towards climate-friendly initiatives and sustainable energy sources. As an attempt to reduce the carbon footprint, zero-emission-based green systems would become the central pillar of the infrastructure envisioned in Amrit-GiG city. This would tap climate finance from global markets, and the finance from the state government would help catalyse the mobilising of private investment. World-renowned consultants will be entrusted to prepare the master plan. Phase-I is proposed to be completed by 2030 and Phase-II by 2035," the FM announced.
- Chief Minister's Fellowship for Climate Resilient Villages: "We propose to launch a fellowship programme to explore solutions for developing climate resilient villages in Assam. Graduate and Post Graduate students from the Science and Engineering stream will be encouraged to participate in this programme under the guidance of assigned scientific institutions. The Fellowship will be Rs 20,000 per month for a period of 1 year. We propose to engage 100 fellows who will adopt 10 villages initially," the FM announced.



Bihar



The Deputy chief minister highlighted how the state had lost green cover in the central government's annual forest survey. He, however, did not announce any specific measures that the state would undertake to address that loss. Instead, the state cut FY23 allocation for the Environment, Forests and Climate Change by 22.7% to Rs 662.85 crore. Of this, over 90% is revenue expenditure towards forestry and wildlife. A further Rs 1,516.52 crore

have been allocated as capital for power projects, and another Rs 96.5 crore as loans. This will include funds for a 200-megawatt grid-connected ground-mounted solar power plant for which work is already underway. It will also fund 18.8 MW of grid-connected solar rooftop capacity that will be installed in government buildings such as health centres and higher education institutes.

Chhattisgarh



Push For Solar Pumps. The budget, presented by Chief Minister Bhupesh Baghel, focused mostly on expanding the use of solar water pumps by the state's farming community. The state will make a provision of Rs 416.9 crore for the installation of an additional 15,000 solar

irrigation pumps of 3-5 horsepower capacity under the Saur Sujala Scheme. Over 1 lakh farmers have received solar pumps in the state so far. The state will also provide Rs 100 crore for 10,000 solar pumps to be set up under the Pradhan Mantri Kusum Yojana.

Delhi (2021-22)



- Extending Delhi's Green Cover to the extent possible, making use of anti-smog guns on construction sites necessary, encouraging the use of biodecomposers made by agricultural scientists of Pusa to prevent pollutants, deploying mechanical road sweepers, banning single-use plastics, solid waste management, better management of waste water treatment, prohibiting the practice of burning garbage and leaves in the open, shutting down of thermal power plants, etc. are among several steps the Delhi government has taken for comprehensive protection of the environment.
- Delhi has the world's most progressive electric vehicle policy, said the Finance Minister, Manish Sisodia. This policy, implemented since August 2020, has turned Delhi into India's 'electric vehicle capital'. Prior to the policy, the total number of electric vehicles among newly purchased vehicles in Delhi stood at 0.2 percent. Post the policy launch, 7,000 new electric vehicles have been purchased in Delhi, he said. "If we compare the figures of the last three months, 2,621 electric vehicles were purchased out of a total of 1,18,482 newly purchased vehicles. This is the impact of the new policy, and the share of electric vehicles has increased from 0.2 percent to 2.21 percent. This is a major indication of the success of the e-vehicle policy. Our government has set a target that by 2024, at least 25 percent of the new vehicles to be registered in Delhi will be electric vehicles. Delhi is the first city in the country
- where road tax and registration fees for all types of electric vehicles have been waived and maximum subsidy is being given for the entire electric vehicle infrastructure. At present 72 public charging stations for electric vehicles are functioning in Delhi. Soon this number will reach 500. In this regard, rapid charging points are also being built along the lines of the City of London. We aim to have at least one e-charging station every 3 kilometres in Delhi. We sincerely hope that when the country is celebrating its 100th Independence Day, our Delhi will be 100 percent free from vehicular pollution," the minister said in his budget speech.
- To promote e-buses in the public transport sector, the government is preparing to put 1,300 e-buses on the roads. Of this, tenders have been put in place for 300 DTC e-buses and they will hit the roads by December this year. 1,000 new e-buses will be on the roads by the middle of next year under the cluster scheme, the minister said.
- The country's first 'Tree Transplantation Policy' has been implemented in Delhi. Through this measure, pruning of trees will be allowed only when there is no other option available. Under the new policy, at least 80 percent of the trees required to be cut for a project in Delhi will need to be transplanted. Along with this, it would be mandated that 10 new trees are planted in place of each cut or transplanted tree. At present, green cover has increased to 21.88 percent in Delhi, which is a major achievement, the minister said.



Goo



The Goa government stands committed to environment conservation and have notified seven wetlands so far through the Goa State Wetland Authority. All 35 wetlands would be notified by this year 2022-23.

"Project GoVan", conservation of biodiversity through Livelihood Interventions, has been launched. A multiprocessing centre for women empowerment in North Goa has been opened. The second centre, in South Goa, has been commissioned. In order to support the Goa State Biodiversity Board, a provision of Rs 6 crore has been made.

Gujarat



The state's finance minister announced plans to set up large-scale renewable energy projects and targeted an increase in the state's already-high solar rooftop capacity.

- Rs 60 crore have been set aside for a group captive solar and wind energy park of 150 MW capacity. The project will cost Rs 600 crore, the finance minister said, without elaborating where the rest of the funds will come from. It will be used to power municipal street lighting, water and sewage works.
- A provision of Rs 825 crore has been made to set up solar rooftops in 3 lakh houses. The state already has

over 1.6 gigawatt capacity of rooftop solar installed, in over 3 lakh buildings. Another Rs 37 crore has been allocated to create 10 MW solar power capacity on rooftops of government buildings.

- State to provide total assistance of Rs 75 crore for the installation of 3 HP solar pumps for tribal farmers.
- The state will also spend Rs 50 crore for research and development of green hydrogen.

Gujarat's climate change department has been allocated Rs 871.7 crore for FY23, which is a 31 per cent increase in its funding.

Haryana



The chief minister announced various proposals to boost the state's solar capacity. He also unveiled a plan to set up a dedicated climate fund.

- The state has provided Rs 565 crore towards climate change-related initiatives. This is the first time it has allocated funds under such a head.
- A climate and sustainable development fund is proposed to be set up for activities around waste management, pollution, recycling of plastic and stubble burning. The total corpus has not been announced.
- The state will identify air pollution hotspots and take steps to convert them into green zones. It will also undertake a tree census, and develop an ecotourism policy.

A total of Rs 7,203 crore has been allocated for the electricity and renewable energy sector.

• The state will install 50,000 solar water pumps of

3-10 horsepower with a 75% subsidy — Rs 5,983 crore has been set aside.

All government offices and higher education institutes with electricity demand of over 10 kilowatts will shift to rooftop solar or other suitable solar power systems. Government offices will also introduce prepaid metering systems.

Policies incentivising a push to cleaner fuels have also been proposed, without specifics on fund allocations.

 The government has proposed to give medium and small industries 50% reimbursement on VAT collected on natural gas to push these units to use cleaner fuels.

For micro, small and medium enterprises in the National Capital Region, the state has proposed a grant for conversion of coal or diesel-powered boilers to cleaner fuels. The grant will be for up to 30 per cent of the capital expenditure, with a maximum limit of Rs 15 lakh.





The chief minister allocated Rs 448 crore to the state's power sector as Himachal Pradesh plans to become India's first state to get all of its energy from renewables by 2030.

- Solar power systems are to be installed in 50 government colleges, 50 schools and 20 industrial training institutes.
- The state will set up a 2 MW solar power unit in Kaza, Spiti, through a joint venture between the state electricity board and Solar Energy Corporation of India Ltd. The commissioned plant will have a 1 MWh battery storage system.
- The subsidy for grid-connected rooftop solar has been increased to Rs 6,000 per KW from Rs 4,000 earlier
- Satluj Jal Vidyut Nigam Ltd. to invest Rs 600 crore for 150 MW of solar capacity.

 The state proposes to initiate a green e-mobility programme on the Shimla-Solan National Highway with bilateral external funding. It will focus on building charging stations and battery replacement networks on the route.

The state's budget also focused on improving ecological outcomes and augmenting its tourism industry. Rs 771 crore has been set aside for forests and wildlife, which is slightly lower than the revised estimate.

- 20 nature trails to be developed to promote ecotourism.
- Forest department to spend Rs 200 crore on afforestation, soil conservation, water storage and ecotourism works.
- 14 new monitoring stations to be set up on various rivers and tributaries to track water quality.

Jammu and Kashmir

- An allocation of about Rs 200.76 crore has been made for the Forest, Ecology and Environment Sector towards Capital Expenditure (CAPEX) for the year 2022-23, which is Rs 9.01 crore more than the previous year's budget allocation.
- Planting of 1.35 crore saplings has been targeted during 2022-23, of which 26.50 lakh will be planted with the active involvement of Village Panchayat Plantation Committees (VPPCs) to create green assets in Gram Panchayats. To ensure widespread participation by people in government-sponsored
- plantation drives, the government will adopt a multidisciplinary convergence model linking school-level eco clubs.
- A sum of Rs 273 crore has been allocated in grants towards rehabilitation of the Dal Nageen lake.
- Rs 476.44 crore has been given in grants as equity for the Ratle 800 MW hydroelectric project. Rs 130 crore has been given in grants as the equity contribution for the 624 MW Kiru hydroelectric projects.

Jharkhand

The state's finance minister made a few announcements related to wildlife conservation and incentives for those setting up solar projects.

- The forest, environment and climate change department has been allocated Rs 1,019 crore — a 33% bump from the revised estimates of FY22.
- A biodiversity park in Namkum, Ranchi, to be turned into an ecotourism park under a public-privatepartnership model.
- A new scheme is proposed to be launched for conservation of wildlife in the Palamu Tiger Reserve.

The state has also raised the subsidies it offers non-conventional sources of energy to Rs 200 crore — from Rs 150 crore earlier — under various schemes. The state has targeted adding 1 GW of solar capacity in the upcoming fiscal year through these incentives. It currently has only 96.4 MW of solar power.



Karnataka

The state's finance minister made allocations that would prompt a shift towards non-fossil fuel energy sources. He also announced a scheme to address the issue of plastic pollution.

- The state will set up 10,000 solar-based irrigation pump sets at a cost of Rs 227 crore. These will be done through Karnataka Renewable Energy Development Ltd.
- A 2,000 MW capacity underground renewable energy storage centre is proposed to be set up in the Sharavathy basin for Rs 5,391 crore. So far, only a handful of large energy storage solutions in India have been proposed, with government-owned entities such as NTPC Ltd. and Solar Energy Corp. floating tenders.
- The state will formulate a green hydrogen policy in line with the centre's announcement and explore the possibility of a pilot project.
- It will also explore the possibility of installing 5,000-megawatt capacity hybrid renewable energy parks in eight districts.

The state has allocated Rs 1,478 crore for environment, forestry and wildlife development, which is an 11% increase over the previous fiscal year. Karnataka will also launch a scheme to address the issue of plastic polluting water resources in coastal areas. With assistance from the World Bank, the state plans to spend Rs 840 crore over five years to end the menace.

Kerala

The coastal state has targeted achieving net-zero emissions by 2050. The state finance minister's budget speech outlined monetary allocations to achieve the target and also identified next steps. He also said a separate environment budget will be unveiled from the next fiscal year.

- The state has kept aside around Rs 60 crore to be spent on new and renewable energy. The bulk of this will be spent on offering grants and research.
- Rs 15 crore has been earmarked as interest subsidy on loans availed by residential consumers to instal solar panels.
- Rs 32 crore has been set aside for a viability gap fund for production of household green energy.
- 50% of the ferry boats in the state will be converted to solar in the next five years.
- Solar pushcarts will be provided to street vendors
- Small solar-wind hybrid power systems of 1 KW to

- be set up on a pilot basis in fishing boats that are engaged in deep-water fishing.
- Rs 5 crore has been earmarked for rooftop solar in all colleges and in other institutions.

The state has also announced new funding to clean up its water bodies.

- Rs 23 crore allocated for the cleaning of rivers and lakes at various locations.
- Rs 10 crore earmarked to expand a scheme for removal of plastic waste from water bodies across the state.
- Another Rs 10 crore has been allocated for studying the possibility of reusing waste material.

In addition, the state wants to disincentivise ownership of fossil fuel-powered cars. It announced a green tax on all diesel vehicles (barring two-wheelers) up to a maximum of Rs 2,000, based on weight. Old vehicles (above 15 years) will pay 50% more.

Madhya Pradesh



The state finance minister's budget speech focused mostly on infrastructure and social welfare. It was announced that the state is exploring multiple projects to increase its renewable capacity. These include:

- A 1,500 MW solar park in Sagar district.
- A floating solar project of 600 MW in Omkareshwar Dam.
- A 1,500 MW solar project in Chhatarpur.
- A proposal to convert Sanchi into a solar city.

In addition, Rs 1,300 crore has been set aside for installation of solar water pumps in rural areas.





The state finance minister announced plans to augment solar capacity and increase environmental awareness. Allocations were also made for river conservation.

The state has more than quadrupled its allocation to new and renewable energy to Rs 396 crore. This includes incentives for renewable energy and installation of solar pumps, amid other projects.

- Solar power projects of 577 MW to be set up at Mauje Kodgaon and Mauje Shindala, Mauje Sakri, Washim, Mauje Kachrala and Yavatmal.
- A 2,500-MW capacity solar energy park will be developed in Maharashtra, the fifth-largest renewable producing state.

The state has allocated Rs 473.5 crore to its environment

and climate change department — 61% more than in the previous fiscal. Of this, Rs 253 crore will be solely for spending on various programmes.

- Rs 100 crore to be set aside under the Mazhi Vasundhara Mission 2.0 for local government bodies to implement biodiversity, waste management, energy efficiency and water conservation projects.
- A new school curriculum on environment to be prepared for students up to Class 8.
- A proposal has been made to spend Rs 150 crore on conservation of 23 rivers.
- Rs 286 crore to be spent over the next five years on the Maharashtra Gene Bank Project to conserve genetic biodiversity.

Manipur

There was no mention of climate change in the budget speech but specific allocations have been made for climate change in the Demand for Grants.

Meghalaya

The chief minister announced several initiatives that the state is taking towards sustainability and ecology. They include:

- Rs 227 crore allocated towards three externallyaided projects related to management of forest resources and communities.
- A project to build 2,500 small and multipurpose reservoirs to address water shortages in rural areas.
 Project to be implemented with support from the

Asian Development Bank, at a cost of about Rs 720 crore, over five years.

- Cash support to communities that preserve and protect existing forests. This will be part of a larger project, funded by Germany's KfW, to protect vulnerable catchment areas of the Umeiw and Ganol rivers.
- Ecological restoration of the Sohra Plateau at a cost of Rs 1,125 crore, over five years.

Mizoram

The chief minister announced a handful of measures for conservation of natural resources in the state. Among them are:

- Rs 10 crore for soil conservation measures through a loan from Nabard.
- A Biodiversity Conservation and Forest Enrichment project for Rs 484.27, with financing from the central government.





Odisha

- Investment of about Rs 8,255 crore for Piped Water Supply Projects under BASUDHA and the Jal Jeevan Mission
- An outlay of ₹968 crore has been proposed for flood control and drainage work.
- An outlay of ₹2,493 crore has been provided in 2022-23 for incomplete Accelerated Irrigation Benefit Projects (AIBP) implemented through the Pradhan Mantri Krishi Sinchayee Yojana.
- An allocation of ₹2,193 crore has been made for

the forestry sector. This includes ₹1,105 crore from the Compensatory Afforestation Fund Management and Planning Authority (CAMPA) fund, and ₹132 crore for implementation of a JICA-assisted Odisha Forestry Sector Development Project (Phase-II).

There is provision of ₹52 crore under the Green Climate Fund (GCF), ₹42 crore under National Mission for a Green India, ₹40 crore for fire preventprevention and ₹35 crore for the Tiger Reserve.

Rajasthan

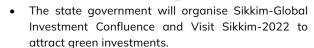
One of the largest solar power generators in the country, Rajasthan's budget didn't make any announcements related to a clean energy transition. The chief minister made a few announcements around afforestation and waste management. These include:

- Plantations over 50,000 hectares to improve the state's green cover.
- Botanical gardens to be established in Jodhpur,
 Bikaner, Kota, Udaipur, Bharatpur and Ajmer. Rs 10

crore allocated for conservation and management of Sambhar Lake.

- Captive animal sponsorship scheme to be launched in zoological parks where individuals or organisations can adopt animals.
- State to launch an e-waste disposal policy and develop an e-waste recycling park in Jaipur for Rs 50 crore.

Sikkim



 The chief minister will set up a high-level climate change and glaciology commission consisting of experts on glaciology and the related climate change impact. The state will also provide fellowships to young scientists (who have already obtained a Ph.D. in social science and natural science) to study the impact of climate change on critical areas such as rivers and water, food and agriculture, energy security, natural disasters, as well as society and culture.

Tamil Nadu

The finance minister did not make any announcements around an energy transition. He, however, announced the launch of a climate change fund that will be used to mobilise capital for such projects.

The state has kept its allocation for new and renewable energy largely unchanged at Rs 100 crore, all of which is revenue expenditure.

Spending on the environment, climate change and forest department has gone up 44% to Rs 849 crore. Over 90% of these funds will go to the forestry department.

 Botanical gardens to be developed near Chennai at a cost of Rs 300 crore in partnership with Kew

- Gardens of London. A detailed project report will be prepared by the government.
- Rs 10 crore has been kept aside for Project Nilgiri
 Tahr aimed at conservation and expansion of the
 habitats of Tamil Nadu's state animal.
- A forest commission will be set up to recommend policy changes in conservation, expansion of green cover, involvement of tribals in forest management, prevention of man-animal conflicts and capacity building.





The state Finance Minister's budget for the state focused more on welfare spending and had little to offer on the climate front. He mainly reiterated schemes and initiatives around renewable energy and conservation that are already in place.

 State to spend Rs 932 crore to improve green cover through the Telanganaku Haritha Haram initiative.
 This will go towards rejuvenation of forest areas and developing 'urban' forests in cities and towns.

Uttar Pradesh

- Rs 1,137 crore has been allocated to the Madhya Ganga Canal project and Rs 976 crore towards the Rajghat Canal project.
- Rs 15,000 crore has been allocated to the Jal Jeevan Mission (Rural) and Rs 2,000 crore has been allocated to the Jal Jeevan Mission (Urban).
- NABARD to facilitate funds with blended capital to finance startups for agriculture and rural enterprises.
- Kisan drones are being used for crop assessment and to spray pesticides.

West Bengal



The state's Finance Minister, Chandrima Bhattacharya, did not make any new climate or energy-related announcement. She apprised the house on progress made in existing initiatives and allocated funds under various heads without elaborating on specifics.

- Allocated Rs 75.5 crore for non-conventional and renewable energy.
- Allocated Rs 938.5 crore towards forests.

Rs 99 crore set aside for environment-related activities.

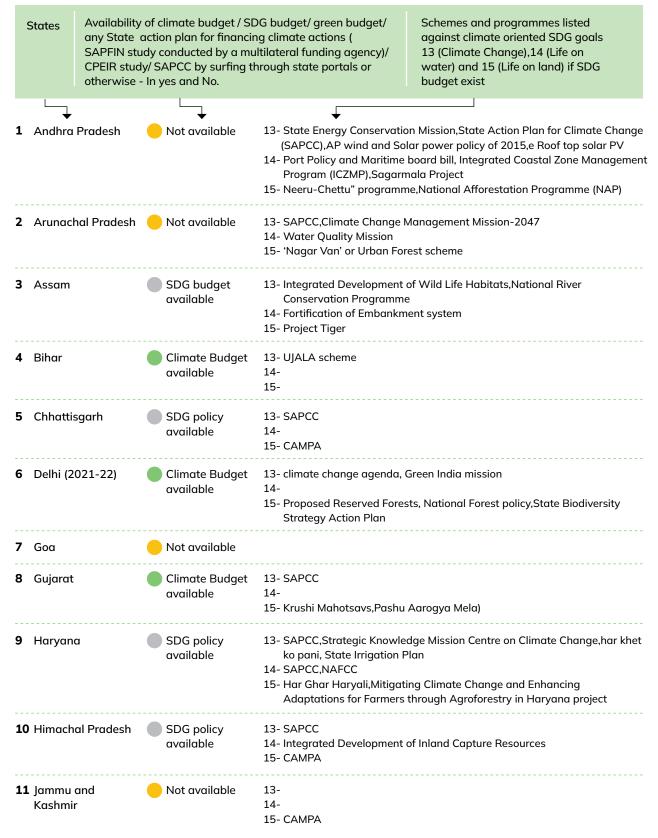
Source: How Prepared Are India's State Budgets For Climate Action, Azman Usmani, Bloomberg Quint, 25th March, 2022





ANNEXURE 3

Statewise mapping of SDG policies and budgets





States

Availability of climate budget / SDG budget/ green budget/ any State action plan for financing climate actions (SAPFIN study conducted by a multilateral funding agency)/ CPEIR study/ SAPCC by surfing through state portals or otherwise - In yes and No.

Schemes and programmes listed against climate oriented SDG goals 13 (Climate Change),14 (Life on water) and 15 (Life on land) if SDG budget exist

	<u></u>	↓
12 Jharkhand	SDG policy available	13- SAPCC,Greening India Scheme,National Afforestation Programme 14- Integrated Development of Inland Capture Resources 15- CM Jan Yojana
13 Karnataka	SDG policy available	13- SAPCC,Strategic Knowledge on Climate Change programme 14- District wise policy brief for water resoueces 15- CAMPA
14 Kerala	SDG policy available	13- 14- Kerela Marine Fisheries Regulation Act, Jala subhiksha 15- One crore saplings
15 Madhya Pradesh	Policy available, Agriculture budget available	13- SAPCC 14- STATE WATER POLICY,FISHERIES AND AQUACULTURE INFRASTRUCTURE DEVELOPMENT FUND,Chief Minister Water Conservation Programme 15- CAMPA
16 Maharashtra	SDG policy available	13- SAPCC, Steering Committee on Climate Change, Action on Climate Today (ACT) programme14- PRADHAN MANTRI MATSYA SAMPADA YOJANA15- Wildlife Action Plan
17 Manipur	SDG policy/ Manipur Vision 2030 available	 13- Integrated Power Development Scheme, Pradhan Mantri Krishi Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of Inland Capture Resources 15- North East India Conservation Initiative
18 Meghalaya	SDG budget is available for 2022-23	 13- Integrated Power Development Scheme, Pradhan Mantri Krishi Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of Inland Capture Resources 15- North East India Conservation Initiative
19 Mizoram	SDG policy available	 13- Integrated Power Development Scheme, Pradhan Mantri Krishi Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of Inland Capture Resources 15- North East India Conservation Initiative
20 Nagaland	SDG policy available	 13- Integrated Power Development Scheme, Pradhan Mantri Krishi Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of Inland Capture Resources 15- North East India Conservation Initiative
21 Odisha	Climate Budget available	 13- SAPCC, Climate Change Innovation Programme, Odisha Integrated Irrigation Project for Climate Change Resilient Agriculture 14- Integrated Watershed Management Programme, Water Sector Infrastructure Development Programme 15- National Rural Livelihood Mission, CAMPA



States

any State action plan for financing climate actions (SAPFIN study conducted by a multilateral funding agency)/ 13 (Climate Change),14 (Life on CPEIR study/ SAPCC by surfing through state portals or water) and 15 (Life on land) if SDG otherwise - In yes and No. budget exist 22 Punjab 13- National Food Security Mission, Compensation for Stubble SDG policy available Management, National Mission for Sustainable Agriculture 14- Neel Kranti Mission 15- National Mission on bovine Productivity 13- SAPCC, Natural Farming, National food secutiry mission 23 Rajasthan SDG policy 14- National Mission for Protien Suppliment available 15- Sara Suraksha Kavach 24 Sikkim SDG policy 13- Integrated Power Development Scheme, Pradhan Mantri Krishi available Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of Inland Capture Resources 15- North East India Conservation Initiative 25 Tamil Nadu SDG policy 13- Tamil Nadu Biodiversity Conservation and Greening Project available 15- ECO-RESTORATION OF PALLIKARANAI MARSHLAND, ECO-RESTORATION OF NANMANGALAM RF **26** Telangana SDG policy 13- Integrated Power Development Scheme, Pradhan Mantri Krishi available Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of **Inland Capture Resources** 15- North East India Conservation Initiative 13- Integrated Power Development Scheme, Pradhan Mantri Krishi 27 Tripura SDG policy available Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of **Inland Capture Resources** 15- North East India Conservation Initiative 28 Uttar Pradesh SDG policy 13- Integrated Power Development Scheme, Pradhan Mantri Krishi available Sinchayee Yojana, National Sample Survey 14- Development of Freshwater Aquaculture, Integrated Development of **Inland Capture Resources** 15- North East India Conservation Initiative 13- Uttarakhand Solar Energy Policy, SAPCC 29 Uttarakhand SDG policy available 14- Uttarakhand Jal Sansthan 15- Uttarakhand Pine Litter Policy, Uttarakhand Aroma Park Policy, CAMPA 30 West Bengal SDG policy 13- SAPCC, The Green City Mission, Gobeshonay Bangla available 14- Namami Gange 15- SABUJSREE, CAMPA

Schemes and programmes listed

against climate oriented SDG goals

Availability of climate budget / SDG budget / green budget /

Source: Compiled by CBGA from various state budget and state SDG documents

About Project:

Building an Inclusive and Cohesive Public Climate Financing Framework

This project intended to bring in inclusiveness and cohesiveness in public policy for accelerating Low Carbon Development (LCD). The project carried an assessment of two select states- Rajasthan and Jharkhand, for their LCD and inclusive policies and suggested a Climate Responsive Budgeting Framework for the states reference. This project is supported by the New Venture Fund.

About Working Paper:

Assessment of the Climate Responsive Budgeting Framework adopted by States in India

This Working Paper made an assessment of existing Climate Responsive Budgeting Framework being adopted by various States. This output will assist interested State governments to adopt Climate Responsive Budgeting as a potential tool to identify climate relevant budget outlays as well as embed relevant strategies in the design of state financing for low carbon development and bringing inclusiveness.



About CBGA:

CBGA is an independent, non-profit policy research organisation based in New Delhi. It strives to inform public discourse through rigorous analysis of government budgets in India; it also tries to foster people's participation on a range of policy issues by demystifying them.

For further information about CBGA's work, please visit www.cbgaindia.org or write at: info@cbgaindia.org

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