

Indian Network on Ethics and  
Climate Change & Alternative Futures

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# STRENGTHENING CLIMATE RESILIENCE FOR THE POOR

State Action Plans on Climate Change

P O L I C Y   N O T E

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# SUMMARY AND KEY RECOMMENDATIONS

India is a land of the marginalised. The emerging threat of climate change is further marginalising the poorest of the poor, tribal groups, people from the lower castes, women and the religious minorities. These groups largely live off climate-sensitive natural resources like agriculture, livestock, fishing, non-timber forest produce and biomass-based small crafts and are affected first and worst by climate impacts. Yet, they have the least resources, opportunities and authority to adapt to these impacts or to lead climate solutions.

India's State Action Plans on Climate Change (SAPCCs) have the mandate to give priority to the concerns of the socially and economically marginalised people. Currently, 30 SAPCCs have been approved by the Ministry of Environment, Forests and Climate Change. Several of the proposed climate solutions are similar across States and follow the broad outline given in the various sector-specific National Missions of the National Action Plan on Climate Change (NAPCC), India's blueprint for climate action. Yet, critical concerns of marginalised people have only been partially addressed.

The financial plan for rolling out the SAPCCs includes plan and non-plan budgets as well as multilateral and bilateral funding. States now have the additional 10% share of the central taxes subsequent to the 14th Finance Commission recommendations. Then there is the Rs 350-crore National Adaptation Fund. Projects are being submitted to the global Adaptation Fund and the Green Climate Fund through India's designated National Implementing Agency (NIE), viz., the National Bank for Agriculture and Rural Development (NABARD).

This Policy note uses the lens of poor and marginalised people to study 12 SAPCCs and deliberations from

## Overall Recommendations

- Anchor the SAPCCs in climate science to correctly assess and address local vulnerabilities and risks
- Make SAPCCs 'transformational' with clear operational guidelines on priority areas, backed by short-, medium- and long-term timelines.
- Provide more specific and realistic budgetary estimates.
- Ensure availability of innovative funding.
- Ensure clarity on how the SAPCCs will overlap with State Annual Plans and the 5-year Plans.
- Make SAPCCs a part of the State Planning Boards, developed as 'small workable packages' with explicit linkages with Central and/or State schemes.
- Bring in a strong adaptation focus rather than the business-as-usual development focus.

regional meetings of civil society groups mobilised by Indian Network on Ethics and Climate Change (INECC) to make recommendations across seven priority areas: (a) Agriculture and Allied Activities (b) Himalayan Ecosystem and Biodiversity (c) Forests and Mining; (d) Water Resources and Disaster Risk Reduction (e) Energy Security (e) Urban Development and (f) Strategic Knowledge.

The 12 SAPCCs are from Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Madhya Pradesh, Manipur/ Mizoram, Nagaland, Orissa, Sikkim, Uttar Pradesh, Uttarakhand and West Bengal.

# AGRICULTURE AND ALLIED ACTIVITIES

**O**ur Concerns: The world's largest number of poor and malnourished people live in India, the country which produces the highest quantities of milk, ginger, turmeric and black pepper; and the second biggest quantum of wheat, rice, sugar, groundnut and inland fishing products. Over 85% of the producers are small and marginal, caught in a poverty trap. They, especially women, do subsistence farming, combining labour-intensive agriculture with livestock, fishing and collection of non-timber forest products without autonomy over land, seeds or other inputs to help

them adapt to climate vagaries. About 60% have no irrigation facilities and very little access to adaptive farm technologies or the value-added market economy. The poorest and most disempowered farmers are mostly tribal people or belong to scheduled castes or minority religious and ethnic groups with women farmers doing most of the work. They are the ones who need the SAPCCs.

The SAPCCs must cater to these marginalised farmers by moving away from fertiliser-dominated, water-guzzling farm policies to more resilient ones that



*In agriculture, the SAPCCs are emphasising stress resilient cultivators, crop diversification, traditional cropping patterns, organic farming, water management and capacity building.*

### ***We Recommend***

*Farm policies for the marginalised producers must invest in robust local planning, land rights, indigenous seeds, organic farm practices, bio-inputs, soil and water conservation, promotion of nutritious and climate-resilient food crops, livestock rearing, real-time weather information, risk insurance and labour-saving farm technologies – all this while keeping gender equality at its core.*



promote bio-inputs, organic farming and water conservation. Promotion of more nutritious and climate-resilient millets and protein-rich pulses is required. The recent boost to horticulture as a mere commercial venture must change so that rural growers can also afford to consume the fruits and vegetables they grow. Poultry and inland fishing need to be promoted, both because these are more resilient during disasters and erratic weather and because they enable families to eat nutritious food and sell the surplus in the market.

The SAPCCs must expand their mandate for institutional reform, giving primacy to convergence of policies and programmes for agriculture and allied activities on the ground through robust village development plans and inclusion of urban agriculture in food miles in urban development plans.

Potential within the SAPCCs: The State of Sikkim, West Bengal and Orissa are moving towards crop diversification while soil and water conservation with more sustainable crop management practices are slated to be promoted in West Bengal, Sikkim, Andhra Pradesh, Madhya Pradesh, Orissa and Uttarakhand. The preparation of seed banks has been prioritised by Sikkim, Orissa, Assam, Andhra Pradesh, Rajasthan, and West Bengal. Madhya Pradesh, West Bengal, Arunachal Pradesh plan to promote traditional practices like multiple cropping, inter-cropping and crop rotation along with conservation and popularization of many climate-resilient indigenous varieties. Uttarakhand, West Bengal, Andhra Pradesh, Arunachal Pradesh, Mizoram, Manipur and Assam are developing and promoting organic farming/integrated farming systems. Crop insurance is being prioritised by West Bengal, Assam and Uttarakhand, Andhra Pradesh, Manipur and Assam.



# HIMALAYAN ECO-SYSTEM AND BIODIVERSITY

## Our Concerns

The Himalayan biodiversity supports about 80 million people, mostly subsistence farmers and pastoral communities from scheduled castes and scheduled tribes. In India, about 27% people depend on non-timber forest products (NTFP) to meet 20-40% of their income, majority being from marginalised groups. Tribals alone collect about 60% of India's NTFPs, lacking access to institutional service and unprepared to deal with climate change-induced biodiversity loss. Yet, there is rich repository of local knowledge on biodiversity, especially with women who access food, seeds, medicines, herbs, firewood, fodder and also raw material for making tools, crafts and their houses.

The SAPCCs must tap this rich local knowledge so that it becomes part of adaptation and afforestation interventions. For instance, women know what edible forest products or medicinal herbs are available across different altitudes for use in times of crop failure or dehydration during the dry winters that are increasingly becoming common with climate change.

The SAPCCs must enable forest people to take informed decisions and adopt participatory approaches to create local, participatory biodiversity registers in every village and town. Involving local communities in research, capacity building, preservation and conservation of biodiversity as well tracking the changes brought about by climate change impacts will





*In forest and biodiversity, the SAPCCs focus on eco-restoration, continued people's participation in forest management, lower dependence on biomass for fuel, more forest-based livelihoods, biodiversity conservation and capacity building.*

### ***We Recommend***

*Adoption of participatory approaches to create local biodiversity registers, track biodiversity changes,*

*informed participation in adaptation and mitigation interventions, research, capacity building, preservation and conservation of biodiversity.*

*The same is true for all mixed forests such as the coastal mangroves and the Western Ghats.*

help villagers and poor and marginalised city-dwellers adapt to climate change. Afforestation will also result in mitigation co-benefits. The improved green cover and forest density will prevent landslides and mitigate flash floods while enhancing biodiversity reserves. Better awareness levels among local communities to preserve pristine forests will also help resolve the continuing 'people-park' conflicts. Yet, SAPCCs must also address institutional barriers to create alternative support systems to fulfil the daily needs of the marginalised people.

**Potential within the SAPCCs:** Nagaland, Mizoram and Sikkim are documenting biodiversity, studying climate-resilient indigenous species and plan to plant climate-resilient native species, the latter being also planned by Uttarakhand. Manipur, Uttarakhand and Sikkim will be promoting agro-forestry. Reduction of forest fuel dependence with use of alternate source of energy is a prominent action point in the SAPCCs of Nagaland, Mizoram and Sikkim. Nagaland, West Bengal, Mizoram and Sikkim are building awareness and capacities of officers and communities. They are also reviving traditional technologies to preserve forests and generate revenue for local people. Assam, Nagaland, Mizoram and Sikkim plan to expand research and mapping exercises to rejuvenate spring sources and potential watershed areas. Manipur and Nagaland will be rehabilitating areas that were under shifting cultivation, mining and ravine through village-level forest protecting bodies.



# FORESTS AND MINING

## Our Concerns

India is among the 10 highest ranking countries for production of several minerals but this has come at the cost of destruction of forests, rivers, groundwater and farmlands and impoverishment of India's tribal people. Highest mineral deposits are found in the best of forests, including pristine forests, inhabited mainly by tribal people dependent solely on agro-forestry. Up to 90% of India's coal and 80% of other minerals occur in tribal areas. Mining damages 20 times the lease land, including agrarian and pasture land and leads to water and air pollution. With climate change, the already vulnerable ecosystems are becoming even

more fragile. Repeated droughts, heat waves and intense rains are leading to degradation of forests, falling groundwater table and dwindling availability of food, water, firewood and fodder. While mining is an energy-guzzling activity, local communities largely continue to depend on biomass for cooking and heating. Climate change-induced successive meteorological and hydrological droughts are now affecting the availability of biomass.

The SAPCCs must revitalise local economies in mineral-rich areas, by ensuring local communities have a voice in location and operation of mines, sharing of profits and protection of the natural resources through







*In mining, the SAPCCs focus on creating 'green' zones, energy efficiency, awareness generation and capacity building,*

### ***We Recommend***

*Legislating participatory review of EIA benchmarks, regulation of mining companies, participation of local communities in wealth distribution, adoption of sustainable farming, renewable energy, recycling and conservation of water and conservation of biodiversity.*

afforestation, recycling of water, use of renewable energy and protection of farmlands and pasture lands. The SAPCCS must legislate periodic, participatory reviews of environmental impacts against benchmarks set in the mandatory Environmental Impact Assessments (EIA). This is because EIAs have been unable to protect the environment after mining operations are given a go-ahead. Land use changes, vegetation and hydrology influence local climate parameters so protection of local ecosystems will improve the livelihood-base of local communities.

The SAPCCs must specifically address poverty and disempowerment in tribal areas, governed under the Fifth Schedule of the Constitution. This must be done by enhancing awareness on climate change, making of informed local village plans and budgets that include adaptation and mitigation interventions and by regulating private mining operators to deliver on environmental protection. At least 12 of the 50 major mining districts are among the 50 most backward districts while 30 major mining districts are among the 150 most backward districts.

### **Potential within the SAPCCs**

Assam and Orissa SAPCCs aim to promote energy efficiency in the mining industries. Manipur and Orissa are considering expanding green zones in major mining clusters. In Madhya Pradesh and Nagaland mined out areas are planned to be rehabilitated, reclaimed and re-vegetated to convert the abandoned mine/quarry into a public utility landscape. Building capacities and awareness on scientific mining is part of the SAPCCs of Orissa and Nagaland.



# WATER RESOURCES AND DISASTER RISK REDUCTION

## Our Concerns

The rural and urban poor are usually the worst impacted by heat waves, cold waves, flash floods, droughts and cyclones. They often occupy the more

vulnerable locations in villages and cities and are excluded from disaster preparedness interventions. Worsening climate change-induced disasters are leading to either too much water – as in flash floods, water-logging, intense and continuous rain and



*Under **Disaster Risk Reduction (DRR)**, investments are being made in early warning system, communication outreach, technological and engineering solutions, better coordination and capacity building. Interventions for **water** include improvement in quantity and quality with demand side management*

### **We Recommend**

*Adoption of the emerging microeco-system adaptation approach which includes socio-economic and cultural factors in vulnerability assessments and community-based participation including early warning systems, relief and rehabilitation aimed at poor and marginalised men and women.*

cyclones; or too little water – as with consecutive droughts and erratic rainfall patterns. For poor people, this affects their survival and livelihoods as they often own un-irrigated lands and use open sources of water or water tankers for drinking and cleaning both in rural and urban India. It is estimated that by 2030, half of India's demand for water may remain unmet.

The SAPCCs must invest in vulnerability assessments that take into account socio-economic and cultural factors both in rural and urban areas. Water policies must focus on price differential and water budgeting to ensure equitable distribution of water and conservation of water. Industrial extraction of water must be regulated, priced and recycled. The SAPCCs must prioritise water-recycling and rainwater harvesting through institutional mechanisms as poor people are better able to implement programmes through collectives.

The SAPCCs must also ensure resilience of poor and marginalised groups by investing in early warning systems that reach women and excluded communities. The poor be prioritised for access to shelter homes, communication and transport facilities, water and sanitation as well as rehabilitation and reconstruction. Relief is often directed only towards men but women's needs must be identified and addressed.

### **Potential within the SAPCCs**

The SAPCCs of Andhra Pradesh, Orissa and Assam propose to improve early warning systems, develop effective monitoring systems. States plan to improve implementation of disaster management policies and document traditional knowledge. Mangrove plantations and Integrated Coastal Zone Management projects are planned in Orissa and Andhra Pradesh. Uttarakhand, Orissa and Assam plan to develop techno-legal regimes and protocol for training and capacity building of disaster-prone communities. Orissa and Assam plan to strengthen work on risk management in flood-prone areas. States plan to undertake groundwater conservation, rejuvenate traditional water bodies, natural drainage channels and river channels to tackle the waterlogging and drainage issues. Mizoram, Sikkim and Manipur plan to craft state-level water policies. Water quality and wastewater management are prioritised by Nagaland, West Bengal and Uttarakhand.



# ENERGY SECURITY

## Our Concerns

In an energy-poor country, the marginalised groups bear the triple burden of foraging for fuel, using inefficient fuel and suffering health impacts. About 87% of rural India and 26% of urban India still use inefficient and unhealthy biomass for cooking and heating. Small holders, women farmers, remote tribal areas or urban slums are not a priority for clean and efficient energy.

Dependence on coal will continue, resulting in more clearance of forests and depriving forest communities of their resource base. Between 1981 and August 2011, 12% of forests were diverted for mining. Of all the forestland diverted for mining during the 11th Five-year Plan, 25% was for mining. There were no impact assessment reports and no ecological or economic valuation done. The flip side of energy security based on coal is that, in a business as usual scenario, mining will take away the wealth of forests,



*Under **energy security** the focus is on adoption of renewable energy, sustainability of energy resources and capacity building.*

***We Recommend***

*Decentralised generation and access to clean energy ;  
clean energy-related jobs for marginalised groups;  
energy efficient technologies for small holders and  
adoption of the land-water-energy nexus approach to safeguard all three resources used in energy production.*

land and water from poor communities, resulting in further deprivation and alienation.

The SAPCCs must invest in decentralised generation of clean energy and provision of local skilled jobs in the sector. Clean energy must be available for all energy-related activities of the rural and urban poor - from agriculture to kitchen gardening, household work, heating and home-based manufacturing and service industry in both rural and urban India. Energy efficiency standards must be extended to low-end machines such as low horsepower water pumps and winnowing fans used by small holders.

The SAPCCs must adopt the land-water-energy nexus approach because trade-offs between these resources are inevitable even with the production of clean energy. Adverse impacts must be off-set and/or mitigated. For instance, solar panels and wind mills require large tracts of land, manufacture of solar cells uses lots of water and generates wastewater while biofuels compete with food crops.

**Potential within the SAPCCs**

Mizoram and Manipur have included climate change as a component in their state power plans. A comprehensive plan for using renewable energy in rural and urban areas is being formulated by Rajasthan, West Bengal and Mizoram. Rajasthan, Mizoram, Andhra Pradesh, Assam, Madhya Pradesh, Manipur, Nagaland, Orissa and West Bengal plan to aggressively adopt renewable energy. An energy development fund has been created by Rajasthan and Arunachal Pradesh. Rajasthan, Mizoram, Andhra Pradesh and Madhya Pradesh are also developing indigenous and cost effective technologies to increase efficiency and sustainability of energy resources. Rajasthan, Mizoram, Andhra Pradesh, Arunachal Pradesh, Madhya Pradesh, Nagaland, Uttar Pradesh and Uttarakhand plan to mandate energy efficiency in infrastructure development. Rajasthan, Assam, Madhya Pradesh and Uttarakhand plan sustainable energy use in integrated industrial plans. Capacity building on energy efficiency will be adopted by Rajasthan, Mizoram, Arunachal Pradesh, Assam, Madhya Pradesh, Manipur and Uttar Pradesh. Andhra Pradesh and Sikkim will reduce transport emissions.



# URBAN DEVELOPMENT

## Our Concerns

The number of urban poor have been growing faster than the number of rural poor and lack secure living spaces and basic services. With a low skill base, their upward movement is slow. They mostly live on river beds, near drains and garbage dumps or in narrow streets. The homeless sleep on pavements and own almost no assets. They are completely vulnerable to climate vagaries – suffering heat strokes, dying of

excessive cold and water-borne diseases and high susceptible to bacterial infection because of close contact with garbage and lack of sanitation facilities. Their low income base means they often cannot afford public transport and are often too malnourished to walk too far. They also inhale much of the polluted city air. The urban poor are also employed in much of the 'dirty' work like garbage recycling and cleaning activities including, even today, manual scavenging as well as low-paid service jobs. Yet, they contribute



*Under urban development the focus is on energy efficiency, clean public transport including non-motorised, green buildings, waste management and housing for the poor.*

**We Recommend**

*Building resilience of urban poor through safe shelters during extreme events, resilient houses, safe water and clean energy, participation in urban planning skills in green jobs with universal education and health being necessary.*

substantially to the informal city economy. Majority of the urban poor belong to scheduled castes, scheduled tribes and minority groups.

The SAPCCs must invest in making the urban poor resilient. This includes provision of safe shelter spaces and resilient housing, safe water, clean energy and resources for emergency finance. Provision of low-cost, clean transport will also result in increasing their contribution to the economy while lowering air pollution. Improved drainage and sanitation facilities must include comprehensive and end-to-end plans for solid waste management with collection and recycling of garbage, hygienic disposal facilities and health safeguards. The SAPCCs must also invest in skill development of poor men and women in green jobs such as construction of green buildings, solid waste management, urban agriculture, rainwater harvesting, water conservation, driving/servicing low-cost, clean transport and repair/maintenance jobs in the clean energy sector.

At another level, the SAPCCs must also enabling the urban poor to participate in informed decision-making as members of local urban bodies and make participative, locally resilient development plans.

**Potential within the SAPCCs**

Integrated water and waste management systems, solid waste management and recycling are part of the SAPCCs of Andhra Pradesh, Mizoram, Arunachal Pradesh, Nagaland, Manipur, Orissa, Uttar Pradesh, Uttarakhand, Sikkim. Energy efficient housing, green buildings and sustainable transportation in cities are planned by Andhra Pradesh, Rajasthan, Mizoram, Arunachal Pradesh, Nagaland, Manipur, Uttar Pradesh and Sikkim. Andhra Pradesh, Rajasthan, Mizoram, Nagaland, Manipur, Orissa, Uttar Pradesh and Sikkim have planned for improved drainage and sanitation systems in urban slum areas and rural areas as well. Arunachal Pradesh, Madhya Pradesh, Nagaland, Uttar Pradesh and Uttarakhand have planned for improved waste management. With Uttarakhand, these States are promoting non-motorized transport and incentive programmes for use of clean/alternate fuel. Housing facilities for urban poor are addressed by the SAPCCs of Andhra Pradesh and Sikkim.



# STRATEGIC KNOWLEDGE

## Our Concerns

Almost all States are setting up climate change-related strategic knowledge centres with interventions being very specific to the States. The ecosystem-dependent communities often rely on traditional wisdom, which may or may not work in a 'new' world that is experiencing climate vagaries. They also do not have the opportunity for cross-learning from other villages or cities. Knowing what to do at the household level is part of the strategic knowledge that individuals

and society must have to be able to adapt to climate change.

Climate education must, therefore, be core to this Mission. The SAPCCs must invest in developing strategic climate knowledge for the rural and urban poor, including vulnerability assessments factoring in ecosystem-based differences and socio-economic differences. Collection of local weather variation data and capacity building are also critical to improved adaptive knowledge and skills. The SAPCCs must also





*Under strategic knowledge, States are taking very different routes to build knowledge and to reach out to people with this knowledge.*

**We Recommend**

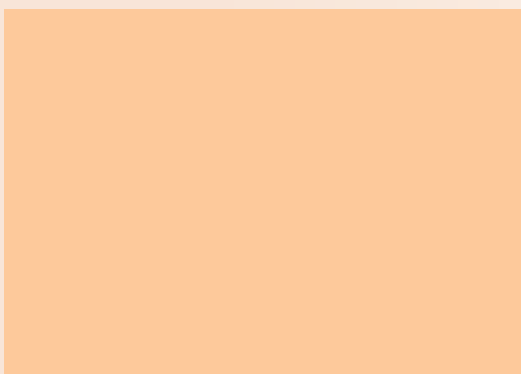
*Being innovative in new knowledge building, Promoting ecosystem based Climate education; mapping all vulnerabilities, documenting resilient traditional knowledge and practices, working on ecosystems both in urban and rural areas and involving local communities to collect local weather data to build a strong scientific basis for adaptation and mitigation.*

use this platform for exchanging information across regions in India and the world.

At another level, the SAPCCs must document resilient traditional knowledge and practices. There is also the need to be innovative, for instance, enhance knowledge about urban green spaces, urban biodiversity and involvement of urban poor in conserving these as many of the urban poor use these spaces for growing food crops, keeping livestock and collecting diverse food items from public spaces. Similarly, the SAPCCs must rejuvenate traditional water bodies with the involvement of local communities. These centres must focus on enhancing knowledge and practice about making urban and rural ecosystems resilient to food and water shortages as well as to disasters – because the poor and the marginalised are impacted first and worst by all three.

**Potential within the SAPCCs**

Andhra Pradesh will work take up vulnerability studies in major river basins, flood-prone industrial hubs, urban areas and also demonstrate climate solutions with urban local bodies and gram panchayats. Manipur and Mizoram aim to monitor climate change at the regional and local level to make accurate State-level climate change projections. Uttarakhand's focus is on capacity building in areas such as energy conservation and efficiency, water harvesting, green buildings, health-related behaviour change communication and development of information, education and communication (IEC) material for awareness generation. Uttar Pradesh plans to support climate modelling, take up collaborative interventions at the national and international levels and foster private sector initiatives in the fields of adaptation and mitigation through venture funds. Besides knowledge creation, management and dissemination, the State-level Mission also proposes to take up monitoring and evaluation work, undertake primary surveys and data collection, build awareness and capacities and facilitate setting up of dedicated research centres at universities and colleges. The Bihar SAPCC proposes to both mainstream strategic knowledge on climate change and to set up an appropriate institution as a 'knowledge aggregator' which would act as a knowledge hub for all kinds of climate-related knowhow and technologies.



# CONCLUSION: THE LARGER CONTEXT FOR THE SAPCCs

The need for SAPCCs to focus on the poorest of the poor and the most marginalized is critical because climate change is deepening the already severe and multiple crisis faced by a very large section of India. This ranges from food insecurity and water shortages to non-availability of fuel, lack of secure livelihoods options and unpredictable and worsening extreme events and disasters. The SAPCCs have the potential to contribute to national and global climate and development goals by ensuring resilient development for India's most vulnerable sections.

## Federal Structure

India being a federal State, all the key sectors that matter to poor and marginalised section of society fall within the State List under the Indian Constitution. Thus, the SAPCCs are main engines for implementing India's National Action Plan on Climate Change (NAPCC). All SAPCCs must address the concerns and needs of the excluded sections of society but the responsibility is even larger for States which are home to substantial proportions of marginalised people. These include States with large tribal and scheduled caste populations. Other States must focus on these vulnerable communities because they often remain unseen and unheard but require supporting climate policies and action the most.

## Nationally Determined Contributions (NDCs) and the United Nations Framework Convention on Climate Change (UNFCCC)

India's INDCs, submitted to the UNFCCC, details India's low-carbon development pathway and its

initiatives on adaptation. By 2030, India plans for a 40% share of non-fossils in installed power capacity and investment in clean coal which will be at about the same proportion of the total installed capacity as today – but with a higher overall generation. For poor and marginalised people their natural habitat will continue to be degraded and polluted by coal mining, nuclear power stations and maybe even big dams – because nuclear and hydro are included in the 'non-fossil' category.

On adaptation, India has no clear investment plans or programmatic approach for poor and marginalised people. The INDCs states that India spent 2.82% of its GDP during 2009-10 to 'strengthen adaptive capacities of the vulnerable communities' viz on poverty alleviation, health and risk management. Yet, some studies have shown that the spending is on business-as-usual development programmes, especially in a disaster-prone country like India. With regard to forests too, creation of carbon sinks of 2.5-3 billion tonnes of CO<sub>2</sub> equivalent overrides the need for expanding the green cover for poor forest communities.

## Sustainable Development Goals (SDGs)

Climate change and resilience cuts across almost all the 17 SDGs that India will adopt in April 2016 and these Goals will cover sectors that lie with the SAPCCs. Despite the overlap between India's INDCs and the SDGs, these have not been spelt out at the global or national level and it will be up to the SAPCCs to identify these overlaps by ensuring that the development targets are indeed sustainable, that is, they factor in vulnerabilities to climate change impacts and the role that poor and marginal communities will need to play in resilient development pathways.

# ANNEXURE

## Recommendations for the 'New' Proposed National Missions

- Wind Energy: Inclusion of local people, also women, in the workforce; and investment in decentralized, small turbines.
- Human Health: Build capacities of frontline workers on climate-related knowledge on hygiene and disease prevention, ensuring ease of access to medical aid and prioritizing preventions.
- Coastal Resources: Factor in caste and gender to map vulnerabilities and create income-generating opportunities for the lowermost sub-castes and for fisherwomen.
- Waste-to-Energy: Prioritise women and children rag-pickers for skill building and income-generating activities and integrate health impacts due to heat waves, higher humidity, etc, into waste handling.

## Existing and Proposed Missions under the National Action Plan on Climate Change

Mission	Nodal Ministry
National Solar Mission	Ministry of New and Renewable Energy
National Mission on Enhanced Energy Efficiency	Bureau of Energy Efficiency, Ministry of Power
National Mission on Sustainable Habitat	Ministry of Urban Development
National Mission on Strategic Knowledge for Climate Change	Ministry of Science and Technology
National Water Mission	Ministry of Water Resources
National Mission for Sustaining the Himalayan Eco-system	Ministry of Science and Technology
National Mission for a Green India	Ministry of Environment, Forests and Climate Change
National Mission for Sustainable Agriculture	Ministry of Agriculture
<b>New Missions (proposed in 2014)</b>	
National Mission on Wind Energy (approved)	Ministry of New and Renewable Energy
National Mission on Human Health	Ministry of Health
National Mission on Coastal Resources	Ministry of Environment, Forests and Climate Change
National Mission on Waste to Energy	Yet to be announced.

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INECC is a national network of organisations and individuals who connect on the issue of climate change from the perspective of marginalised communities. INECC works to bring climate change and sustainable development concerns of the marginalised majority into policy dialogues.



Alternative Futures is a development research and communication group working on creative and meaningful policy, social and technological alternatives and innovations for development and social change. AF looks at change in a holistic manner, even while working on various specialized issues.



Laya, a CSO based in Visakhapatnam, Andhra Pradesh, India is the secretariat of INECC.

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