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Delhi’s air pollution is taking away more than 10 years from the life of an average resident who is exposed to it for a sustained period of time. Know More

Less than 2% of the 1.376 km kilometre long Yamuna river is responsible for around 76% of its pollution: This is happening along the 22-km stretch from Wazirabad to Okhla in the vicinity of the National Capital Region Delhi. Know More

India scored a 57 out of 100 as a composite score at an overall level in India’s SDG Index score published by the Government Policy Think tank Niti Aayog. The Index ranks all States and Union Territories on various SDG goals and targets and arrived at a composite score for India. Know More

**Climate World in Numbers**

| GHG emissions (incl. forestry) per capita (tCO₂e/capita) India | 2.2 |
| GHG emissions (incl. forestry) per capita (tCO₂e/capita) Germany | 10.5 |
| Energy use per capita (pj/capita) India | 29 |
| Energy use per capita (pj/capita) Germany | 158 |
| Total Primary Energy Supply from new renewables (PJ) India | 7.6% |
| Total Primary Energy Supply from new renewables (PJ) Germany | 11% |

Know More
“We need to explore possibilities to fund research and development of climate friendly technologies and shorten technology deployment cycle in absence of which transformative development would be delayed”

Dr. Harsh Vardhan
Union Environment Minister
at BASIC Ministerial Meet,
20 November 2018, New Delhi

Climate Policy

- COP24 came up with the ‘Ministerial Katowice Declaration on Forests for the Climate’ which mentions that Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases, including forests and forest products as well as to strengthen cooperation in this respect. Affirming that forests are a key component to achieve the goals of the Paris Agreement, which will contribute to building a community with a shared future for humankind.

- The MoEFCC stated that the outcome of COP 24 was positive and India demonstrated the spirit of leadership and commitment by reiterating its promise to implement the Paris Agreement in its spirit and act collectively to combat climate change. Know More [1][2]

- A technical assessment conducted by the United Nations Framework Convention on Climate Change (UNFCCC) of India’s submission on forest cover has raised concerns about the country’s definition of forests, which experts say exaggerates forest cover and inadvertently masks deforestation. The global body has recommended that India delineate areas under orchards, and bamboo and palm cultivation for an accurate assessment of carbon stocks of forests. Know More [1][2]
NDC Implementation– Adaptation and Mitigation

- India submitted its second Biennial Update Report (BUR) to United Nations Framework Convention on Climate Change (UNFCCC) on 31st December 2018. In the Inventory year 2014 under the 2nd BUR, India emitted 2,607.49 million tCO2e excluding LULUCF and 2,306.3 million tCO2e including LULUCF – a growth of 22% from 2010. The energy sector contributes to 73% emissions, agriculture 16%, Industrial processes and product use 8% and waste sector 3%. The LULUCF sector offsets about 12% of India’s emissions.

- According to Brown to Green Report 2018, India’s NDC is already compatible with a global scenario to limit warming to below 2°C, but not to the 1.5°C Paris Agreement limit. India’s National Electricity Plan aims for 47% capacity from non-fossil sources by 2027, reaching the NDC target ahead of schedule. The report, an overview of all G20 countries published by Climate Transparency supported by BMU, also highlights that 40% cumulative electric power installed capacity will be from non-fossil fuel-based energy resources by 2030 with the help of transfer of technology and low-cost international finance including from Green Climate Fund (GCF). India has taken back the commitment to sell 100% Electric Vehicles EVs by 2030, and now targets around 30% of EVs by 2030. Know More [1]

Climate Finance

- Foreign Direct Investment in the Indian non-conventional energy sector totalled $3,217.43 million (2.5 billion Euro approx.) in the April 2015 to June 2018 period, according to the Department of Industrial Policy and Promotion (DIPP). The DIPP also highlighted that most of the renewable energy project deployment was occurring in the private sector. As of November, 2018, a total capacity of around 73.95 GW had been installed in India, of which 37.84 GW has been added during the last four-and-a-half years. Know More [1] [2]
Sustainable Development Goals

- **India’s Federal Policy Think Tank Niti Aayog and the UN released India’s SDG Index** and three states - Himachal Pradesh, Kerala and Tamil Nadu - emerged as the front runners to achieve sustainable development goals (SDG) like removal of poverty and inequality. Meanwhile Assam, Bihar and Uttar Pradesh are the laggards in a ranking of states. India at the overall level scored a 57, going beyond the halfway mark in the adoption of SDGs. The index covers 13 of the 17 sustainable development goals, including healthcare, gender equality, clean energy, infrastructure, education, peace and building strong, accountable institutions. Four goals, including climate action and sustainable use of marine resources, were left out because of lack of data at the state level. Know More [1] [2] [3]

- The **United Nations Food and Agricultural Organisation** conferred Sikkim with Future Policy Gold Award to applaud the state’s contribution and achievement in agro ecology and sustainable development. Sikkim received the honour due to its recognition as a fully organic state since January 2016. Sikkim won the award beating 51 other nominees. Sikkim is the first organic state in the world. Know More [1]

Energy

- **The National Bank for Agriculture and Rural Development (NABARD) signed an agreement with Green Climate Fund (GCF) to infuse $100 million** into a new project focused on unlocking private sector initiatives for creation of rooftop solar power capacity in India. The $250 million project which will be implemented by Tata Cleantech Capital Ltd and will receive the GCF support through NABARD, which is designated as the National Implementing Entity (NIE) for the UNFCC-promoted Fund. Know More [1] [2]

- **International Solar Alliance (ISA) and India’s National Institute of Solar Energy received a plug-n-play PV system** with energy storage for scale up in India and the more than 100-member countries of ISA. The system is first-of-its kind to promote solar energy especially with domestic consumers. The first system was handed over on the side-lines of the Indo German bilateral talks end of November in Delhi with the presence of
senior officials from Zukunft – Umwelt – Gesellschaft (ZUG) GmbH. It is a standardized, low cost, portable and self-cleaned PV system which addresses several concerns from the consumers who wish to use solar energy but are unable because of lengthy procedures of net metering and quality worries. The system is intelligently designed to work at all times (also during power outages) and shave the peak of electricity distribution companies allowing them to integrate more renewable energy in their network.

- The share of renewable energy in India’s energy mix is set to cross 10% in the Financial year of 2019-20. The wind and the solar sector would add 10 Gigawatts to generation capacity during this period. In the past three years, the share of renewable in total generation mix has risen to 7.8% as of March 2018 from 5.6% in 2015 owing to large capacity additions in the wind and solar power sector. Most of the addition came due to state and central government policies along with improved tariff competitiveness. India plans to have 40% of installed power generation capacity on clean sources by 2030. Know More [1] [2]

Cities and Industries

- According to the Air Quality Index developed by University of Chicago Energy Policy Institute (EPIC), Delhi’s polluted air is taking away more than 10 years from the life of an average resident who is exposed to it for a sustained period of time. In Delhi, pollution concentrations in 2016 averaged 113 micrograms per cubic metre. The concentrations are significantly high from the standards of World Health organisation. Outdoor air pollution caused 99.5 per cent of total air pollution-related deaths in Delhi in 2017. A recent story highlights that 2018 was better than the last two years as there were more ‘good’ to ‘moderate days in 2018 than in the previous year. The poor to severe days highlighted a decrease in number from 194 days to 187 days according to the Continuous Ambient Air Quality Monitoring System data provided by the Central pollution Control Board (CPCB) Know More [1] [2] [3] [4] [5]

- 19th of November was World Toilet Day. India has made Sanitation a national issue and to mark the day, The Ministry of Drinking Water and Sanitation (MDWS), held the World toilet Day contest that from November 9 to 19, 2018, across the country. Six districts of Haryana were among the top 42 districts which have been declared winners. A total of 412 districts from 25 states and Union Territories had participated in the contest held to re-intensify the Swachh Bharat Jan Andolan at the grassroots level. Almost 1.75 million tons of human waste is generated in India every day. When treated correctly, human waste can be converted into useful byproducts, including fuel, fertilizer, and irrigation water. The human waste management sector also has the potential to create jobs and entrepreneurship opportunities. Know More [1] [2]

- The Airports Authority of India (AAI) has engaged Quality Council of India (QCI) to assess the implementation of the ban of single-use plastic items at 34 airports — handling one million
passengers per annum — which will be completed by January 2019. Know More [1]

- **India's construction industry**, given the role it will play in building smart cities, must evolve and start embracing advanced construction technologies. The government is pushing for adoption of technology in the construction sector, the onus is now on the Construction industry to embrace cutting edge technologies and practices in order to play a judicious role in India’s urban transformation. Know More [1]

- The monitoring committee formed to oversee the cleaning of Yamuna has highlighted that a short stretch of 2% of the 1.376 km long Yamuna is responsible for around 76% of the pollution in the river. The committee also stated that the river is “fighting to stay alive” and it would not be possible to rejuvenate the Yamuna unless minimum environmental flow of water is provided as it is “virtually reduced to a trickle and remains dry in some stretches for almost nine months of the year”.

Region (NCR) Delhi is less than 2 per cent of the river length but accounts for about 76 per cent of the pollution level in the river. The lack of sewer lines in 1700 unauthorised colonies within the NCR is the key contributor. The Monitoring plan had asked for the submission of a plan for cleaning of the river by December 31st, 2018. Know More [1] [2] [3] [4] [5]

### Biodiversity

- **India submitted its Sixth National Report (NR6) to the Convention on Biological Diversity (CBD) on 29th December 2018.** As per the official report India has overachieved two National Biodiversity Targets (NBT) and is on track to achieve the other eight NBTs soon. In respect of the remaining two NBTs, India will strive to meet the targets by 2020. The report was submitted online to the CBD Secretariat by the Union Environment minister, Dr Harsh Vardhan, during the inaugural session of the 13th National Meeting of the State Biodiversity Boards. The event was organised by the National Biodiversity Authority in the MoEFCC. The NR6 gives a progress-update on the attainment of 12 (NBT) developed under the Convention process, as per the 20 global Aichi biodiversity targets. Speaking at the inaugural session Minister Vardhan said that India is among the first five countries in the world, the first in Asia and the first among the biodiversity rich megadiverse countries, to have submitted NR6 to the CBD Secretariat. Know More [1] [2] [3] [4]

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Source: Shutterstock.com
Moving Forward from CoP in Katowice:

“There is huge concern that the vast amount of future emissions reduction goals would be pushed towards developing countries such as India”

Interview with Dr. Ajay Mathur, Director General, The Energy and Resources Institute (TERI)

- What are the key takeaways of the negotiations at CoP 24?

CoP 24 was a step forward and while a lot of things were left incomplete the good thing is that we did get an agreement on the core of the roadmap, we got an agreement on how we would move forward as we finalise the Global Stocktake and we got some degree of agreement on how we would move ahead on issues related to the raising of ambitions. In none of these, the work is completed, given the fact that there are 192 countries.

- What is your perception of the Global Stocktake (GST) process? And is it true, that the Indian cabinet gave a ‘postfacto’ approval to India’s negotiating point emphasising the need for equity?

Concerning the Global Stocktake there are two things which create a need for a trade-off between them. First, the Global Carbon budget is shrinking on a year on year basis. Second, the increasing amount of emissions are occurring from those countries which need to ensure that all their citizens have a decent energy supply and the cheapest energy supply is from fossil fuels. So the tension is, that we are not looking at the per capita amount of energy used in a country but the increase in their overall Co2 emissions. This is what creates the problem and it is highlighted in the equity issue, because it is the overall emissions based on how much Co2 is emitted per person that needs to converge over a period of time. So, the cabinet decision is saying, that the Global Stocktake should move towards a convergence of Co2 emissions per capita. If this notion is brought into the negotiations, we would move towards a greater degree of climate justice for all the people in the world.

- As the 1.5⁰C Report of IPCC wasn't welcomed by certain countries, what would be its impact on future negotiations?

The 1.5⁰C report has been discussed by everybody. That it did not lead to a political statement at CoP 24 is not as important as the fact that the operationalisation of the report means that each country will have to enhance its ambitions. We need the developed countries to start putting out their goals showing to lead the world to a 1.5⁰ goal. What we are seeing is that there is a lack of political consensus on actions towards Co2 reduction and even towards a 2-degree world. The discussion at CoP 24, more than anything else, told us that actions are now really being taken on the basis of relative economics. For example, as prices of renewables fall, they will increasingly replace fossil fuels, and therefore we like to seefrom the developed countries that the Co2 produced per unit of energy used keeps declining very fast. I think Germany has shown how this can be done. The German political process of “energy wende” and the specific process of enhancing the amount of renewable energy particularly solar helped bring down prices for the rest of the world. We need to see this kind of action by all countries of the world.

- While the Paris rulebook text has been agreed upon in most areas, how will unresolved issues be tackled in the coming year?

The biggest issue that has yet to be addressed are the financial contributions made by developed
countries. The developed countries have said that they would not like to be subject to a regime in which they need to declare these in an ex ante fashion. Now it is very difficult for developing countries that have provided their NDC’s based on the financial contributions by developed countries, to be able to deliver on our NDC’s without an indication of how much resources would be available. How could this be resolved? My own perception is that there are windows of opportunity in enabling resources that could be made available in an indicative manner, not in a committed manner. In real terms, countries could provide indicative numbers which are less but actual transfers which are more, because nobody would like to be seen as reneging on their indicative goals. This would allow us to start the process and as the results start coming in on the impact of these resources on global CO2 emissions the trust and confidence in the indicative ex ante numbers and the reported post-facto numbers would start becoming less.

- What is your perception of India’s performance at the CoP 24 and India’s expectations for CoP 25?

I think for all countries including India it was important that we started the agreement on the rulebook. The fact that, at least on the transparency side we got most of it done is positive. The greatest challenge for India continues to be on the Global Stocktake. As the recent cabinet decision has shown there is a huge concern that the vast amount of future emissions reduction goals would be pushed towards developing countries such as India. Consequently, I think there is a clear political signal that our efforts have to be on ensuring that the principle of Common but differentiated responsibility is operationalized in the Global stocktake and the future emissions reduction targets.

Furthermore, I am concerned that we did not achieve at CoP 24 an agreement on the transfers-Article 6. Here, I think, a group of countries including India should take the lead in seeing how we operationalize 6.2 and 6.4. My view is that these have to be seen in the context of overall reductions that occur and within those reductions how do we provide for transfers either between countries or to various processes. I also hope that processes such as Corsia that are used for Civil Aviation would start using some of the CDM credits that are still lying unutilised in which people invested money but there is no market for them. If we do not build markets for these credits, the confidence in these kinds of measures would dramatically decrease.

**Status of Climate Finance at COP24**

*Tamiksha Singh, Centre for Global Environment Research, The Energy and Resources Institute (TERI)*

The COP24 in Katowice, saw a finalized rulebook for implementation of the Paris Agreement being unanimously adopted by all Parties. The overall positive conclusion of the conference had some negatives, especially for the future of climate finance. Some heartening finance milestones were achieved in terms of pledges, for instance, the Green Climate Fund was able to receive higher commitments and also pledges from first-time contributors and the Adaptation Fund saw a record number of pledges totalling to $129 million, yet the total scale of climate finance mobilization for ambitious action fell short. While the final text is urging developed countries to meet the $100 billion target and directing more public funds for adaptation and set a way to decide on new and more ambitious targets from 2025 onwards, it did not promote enhanced ambitions in any stringent terms. However, the majority of the post-2020 rules pertinent for financing – under Articles 9 (climate finance), 13 (transparency framework) and 14 (global stocktake) – in general were agreed upon by most of the developing countries, even though they were felt to be weak for ensuring equity and accelerated actions.
The point of contention was carbon markets and Article 6 (market mechanisms), where the Brazil led opposition to the proposed ‘corresponding adjustments’ rules almost tripped the overall negotiations. The Paris Agreement allows for climate market transactions at the economy level and at specific sectoral/project levels. Most developed countries are in favour of the host countries deducting their emission credits when transferred or sold to another country, from the inventory of emissions under their NDCs; while a few developing countries oppose this, believing that for the markets to promote investments in clean and green technologies this is unnecessary and emission credits should not be adjusted against the national inventory[1]. Brazil’s position states that corresponding adjustments, with respect to the Paris Agreement text, is only applicable to Article 6.2 (i.e. for international transfers) and hence an application to national registries would be contradictory to the text. This was the crux of the issue which could not be agreed upon, resulting in the issue of carbon markets and market mechanisms being shunted to the next COP in 2019.

A similar issue was highlighted at the Bangkok inter-sessional meeting in September 2018, where the LMDCs (Like Minded Developing Countries) pushed for the transition of CDM projects and certificates from the previous regime, stating reasons such as maintaining the private sector’s trust in UNFCCC mechanisms and the reliability of UNFCCC verification processes. They agreed that methodologies for approving projects and issuing certificates should be revised. However, they were against the application of revised methodologies on already approved of projects and certificates. This was highly contested by developed country Parties, including the SIDs (Small Island Developing states) as they believed that this negatively impacts the environmental integrity of climate actions and commitments and hampers the actual impact of raised ambitions[2]. These issues are now to be resolved in the coming year.

While India welcomed the overall progress made on the rulebook, it expressed “strong reservation” over the lack of equity in the global stock-take decision, which it found to not be in tune with the Paris Agreement’s common but differentiated responsibility principle (CBDR)[3]. For instance, the final text seems to point to the need for developing countries to strengthen their domestic enabling environments and policy frameworks to attract climate finance, but makes no mention for the need for more transparent and streamlined budgetary channels for mobilizing climate finance for developed countries[4]. However, there is still hope of bringing in this equity, as the Global Stock-Take, which will determine the next round of obligations and their ambitions, is set to take place in 2023[5].

India is on track to achieve two of its three quantifiable goals before the deadline. However, there is scope for the country to be more ambitious, provided that there is support available from the global community in terms of increased investments in renewables sector and other nascent low carbon industries, along with capacity building of institutions and individuals to support the low carbon growth. To truly raise global ambitions, developed countries must come forward with solutions relevant for India and developing countries. While climate leaders emerge from the global South, it is imperative that developed countries step up their climate actions to make good on their climate commitments.
As Climate Change impacts affect development opportunities in countries like India a shift in the pathways that promote climate-resilient development along with low carbon economy is required. This was the key message from the side event hosted by GIZ India at the Indian Pavilion at CoP 24 titled “Implementing Climate Actions: Opportunities and Challenges” on 7th December 2018. The session was organized in partnership with the MoEFCC and fuelled by experts from Department of Science & Technology, Representatives of State governments of Punjab, Telangana, Tamil Nadu & Manipur along with NABARD and thematic experts.

Opening the side event, GIZ India Director Climate Change Dr Ashish Chaturvedi talked about Indo-German technical cooperation on climate change being implemented by GIZ working at the national and State level in key areas such as development of State Action Plans on Climate Change (SAPCC), facilitating policy dialogues, accessing climate finance and capacity development for evidence-based adaptation planning and implementation. He emphasised strengthening the science-policy practice connection though knowledge management and outreach.

The event discussed priority topics like the role of sub-national planning in the form of SAPCC for promoting climate actions at the State level and the role of National Missions such as the National Mission for Strategic Knowledge on Climate Change and National Mission for Sustaining Himalayan Ecosystem for institutional capacity development and evidence-based adaptation planning and implementation. These approaches are important for mainstreaming climate change into development plans and policies and scaling up best practices as well as mobilizing dedicated climate finance for promoting climate actions at the State level.

The platform was also an opportunity for the State governments to showcase their state level initiatives. Mr. Rakesh K. Verma, Principal Secretary (Science, Technology & Environment), Government of Punjab shared climate change related initiatives in areas of agriculture, water, renewable energy, and capacity...
Special Feature on CoP 24

development. Showcasing initiatives of mainstreaming climate action in the state of Telangana, Mr Kalyan Chakravarthy, Director General of EPTRI shared climate change indicator-based performance of various Departments as well as vulnerability assessment, capacity building and adaptation initiatives. Dr Jayanthi Murali, from Department of Environment, Government of Tamil Nadu highlighted the efforts of restoration of coastal habitats & marine biodiversity with initiatives climate change adaptation, knowledge management and capacity development initiatives. Dr Braja Kumar from Department of Environment, Manipur talked about climate change related challenges, experiences and best practices in SAPCC implementation and mainstreaming CCA into local planning process, capacity building and knowledge management.

The presentations were followed by a panel discussion with representation from States, DST and NABARD. Dr. Akhilesh Gupta, Advisor and Head, CCP, DST emphasized on using S&T information for informed decisions on CCA and the role of national missions in supporting enabling environment. Mr. C.V. Reddy, DGM, NABARD sought for innovative CCA project for financing under NAFCC and using the funding instrument for mainstreaming.

These interactions highlighted the need for forging multi-stakeholder partnerships and alliances (both domestic and international) including community organizations and local government institutions in scaling up adaptation and mitigation actions, technology, capacity development efforts with cross sectoral linkages and further enhancing ambitions of SAPCCs.
NEW PROJECT

**EPICC: bridging climate science and NDC implementation**

The new EPICC project funded by IKI is producing climate information and services jointly with scientists and policy makers in India, Tanzania and Peru. It builds capacities for translating and applying state-of-the-art climate information in planning and decision-making. Scientists from the Potsdam Institute for Climate Impact Research (PIK), the German Weather Service (DWD), the Energy and Resources Institute (TERI) and a range of Indian research institutions are working closely with national and state ministries and authorities. Scientific evidence in terms of forecasts, scenarios and impact assessment will support the implementation of NDCs, the revision of state action plans on climate change (SAPCC) and climate proofing other plans, policies and strategies, in particular in the water and agriculture sectors.

EPICC products include short term and seasonal forecasts (in particular monsoon forecasts), hydrological simulations of extreme events (floods and droughts), changes in water availability, crop yield predictions (e.g. informing agricultural insurance schemes), and a better understanding of the role of climate change in migration.

The EPICC kick-off workshop in November in Delhi was held in conjunction with Climate Jamboree. It brought together science and practice for climate adaptation and resilience building. The EPICC project will closely work with institutions such as the India Meteorological Department, Department of Science & Technology, National Water Mission, National Institute of Hydrology, Indian Agricultural Research Institute, A.P. State Planning Department and others. These institutions will mainstream EPICC products into their respective activities and agendas. For achieving its objectives, EPICC will also work closely with other IKI and GIZ projects.

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**IKI India Project highlights**

**Forest NAMA**

- GIZ and TERI in collaboration with Assam Forest Department conducted the launch workshop on pilot implementation of the Forest NAMA in Guwahati, Assam on 30th November 2018. The event was attended by Forest officers of Assam, Assam Energy Development Agency, NGOs, Assam Brach of Indian Tea Association and financial institutions. Stakeholder consultations were conducted December 2018 in tea estates and forest fringe villages the four districts of Sonitpur, Nagaon, Dibrugarh and Cachar to identify beneficiaries, explain the project details and begin the baseline assessment.

**India Sustainable Mobility Initiative (2015-2019)**

- Series of five Complete Streets publications created for the Ministry of Housing and Urban Affairs: Recognizing the need for sustainable mobility, the Union Ministry of Housing and Urban Affairs (MOHUA), collaborated with ITDP India
Programme to create a series of five complete streets publications — Policy Workbook, Complete Streets Master Planning, Street Design Guidelines, Implementation Guidelines, andMonitoring and Evaluation Framework. The first draft presented to the Joint Secretary of MOHUA was very well-received. A first-of-its kind in India, this comprehensive series will guide the redevelopment and design of streets in 100 cities, selected under the Government’s Smart City Mission. Under this Mission, ITDP India Programme was invited by MOHUA as an Urban Mobility sector lead, to support Strategic Mobility Planning for creating People-and Transit-Oriented Cities.

- **ITDP set to transform ten cities of Tamil Nadu:** To improve the condition of walking and cycling infrastructure in the state, the Tamil Nadu Commissionerate of Municipal Administration (CMA) led the Transforming Tamil Nadu programme with technical assistance from the ITDP India Programme. The programme aims to implement Complete Streets in ten of its most populous cities other than Chennai — Coimbatore, Erode, Madurai, Salem, Thanjavur, Tirunelveli, Thoothukudi, Tiruppur, Trichy, and Vellore. Over a period of nine months, ITDP India Programme conducted ten capacity development workshops with these cities to identify, plan, and implement city-wide walking and cycling networks. As a first step, the India Programme will work with GIZ Smart-SUT to help pilot Complete Street master plans in three cities, gradually scaling the project to other cities in Tamil Nadu.

- **Senior Indian bureaucrats initiated sustainable mobility approach:** ITDP South Asia Programme Lead, Shreya Gadepalli, conducted a capacity development workshop for over 60 senior officers of the Indian Administrative Service (IAS) from across India, at the Lal Bahadur Shastri National Academy of Administration. The workshop focused on building awareness to support sustainable urban transport initiatives. Participants included the Secretaries of transport, urban development, and other related sectors from various Indian states, as well as Joint Secretaries of the national government.

- **IKI-supported projects presented at international forums:** ITDP showcased IKI-supported project achievements at two international conferences. Shreya Gadepalli, ITDP South Asia Programme Lead, presented the India Programme’s work on Complete Streets at the National Association of City Transportation Officials (NACTO) conference in Los Angeles, in October. The audience—that included city officials from across North America, practitioners, as well as various philanthropic organisations—appreciated the advance made by Chennai, Pune, and other Indian cities on Complete Streets, with the technical support from ITDP India. ITDP showcased the sustainable transport paradigm shift in India, at the Development Finance Forum organised by KfW in Frankfurt, in December 2018.

- **The Maha-Bus plan inches closer to becoming a reality:** ITDP India initiated dialogue with the Transport Secretary of Maharashtra on the Maharashtra Bus (Maha Bus) Plan, a state-wide programme
aimed at strengthening public transport, by procuring an estimated 40,000 urban buses and 25,000 regional buses in India’s largest urban state.

**Climate-SDGs Integration Project: Supporting the implementation of Paris Agreement and Sustainable Development goals through Ecosystem based Adaptation**

- The IKI-funded project proposes nature-based solutions to address major climate hazards and help people adapt to climate change in India and Guatemala. By focusing on biodiversity and ecosystem services, EbA emphasizes the importance of adequate natural resources management on the adaptive capacity of local communities. This project focuses on Rayalaseema (Andhra Pradesh region), one of the most and increasingly drought prone regions of India.

- To draw on existing local knowledge and experiences, a conceptual framework was developed to guide the process of identifying sustainable natural resource management initiatives that could be considered EbA in Rayalaseema.

- Participatory governance gives villagers a chance to engage in local decision making about the natural resources they are dependent on. In the Rayalaseema region, for instance, positive experiences have shown how local governance structures can help communities to increase their adaptive capacities to drought. In community meetings, experiences are shared, and collective decisions are taken on how common resources should best be used (e.g. pasture land, water, firewood). Also, the local government and authorities are invited to these meetings, which give the decisions a different level of acceptance and legitimacy. Joint-decision making between people and government has shown to increase protection of common goods. To build evidence on good practices of nature-based solutions to build resilience to drought, the project started off by identifying EbA measures that show decentralized and participatory structures of governance.

**Tracking and Strengthening Climate Action (TASCA)**

- **National level workshop on Energy Modelling** : WRI conducted the ‘National Workshop on Energy & Environment Modelling’ in partnership with MoEFCC and Center for Policy Research (CPR) on 29 October 2018 at India Habitat Centre in New Delhi. The workshop brought together a wide range of actors, including modelers, policy makers, and researchers using quantitative insights to inform policy. We discussed recent developments in modeling India’s energy and emissions, best practices, and how to align efforts to solve pressing questions regarding India’s energy transition.
Launch of the India Energy Policy Simulator (EPS): At the workshop, WRI and Energy Innovation also released the India version of the Energy Policy Simulator (EPS) which is a free, open-source and web-based modeling tool with a user-friendly interface. EPS utilizes data from Indian government agencies, peer-reviewed academic journals and reputed international organizations. The WRI team worked closely with colleagues from Energy Innovation over several months to complete the EPS India version which can be used to understand the environmental and health effects of different energy scenarios for India.

Leveraging the social and economic Co-Benefits of ambitious and early Climate Action (COBENEFITS)

- The global COBENEFITS project, led by the Institute for Advanced Sustainability Studies (IASS), supports partner countries in assessing the domestic co-benefits of ambitious and early climate action and seizing these opportunities in enabling political environments. **Preliminary results of the four co-benefits assessments carried out in India** were presented during a COBENEFITS council meeting in Delhi in October. Key takeaways:
  - There is a vast scope for creating jobs in the fulfillment of the 200GW of solar power within the Solar Mission, India.
  - There are definite and regionally diverse benefits from planning emission reductions to improve health statistics, considered over a period of 30 years.
  - In accordance with off-grid solar solutions mentioned within the Deen Dayal Upadhyay Gram Jyoti Yojana, mini and micro solar solutions are found to have multi-faceted impacts on rural lives. [Know More](#)

Following the Adaptation Fund into the post-Paris era

- Development Alternatives India in cooperation with Climate Action Network South Asia (CANSA) supported partners from India in the Adaptation Fund NGO Network (AFN). The overall role of the AFN is to accompany the Adaptation Fund, which committed US$ 532 million since 2010 to climate adaptation and resilience activities. The aim of the IKI project lead by Germanwatch is to contribute to a strengthened adaptation financing architecture at the international level in order to support particularly vulnerable population groups in global south priority countries. Through interaction between civil society actors, governments and the Adaptation Fund (AF), the project improves the implementation of AF projects, policies and processes.
In India, there are currently 6 approved AF projects that are implemented by the National Implementation Organisation (NIE), the National Bank for Agriculture and Rural Development (NABARD). For instance, Madhya Pradesh Forest Department with support from Royal Bank of Scotland Foundation is implementing the project “Building Adaptive Capacities of Communities, Livelihoods and Ecological Security in the Kanha-Pench Corridor”. With a funding outlay of US$ 2,514,561, the project aims to build the adaptive mechanisms towards climate change by building economic, social and ecological resilience of the target community and landscape through capacity building, governance, biodiversity management and developing climate resilient livelihoods. 

**Know More**

### Biodiversity and Ecosystem Services in Agrarian Landscapes

- Under the IKI project training of more than 1000 farmers (70% women) on biodiversity friendly agricultural practices in Meghalaya and Mizoram was conducted. Together with the local partner organization “Bosco Reach Out” the project held a capacity building workshop and exchange of experts in rotational Agroforestry methods (Jhum) in Guwahati/Assam, which initiated a reflection on various types of the traditional land use form.

- Supervised by the “Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF)” from Germany the first biodiversity assessment in the project area in Mizoram has been launched in autumn 2018 and this base study shall serve as benchmark for the next assessment at the end of the project.

- The project team participated at the CBD COP14 in Egypt in November. One highlight was the side event “Mainstreaming Biodiversity into Agriculture – 2 years after Cancun” with an exchange of experiences and opportunities between representatives from agricultural Ministries in Mexico, Kenya, Tajikistan and India, identifying and discussing barriers and opportunities within each country, including the role of international cooperation in the process. Another important milestone was the presentation of the project’s Aichi Poster during a special event.

### Private Business Action for Biodiversity

- PBAB in collaboration with Global Partnership for Business and Biodiversity (GBPP) organised a side event on “Supporting Business Pioneers” in the Conference of the Parties to the Convention on Biological Diversity (COP-14) at Egypt on 20th November 2018 with more than 50 participants.

- Important topics of discussion included defining the meaning of mainstreaming in the context of Business and Biodiversity (B&B), what needs to change or improve to enable substantial business participation, successful examples which could be applied widely and ways to integrate Small and Medium Enterprises in Biodiversity. Mr. George Jaksh, Chair of Executive Committee (GPBB), introduced the role of GPBB in connecting businesses with biodiversity issues at the global level. A tool for mainstreaming biodiversity into habitat restoration was presented by
Ms. Aixa Sopeña (Spanish Business and Biodiversity Initiative) and global experiences from PBAB in three countries, especially in supply chains, were shared by Mr Andreas Gettkant from GIZ Germany.

- The success story from the National Thermal Power Corporation Limited (NTPC India) was shared by Mr. Vikas Kumar (NTPC). Dr Pravir Deshmukh from the Confederation of Indian Industry–India Business & Biodiversity Initiative (CII–IBBI)-elaborated Indian Businesses best practices. Mr. Matt Jones from the United Nations Environment Programme elaborated biodiversity metrics for businesses.

**Training of Trainers for implementation of Biodiversity Action Plans for Western Ghats, India**

- Biodiversity Action Plans, which provide specific guidance on how to integrate biodiversity aspects into spice production, are now available for Indian Spice Producers and more than 30 trainers have been trained in the implementation. Biodiversity Action Plans (BAPs) help to schedule, implement and monitor agricultural measures for the protection of biodiversity, as well as work on good agricultural practices to reduce the negative impact of farming practices (e.g. reduced use of pesticides, erosion control, mixed cropping systems). These Biodiversity Action Plans have been adapted to Spice Production in the Western Ghats of India by the global IKI project “Private Business Action for Biodiversity” (PBAB) with the support of Global Nature Fund (GNF).

- The PBAB project pursues to identify and analyse promising mechanisms and instruments for promoting biodiversity-friendly production and commercialisation and to test pilot approaches in three partner countries – India, Brazil and Mexico. In India, the objective is to improve awareness, knowledge and training opportunities regarding biodiversity friendly production and commercialisation among Indian Spice Producers and Small and Medium Enterprises (SMEs) in the Western Ghats. The project is working in collaboration with Spice Board of India, National Biodiversity Board, Spice companies, Business associations as well as non-government organisations.

**Climate Transparency Activities in seven G20 Countries**

- Climate Transparency is a global partnership project that examines G20 climate actions, finance and vulnerability and releases a comprehensive brown to green report every year to review G20 countries climate actions. This report provides a concise and comparable information on whether and how well they are doing on the journey to transition to a low carbon economy. The report draws latest emissions data and covers 80 indicators on decarbonization, climate policies, finance and vulnerability to the impacts of climate change. Providing the country ratings, it identifies the leaders and laggards in the G20. The report is an independent and in dept assessment that draws a range of latest analysis and qualitative data from leading global experts in the field. Along with the main report, country profiles are also released every year. The country profile for India assesses...
India’s past, present and indicators of the future performance towards a low carbon economy by evaluating emissions, climate policy performance, climate finance and decarbonization. Know More [1] [2] [3]

**Urban Pathways**

- Urban Pathways project helps delivering on the Paris Agreement and the Nationally Determined Contribution (NDCs) in the context of the New Urban Agenda and Sustainable Development Goals in cities of 4 pilot countries (India, Brazil, Kenya, Vietnam) and 20 replication cities. It established a facility to support national and local governments to develop Low Carbon Plans for Urban Basic Services (urban mobility, energy and waste management) and concrete implementation measures to boost low-carbon urban development with a high mitigation potential.

- In India, Urban Pathways is working in the city of Kochi (Kerala) on the development of local implementation concepts on sustainable transport and waste management. The project works with the partner projects MobiliseYourCity and Smart-SUT on a pilot on replacing fossil-fueled Auto Rickshaws with electric ones. The local implementation partners are Kochi municipality, Kochi Metro Rail limited (KMRL), together with Kerala State Electricity Board (KSEB) and E Tuk-Tuk manufacturers.

- The proposed local implementation measure for E Tuk-Tuks in Kochi aims at expanding the adoption of electric mobility and focuses on improving the city’s first and last-mile connectivity and reducing car usage. The pilot initiative shall comprise of establishing a fully-operational Intermediate Para-transit (IPT) system with a fleet of 10 to 15 E Tuk-Tuks. Know More [1]

**Wetlands Management for Biodiversity and Climate Protection**

- Integrating Multiple Values of Wetlands in Management Planning and Decision Making – Side event. The Indo-German Biodiversity Programme, GIZ India jointly with the BMU-IKI global project ValuES and Wetlands International South Asia organised a side-event at COP13 to the Ramsar Convention in Dubai, on 25th October 2018.

- The main topic were ways in which wetlands’ ecosystem services are perceived and valued by different groups of people and what this implies for management planning and decisions. The challenges of integrating different value perspectives in wetlands management was explored by case examples from India and Sri Lanka. Renowned international experts on wetlands such as Professor Max Finlayson (Institute for Land, Water and Society at Charles Sturt University) and Rob McInnes (RM Wetlands & Environment) participated in the discussions.

- Mr. Anil Kumar Jain (Additional Secretary, MoEFCC) released the brochure for the new BMU-IKI bilateral project “Wetlands Management for Biodiversity and Climate Protection”. Mr. RK Dhiman (Principal Secretary, Government of Himachal Pradesh) and Mr Frank Barsch (Policy Officer, BMU) were present during the occasion.
The implementation agreement for the new IKI-BMU Indian-German bilateral project, "Wetlands Management for Biodiversity and Climate Protection" was signed by the MoEFCC and GIZ on 14th December 2018 at New Delhi, India. With the overall goal of securing and enhancing wetland biodiversity and ecosystem services while offering nature-based solutions for climate change, the MoEFCC in collaboration with the BMU has launched the IKI project.

The main objective of the project is to strengthen the institutional framework and capacities for an ecosystem-based integrated management of wetlands of international importance (Ramsar sites) in India. Three main output areas define the implementation of the project:

- Integrated management planning for 3-4 pilot Ramsar sites based on biodiversity, ecosystem services and climate change risks.
- Capacity development of national, state and site level stakeholders for integrated wetland management.
- Development of a wetland monitoring system, including an instrument to track management effectiveness.
- Up to four Ramsar sites in India will be selected as pilot sites for project implementation in consultation with the MoEFCC and state governments. Wetlands International South Asia is a knowledge and technical implementation partner for the project.
IKI in India

Principal Implementing Organisation

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH; KfW Entwicklungsbank; Deutsche Forschungsgemeinschaft (DFG); World Bank Group; United Nations Development Programme (UNDP); Wuppertal Institute; Bundesverband Solarwirtschaft e.V. (BSW) – Germany; World Resources Institute (WRI); Renewables Academy AG (RENAc); International Union for Conservation of Nature (IUCN); Institute for Transportation and Development Policy (ITDP); Global Forest Coalition (Paraguay) (GFC); Institute for Advanced Sustainability Studies (IASS)

Principal Partners

Ministry of Environment, Forests and Climate Change (MoEFCC); Ministry of New and Renewable Energy (MNRE); Bureau of Energy Efficiency (BEE); Ministry of Power (MoP); Ministry of Development of North East Region (DoNER); Ministry of Housing and Urban Affairs (MoHUA); Indian States
Propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation.

Adopt a climate friendly and a cleaner path.

Reduce the emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005 level.

Achieve 40% cumulative electric power installed capacity from non-fossil fuel energy resources by 2030.

To adapt to climate change by enhancing investment in development programmes.

Create an additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent through forest and tree cover by 2030.

Build capacities, create domestic framework and international architecture for diffusion of climate technology & collaborative R&D.

Mobilize domestic and new and additional funds from developed countries.

Area or sector | Current Status
--- | ---
Human Development Index global Ranking | 130
Total population (in millions) global share | 1339.2 (17%)
Working poor at PPP$3.10 a day (% of total employment) | 42.9 %
Total Forest Cover in the Geographical Area | 21.54 % (2017)
Total Estimated Forest Carbon Stock | 7082 million tonnes (2017)
Annual Increase in Carbon Stock | 19 mt (2017)
Urban population (% in total population) | 34 %
Rate of Urbanisation (annual) | 2.4%
Renewable energy consumption (% of total final energy consumption) | 36 %
Renewable energy installed capacity | 71.33 GW
Population with access to electricity | 76 %

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