CONTENTS

From the CEO’s Desk.................................................................02
Build Back Better Webinar Series ........................................03
Program Webinars................................................................08
External Webinars................................................................11
Blogs..................................................................................15
Insights................................................................................19
In the News..........................................................................23
Quoted................................................................................25
Updates................................................................................27
Knowledge Products............................................................29
Dear friends,

It has been over five months since the first lockdown, and we have since then realized that managing work remotely is hectic and challenging. Even now, as the future remains hazy, teams at WRI India take challenges head-on. Our focus at WRI India is on exploring the possibility to measure and map changes and convert them into actionable research propositions.

Through this time, our staff has been consistently bringing out analyses and articles in the form of blogs and editorials. All WRI India programs have been exploring online platforms to launch their work. We have also worked on our next five-year strategic plan. It would have been difficult to do this exercise prior to the lockdown as our schedules would have made it near impossible to get groups of 10-15 colleagues to arrive at a mutually convenient time for meetings. With the lockdown, this has perhaps been easier.

We also started a Build Back Better webinar series and have organized six webinars so far.

Just like climate change, the COVID-19 pandemic is a global emergency, resulting in devastation to millions around the world. It has impacted lives and jobs, bringing the global economy to a grinding halt. It is in times like this that we are exposed to our deepest vulnerabilities and underestimations of the nature of systemic risks. Therefore, it calls on all of us to come together with compassion and humility, and our hope is that our Build Back Better webinars lead the way to a resilient future.

Thank you,
Dr. OP Agarwal
With the coronavirus (COVID-19) pandemic, the world is now facing an unprecedented crisis and a time of unimaginable distress. It’s also a time of great risk-taking and decision making. Through a series of webinars called the Build Back Better series, researchers and teams at WRI India have tried to offer and initiate a discussion on how to aim at a sustainable, resilient overall recovery after COVID-19. There have been five of these webinars so far, details of which are listed below.
Summary

We started off with a webinar on **Farm Sector Reforms** on May 26. As Nirmala Sitharaman, the Finance Minister of India announced reforms in the agriculture sector as part of the special economic package, leading voices from across industries discussed modalities such as essential supplementary measures that will help secure the expected outcomes of these reforms. Moderated by Dr. OP Agarwal, CEO, WRI India, the speakers in this webinar included Jugal Kishore Mohapatra, IAS, (Former) Secretary, MoRD; Shloka Nath, Head - Sustainability and Special Projects, Tata Trusts & Executive Director, India Climate Collaborative; Saroj Kashikar, Member and ex-head Shetkari Sanghatana and Harish Damodaran, Rural Affairs and Agriculture Editor, The Indian Express.

Second in the series was the webinar on **Informal Economy in Our Cities: How can Our Cities Serve Those Who Built Them, Better** on June 4. The discussions on this panel were about housing for informal sector workers in urban India and the future of slums, the role of local governing bodies in managing the informal sector workforce, etc. Moderated by Madhav Pai this webinar saw speakers like Sheela Patel, (Director, SPARC), Chair Shack/Slum Dwellers International; Shilpa Kumar, Partner, Omidyar Network India, Ex MD & CEO ICICI Securities. Omidyar Network India supports several young enterprises and research organisations to improve urban governance; Shailaja Chandra, (ex-IAS); Shashank Rao, General Secretary, BEST Workers’ Union and Amitabh Kundu, Senior Fellow WRI India, Former Professor and Dean of the School of Social Sciences at Jawaharlal Nehru University.

Next was the webinar on **Financing Nature Conservation as a Response to COVID-19** held on June 11. This webinar moderated by Dr. Madhu Verma, Chief Economist, WRI India, and organized by the United Nations Environment Programme (UNEP), World Resources Institute, India and National Biodiversity Authority (NBA), Government of India to seek answers for questions like: how to bring nature and biodiversity in the relief package, is nature-based solution going to be a potential option, etc. The panelists included Pushpam Kumar, Chief Environmental Economist and Senior Economic Advisor, United Nations Environment Programme, Nairobi, Kenya; Vinod Bihari Mathur, Chairman, National Biodiversity Authority,
Chennai, India; Helen Mountford, Vice President for Climate and Economics at World Resources Institute, Washington DC, USA; Ajay Narayan Jha, Member, 15th Finance Commission of India, Former Expenditure Secretary, Secretary, MoEFCC & Finance Secretary, Govt of India, New Delhi, India; Juha Siikamäki, Chief Economist, IUCN, Washington, DC, USA and Andrew Harper, Special Advisor on Climate Action to the United Nations High Commissioner for Refugees (UNHCR), Geneva, Switzerland.

TheCityFix Labs India Webinar: Adapting and Responding to a Public Health Crisis held on June 15 was moderated by Jaya Dhindaw, Director, Sustainable Cities & Transport, WRI India, and focused on questions like how the COVID-19 health crisis has impacted urban service delivery enterprises and how have they adapted and innovated to ensure continued service provision. Some of the panelists included Abilash Haridass, Co-Founder and Chief of Growth & Strategy, WEGot Utilities; Nidhi Jain, Co-Founder, Fluid Robotics; Gokul Shrinivas, Founder & CEO, MinionLabs; Rahul Nainani, Co-Founder & CEO, RaddiConnect; Shekar Prabhakar, Co-Founder & Managing Director, Hasiru Dala Innovations; C.M. Patil, CEO, Deshpande Startups; Nagaraja Prakasam, Partner, Acumen; Vignesh Nandakumar, Partner, LGT Lightstone Aspada and Dr. Leni Chaudhuri, Country Director, Tata Center for Development at UChicago Trust.

In our last webinar held on June 18 we discussed Challenges Ahead for Restoring Public Transport for the New Normal. Moderated by Amit Bhatt, Executive Director, Integrated Transport, this webinar discussed how public transport systems can be restored in a manner that is safe and financially sustainable along with key elements of standard operating procedures that will be needed to ensure safe operations. Speakers at the webinar were: KR Jyotilal, IAS, Principal Secretary for Transport in Kerala; Ajay Seth, IAS, Managing Director BMRCL; Sahba Chauhan, Programme Officer - Climate and Energy, Oak Foundation; Prasanna Patwardhan, Chairman, Bus Operators Confederation of India; Chandramauli Shukla, IAS, Collector Dewas, MP and Prasanna Ganesh, Program Director, TMF - Asia Region.
Build Back Better Series

Farm Sector Reforms: Do They Sow the Seeds Of Well-being for Farmers  May 26, 2020

WRI India and FOLU India platform organized this webinar to discuss the issues like how far the recently announced agriculture reforms can help the agriculture and allied sectors perform better and address the agrarian crisis that exists in India and the potential barriers to implementation and possible negative impacts on rural livelihoods. Moderated by Dr OP Agarwal, CEO, WRI India, the speakers include Jugal Kishore Mohapatra, IAS, (Former) Secretary, MoRD; Shloka Nath, Head - Sustainability and Special Projects, Tata Trusts & Executive Director, India Climate Collaborative; Saroj Kashikar, Member and ex-head Shetkari Sanghatana; and Harish Damodaran, Rural Affairs and Agriculture Editor, The Indian Express. See full recording here


The informal working populace in India is as much a part of the city’s fabric, as any of us. This webinar tried to understand ways in which cities can serve the informal sector workers better. Moderated by Madhav Pai, this webinar saw speakers like Sheela Patel, (Director, SPARC), Chair Shack/Slum Dwellers International; Shilpa Kumar, Partner, Omidiyar Network India, Ex MD & CEO ICICI Securities; and Shailaja Chandra, (ex-IAS), among others. See full recording here

Financing Nature Conservation as a Response to COVID-19  June 11, 2020

India’s INR 20 lakh crore COVID-19 relief package, one of the largest in the world, amounting roughly to 10% of country’s GDP, needs to be implemented for creating jobs and growth by keeping nature at the center. Since the pandemic came from the disturbance of nature, its treatment also lies in nature rebuilding and investing in natural capital. In this regard the United Nations Environment Programme (UNEP), the World Resources Institute, India and National Biodiversity Authority (NBA), Government of India organized this webinar, which was moderated by Dr. Madhu Verma, Chief Economist, WRI India.
Other panelists at the webinar were: Pushpam Kumar, Chief Environmental Economist and Senior Economic Advisor, UNEP, Nairobi, Kenya; Vinod Bihari Mathur, Chairman, National Biodiversity Authority, Chennai; Helen Mountford, Vice President for Climate and Economics at WRI, US; and Ajay Narayan Jha, Member, 15th Finance Commission of India, among others. See full recording here

**TheCityFix Labs India Webinar: Adapting and Responding to a Public Health Crisis 15 June, 2020**

As the economy gradually opens up, urban services such as provisioning of water supply and sewerage, electricity and waste collection and disposal remain challenges for urban local bodies (ULBs) who are burdened with limited resources and procedural barriers. The webinar brought together entrepreneurs, investors, and health experts to discuss how the COVID-19 crisis, lockdown and gradual opening up of the economy has impacted urban service delivery. Moderated by Jaya Dhindaw, India Director, Cities Program, WRI India, the webinar saw panel Abilash Haridass, Co-Founder and Chief of Growth & Strategy, WEGot Utilities; Nidhi Jain, Co-Founder, Fluid Robotics; Gokul Shrinivas, Founder & CEO, MinionLabs, among others. See full recording here

**Restoring Public Transport for the New Normal – Challenges Ahead June 18, 2020**

Moderated by Amit Bhatt, Executive Director, Integrated Transport, this webinar discussed how public transport systems can be restored in a manner that is safe and financially sustainable along with key elements of standard operating procedures that will be needed to ensure safe operations. Other speakers present at the webinar were: KR Jyotilal, IAS, Principal Secretary for Transport in Kerala; Ajay Seth, IAS, Managing Director BMRCL; Sahba Chauhan, Programme Officer - Climate and Energy, Oak Foundation; Prasanna Patwardhan, Chairman, Bus Operators Confederation of India; Chandramauli Shukla, IAS, Collector Dewas and MP Prasanna Ganesh, Program Director, TMF - Asia Region. See full recording here

The 16th Bus Karo Outlook 2030 – Scaling Public Transport Webinar discussed the need to direct focus and funding to strengthen bus based public transport systems. Towards this, the Bus Karo webinar brought together experts and representatives from various transit agencies to discuss key considerations of a National Level Investment Program for bus systems based on the learnings from the previous national level schemes around bus funding and international case examples. Additionally, given the COVID-19 crisis, the session focussed on discussing the response of bus systems to COVID-19. Dr. OP Agarwal, CEO, WRI India, was the Session Chair and Speaker; while speakers included: Vivek Chandran, Shakti Sustainable Energy Foundation; Ravi Pandit, KPIT Technologies; Dario Hidalgo, WRI; and Shivanand Swamy, CEPT, among others. Read More

Carbon Market Simulation: Leveraging Markets for Emission Reductions in India  May 19, 2020

To support evidence-based design and implementation of a potential carbon market in India, WRI India is working with Indian businesses to simulate a carbon market. This simulation can help businesses identify cost-effective opportunities for emission reduction and provide policy-relevant feedback. It can also help build capacity on carbon markets in India, especially among the micro, small, and medium enterprises (MSMEs) that are part of the value chains of participating companies. Participants included Megha Nath and Ashwini Hingne from the Climate Program at WRI India; Saurabh Kumar, Managing Director, Energy Efficiency Services Ltd.; Dr. Saon Ray, Senior Fellow, ICRIER; and AG Kshirsagar, Head, Corporate HSE, Thermax Ltd., among others. See full recording here

Lithium-Ion Battery Hazards and Design Challenges for the Electric Vehicle Sector  May 25, 2020

India is witnessing significant growth in the e-mobility and renewable energy sectors. Batteries are an integral part of these sectors as they provide the energy and power for these applications as well as a wide variety of
accessories linked to these sectors. In this webinar, moderated by Shravani Sharma, Project Associate, Sustainable Cities, WRI India, Dr. Judy Jeevarajan, a Research Director at Underwriters Laboratories Inc., talk about hazards, challenges and mitigations which may be beneficial to relevant stakeholders now as well as in the long run when EVs have been adopted and are a vital part of public life. See full recording here

Impact of COVID-19 on Sustainable Fashion in India  May 29, 2020
This webinar, hosted by WRI India and the Circular Apparel Innovation Factory (CAIF), presented a guidance and discussed the new challenges thrown up by the COVID-19 crisis. Moderated by Pavithra Mohanraj, Founder, Infinitive, panellists on this webinar were Priyanka Khanna, Lead - International Expansion, Fashion for Good; Ekta Jain, Business Head - Spun Initiative; and Nohar Nath, CEO and Founder, Kiabza. Read more

Climate Change and COVID-19  June 26, 2020
WRI India partnered with the Climate Change Department, Government of Gujarat, and the Ministry of Environment, Forest & Climate Change (MoEFCC), Government of India on a series of webinars on the theme of "Climate Change and COVID-19". In the session on Vulnerability Assessment, held on 26 June 2020, Ulka Kelkar presented WRI India’s recent research and highlighted emerging issues due to the pandemic and climate crisis. The webinar series was widely attended by government officials, researchers, practitioners, and students. Further webinars in this series will be held up to September 2020.

Technology, Financing and Commercialization Aspects: Lessons from an EV-Startup  June 30, 2020
The emerging trend of micro mobility services, together with cleaner technologies, act as complimentary services to increase the usage of public transport. Gargi Ghosh of Yulu bikes took us through key questions like what the role and impact of electric micro mobility services in pre, present and post COVID-19 scenario, etc. This one-hour session was moderated by Shravani Sharma, Project Associate, Sustainable Cities, WRI India. Read more
How Cities can Build Back Better in the New Normal with Cycling  *July 28, 2020*

The ongoing pandemic has led to a drop in public transport as well as private vehicles, leading to a surge in cycling across the world. Moderated by Amit Bhatt, Executive Director - Integrated Transport, the webinar brought together leading transportation and urban planning professionals to explore how cities globally have utilised the current situation to promote cycling and what Indian cities can learn going forward. Panellists in the webinar included: Maud de Vries - Co-Founder & Managing Director, BYCS, Amsterdam; Carlosfelipe Pardo - Senior Manager, City Pilots, New Urban Mobility Alliance; Prof. Rutul Joshi, Associate Professor, CEPT University, Ahmedabad; Dr. Bhairavi Naik Joshi - Director & CEO, BYCS India Foundation. [Read more](#)

**Bus Karo XVI - Cashless Ticketing: Urgency, Opportunity and Challenges  *July 3, 2020***

A transition to a cashless economy is ambitious and addressing the requirements of the bus ridership, its legacy systems and dependence of liquidity might be a crucial first step. Moderated by Amit Bhatt, Executive Director, Integrated Transport, WRI India, this panel discussed issues like how cities are trying to move away from cash and paper tickets in the immediate post-lockdown movement; what is the role of private enterprises in achieving and scaling this transition, etc. Panellists were: K Santosh Babu, IPS, Director (Information Technology), BMTC; Neelesh Gupta, Incharge, Rupay Acceptance, National Payments Corporation of India; Pravesh Biyani, Associate Professor, IIT Delhi; Priya Ajith, Vice President, Product Management, PayCraft; and Sanyam Gandhi, Director, Chartered Speed. [Read more](#)

**Webinar: De-Risk your Business  *July 17, 2020***

Participants learnt how to identify the critical business model assumptions of their own company, and then create plans to de-risk the assumptions. The techniques discussed can help all stages of businesses from ideation to the scaling stage. [Read more](#)

**Building Back Better: A Deep Dive into the Chandni Chowk Redevelopment Project  *July 30, 2020***

The Shahjahanabad Redevelopment Corporation (SRDC) started the Chandni Chowk Redevelopment Project with a vision to bring back the lost glory that this street, and the pedestrians, enjoyed in the past. Moderated by Rohit Tak, Manager, Urban Transport and Road Safety, WRI India, this webinar saw SRDC share insights about the inception of the project. Participants in the webinar included: Nitin Panigrahi, Deputy General Manager, Project and Administration, SRDC, Govt of NCT of Delhi; Vidya Tongbram, Associate Architect, PSDA; Gautam Sachdeva, Associate Architect, PSDA; Priyanka Sulkhan, Manager, Streets for All, WRI India. [Read more](#)
As the ongoing COVID-19 pandemic wipes away years of development in weeks, the ability to reinvent ourselves and rebuild has become more critical than ever. WRI India and Omidyar Network India hosted sessions on Informal Workers and the City on the Charcha 2020 platform. While these sessions explored what it takes to move India and its unsung workforce forward, WRI India also participated in urban-focused panel discussions to explore how cities can build back better. Shashank Rao, Union Leader Auto Rickshaw Union, Street Vendor Union, Mumbai was in conversation with Madhav Pai, Executive Director WRI India, on May 14. And Rejeet Mathews gave an introductory presentation on Improving Affordable Urban Housing: Community Needs and State Response on May 15. Read More

The Value of Sustainability in the New Normal. FICCI-KAS Virtual Dialogues: The New Normal Series May 15, 2020
As a panelist at this webinar, Dr Aman Srivastava, Lead Economist, at WRI, India highlighted the need to shift to clean renewable energy, scale up the electrification of public transport as well as provide support to MSMEs.

Active Mobility Post Lockdown: Finding the New Normal towards 24X7 Raahgiri Day June 3, 2020
On World Bicycle Day, Madhav Pai, Executive Director, WRI India Ross Center For Sustainable Cities, participated in this webinar to discuss how sustainable mobility can help find a new normal.
**Investing in Nature for Building Back Better** *June 5, 2020*

On World Environment Day WRI India CEO, Dr. OP Agarwal spoke at a panel discussion conducted by United Nations Environment Programme (UNEP). He said that the biggest problem facing the agricultural sector is that of demand on accounts cities being locked down and closures of restaurants, businesses, etc. Supply chains are critical to the livelihoods of farmers across India.

**Green Recovery Plans India** *June 5, 2020*

Konrad-Adenauer-Stiftung (KAS) Regional Project on Energy Security and Climate Change Asia-Pacific (RECAP) organized a series of virtual workshops to map the discussions on green measures in stimulus packages in Asia-Pacific countries and to compare them with each other. Ulka Kelkar, Director, Climate Program, WRI India, participated in the India workshop organized by the Council for Sustainable Development (CSD) to discuss ideas for green economic recovery.

**Building Efficiency Accelerator Workshop: Strengthening National-subnational Engagement on Building Efficiency** *June 11, 2020*

Efficient buildings are more important than ever for recovery and resilience. This webinar discussed national-subnational engagement as key for aligning policy and finance for achieving this goal. This webinar was organized by WRI India along with Indo-Swiss Building Energy Efficiency Project (BEEP), NRDC India, ICLEI South Asia and Alliance for an Energy Efficient Economy (AEEE India).

**It Pays to Own Your City** *June 12, 2020*

The ongoing COVID-19 pandemic has taught us that we need to re-think the way we plan our cities and focus on urban renewal. Jaya Dhindaw, Director, Integrated Urban Planning at WRI India participated in this webinar organized by Habitat Forum (INHAF). See full recording here

**Conversations on COVID-19 13th Webinar: Exploring a Planetary Health Response to the Pandemic** *June 12, 2020*

This webinar was co-hosted by Irish Doctors for the Environment along with Irish Global Health Network (IGHN) and saw Lanvin Concessao, Project Associate, Energy Program at WRI India, participate as a panelist. See full recording here

**Opportunities to build back better at the Aditya Birla Group of Companies** *June 16, 2020*

Ulka Kelkar was invited to speak to the sustainability leads of the Aditya Birla Group’s businesses to provide inspiration on how to navigate this pandemic and build back better in ways that accelerate action on their environmental targets and ensure greater resilience in the future.
Webinar on Data Strategies for Cities  June 16, 2020
Highlighting the need for data driven strategic planning in cities and providing context of planning for COVID-19 response using data-based strategies, this webinar was conducted by Ministry of Housing and Urban Affairs (MOHUA), European Union and AFD in partnership with WRI India and several other organizations. Ravi Ponnapureddy, Head of the Sustainable Cities and Transport team at WRI India participated in this as a panelist. The webinar was moderated by Vishal Ramprasad who works with the Urban Innovation team at WRI India.

Valuing Nature for Sustainability in the Agriculture and Food Sector  June 19, 2020
Dr Madhu Verma, Chief Economist at WRI, India was a panelist at this webinar and discussed the importance of sustainability in the food sector, especially from the post-pandemic lens.

Sector Revival Through the Lens of a CEO: Chapter 6 - Energy & Utilities Industry  June 25, 2020
As a part of the exclusive roundtable at this seminar organized by Michael Page, WRI India CEO, Dr. OP Agarwal spoke about the challenges that the Indian Energy sector faces in the wake of the ongoing pandemic.

Iconic India Innovations: Should Fresh Water Be Used Just Once?  June 25, 2020
Jaya Dhindaw, Director, Integrated Urban Planning, WRI India talked as a special invitee at this webinar.

Webinar on Air Quality & Urban Transportation Planning  June 26, 2020
Dr. Ajay Nagpure, Head of Air Quality and Sustainable Urbanization, WRI India talked about air pollution and health in India in this webinar which focuses on estimation of air pollution through various sources and how the COVID-19 lockdown has affected air quality in India.

Habitat Forum’s Rethinking Cities Webinar: Is City led Economic Growth Under Stress?  July 6, 2020
This Habitat Forum webinar saw Dr. OP Agarwal, CEO, WRI India, talk about “Is City led Economic Growth Under Stress”.

Making Cities Safer by Design  July 6, 2020
Amit Bhatt speaks about Road Safety and infrastructure design with a focus on pedestrian safety. This webinar was presented by NSS IIT Roorkee and was broadly based on the theme of “Road Safety and Pedestrian Safety Awareness”.

KHAKI Talk 27: #ChalteChalte - Reclaiming Mumbai’s Streets for Walking  July 22, 2020
With the help of technology, public transport in Mumbai has evolved from horse-drawn trams to electric trams to buses and suburban trains to taxis and autorickshaws to now metro and monorail. All this while, facilities for pedestrians have deteriorated. In this Online Talk #ChalteChalte, Madhav Pai outlines his thoughts on how Mumbai can go back in time and reclaim its streets for pedestrian traffic.
Air Quality Index Study During Lockdown: A Data Deep-Dive  *July 22, 2020*
Organised by Massive Earth Foundation, this webinar shed light on the Air Quality Index during lockdown. Dr. Ajay Nagpure participated in this.

Why Should We Return to Cities that Discarded Us?  *July 22, 2020*
The webinar addressed the challenge of rebuilding new India through a just, legal and institutional framework. The panelists addressed the issue empirically and presented possible scenarios. Dr. OP Agarwal, CEO, WRI India, participated in this webinar.

A Q&A Session With Thought Leaders Discussing India’s Journey Beyond COVID-19  *July 23, 2020*
In this session organized by The Echo Network and supported by Principal Scientific Adviser, Govt. of India., Chirag Gajjar answered questions on how science and technology can help the livelihoods of people as we emerge from the pandemic.

Webinar Series on Climate Change and COVID-19 by Climate Change Dept, Govt of Gujarat, GEDA and MoEFCC  *July 24, 2020*
WRI India in collaboration with Government of Gujarat, Gujarat Energy Development Agency (GEDA) and Ministry of Environment, Forest and Climate Change (MoEFCC) designed a webinar series titled Climate Change and COVID-19. The topics focused on actions enabling economies to bounce back after COVID-19 while also minimizing the impacts on climate and ensuring sustainability in the long term. WRI India was a knowledge partner in these webinars. On July 24 Sahana Goswami spoke about Climate Change and Water Resource Management.
Back to Business: Enabling Public Bus Systems Post COVID-19

COVID-19 has completely torpedoed the fragile finances of the public transport sector. Due to lockdown restrictions, nearly 98% of bus services were halted, leading to almost no revenue generation for two months. Shilpa Kharwal and Aloke Mukherjee discuss how public bus systems can be emboldened post-COVID. Read more

Energy for Development in Climate Vulnerable Areas

Harsha Meenawat and Bharath Jairaj note how the 360 million living in poverty in India make adequate progress on developmental indicators, it will be challenging for the country to face the rapid onset impacts of climate change. Read more

Two Cs of the New Decade: COVID-19 and Climate Change

Parvathi Preethan, Arivudai Nambi Appadurai and Shubham Gupta discuss the differences and similarities in the devastating and global reach of COVID-19 and climate change and how they pose different kinds of policy problems. Read more

Going Local for Climate Action

Prerna Mehta and Himanshi Kapoor discuss the importance of local readiness for cities in a post-COVID India. As economies start to rebuild in the new normal, it is essential to assess our readiness not just while responding to crises but also to growing impacts of Climate Change. Read more
Low-carbon Commitments in a Post-COVID-19 India

Subrata Chakrabarty notes that as India looks to bolster the post-COVID-19 economy, it must also consider a low-carbon element in any economic stimulus package.  

Read more

Building Back Better: A time to Introspect on Innovation in Public Service Delivery

Jaya Dhindaw and Aarathi Kumar elaborate on the struggles of providing equal access to efficient and reliable basic services which is not new to Urban Local Bodies (ULBs) in India. Helping limit contagion and avoiding secondary health impacts has added another dimension to the design of service delivery.  

Read more

South Asia Confronts a Double Disaster: Cyclone and COVID-19

Arivudai Nambi Appadurai writes about the challenges posed by Cyclone Amphan are amplified because of the ongoing coronavirus pandemic. Decades of preparation, plus a weakening of the storm as it made landfall, appear to have mitigated Amphan’s initial impact, but it will still wreak havoc on the region, especially as COVID-19 lockdowns complicated typical disaster response measures.  

Read more

Could the Pandemic Help Rethink Bengaluru’s Traffic Issues?

Sudeept Maiti talks about how by investing in cycling infrastructure now, Bengaluru with one of the most severe traffic congestions in the world, can recover from the lockdown more sustainably and build more resilience.  

Read more

Feeding Into Metro Rail: New mobility Services for Last Mile Commute

Subhadeep Bhattacharjee, Chaitanya Kanuri, Sudeept Maiti and Sai R. Chaitanya put together a compendium of information about new mobility in and around metro stations in three cities: Kochi, Bengaluru and Delhi.  

Read more
**Design Elements to Rejuvenate Indian Streets: A Case of Bellasis Road, Mumbai**

An automobile-centric approach of street design stifled the human accessibility aspect, and eventually, cities forgot that every citizen is a pedestrian at some point in a day. In this blog Rohit Tak and Lekshmy Hirandas create a case for how to infuse interesting data elements into the existing streets in India.

Read more

**Mainstreaming Climate Resilience: The MGNREGA Model**

Parvathi Preethan, Shubham Gupta and Nakul Sharma share their thoughts on climate resilience as a way of understanding how climate change works and how it is similar to the MGNREGA model.

Read more

**Why Children Matter in Street Design: An Experiment as a Medium of Exploration**

Through this blog Priyanka Sulkhan elucidates how better street design could be brought in place if we planners think of children as one of their primary users.

Read more

**Applying Demand Aggregation Across Value Chains for Green Recovery**

India has the largest number of MSMEs in the world after China. Out of a total of 63.3 Million, 19.6 million MSMEs are manufacturing enterprises. In 2017, the share of MSMEs in India’s GDP was nearly 29%.

Read more
Ephemeral Islands: Access to Energy in the Char Regions of Assam

In the absence of electricity and storage at the village, health workers like Salma travel to the mainland on the first Wednesday of every month to collect vaccines for immunizing children back at her health center. Read more

Tactical Urbanism: An Adaptive Tool for Safe Distancing

As we come to terms with ensuing lockdowns and a slowly evolving new normal, it is imperative to rethink how our streets and open spaces, that underwent a conversion into emergency spaces, remain flexible while offering safe distancing to users. Read more

What do MSMEs want? Perspectives from a conversation with NCR’s industrial associations

MSMEs have been identified as an engine of economic growth being the second largest employers after agriculture providing 11 crore jobs. Read more

Photo essay: People-centred Street Designs as Lessons from Raahgiri Day Street Stories

My experiences also highlight how these events often become a channel for steering a conversation in different fields and developing opportunities for new ideas and innovation. Read more

What’s Happening In India’s Forests?

Kai Kresek and Marie Duraisami take a local look at historical and current trends in forested countries across the world to highlight the diversity of forest issues. Read more
Investing in Informal Workforce  *Indian Express*

The informal sector holds the key to Indian economy’s revival post-COVID-19. In this piece, Shakti Sinha and Madhav Pai observe that the government must have plans in place to help them prosper.

Reconfiguring Public Spaces Within the New Normal  *TOI Blogs*

Prerna Mehta and Jaya Dhindaw write about how several COVID-19 norms like social distancing, isolation and locking down of cities and oneself are exposing the inequities in cities.

Help Farmers Gear up for Post-COVID World  *The Tribune*

A. Arunachalam, Principal Scientist, Indian Council of Agricultural Research and K.M. Jayahari write about how agriculture in India needs to have inclusive recognition, right from farmers to the food processors.

Getting India Back on its Feet: For Economic Revival, Urban Mobility Must be Restored Quickly and Efficiently  *TimesNowNews*

Dr. OP Agarwal writes about the importance of being open to new ideas in order to kickstart our economy while adhering to social distancing. He underlines the importance of adapting smartly and reinventing our urban mobility system using existing resources while doing so.

Urban Mobility Post Lockdown: How to Get People Back on Public Transport  *News18*

Dr. OP Agarwal shares his view on how the constant urban struggles with traffic congestion, vehicular pollution, parking problems, have validated the need for the shift to public transport.
COVID-19 Pandemic: Lessons for Climate Crisis

_Namib Appadurai_ writes about how as a country we should invest in resilience-building measures, especially in health infrastructure, weather and disease forecast systems, addressing training and adaptive capacity needs.

**Fighting COVID-19: A Solar-powered Hospital in Rural Jharkhand Takes on the Pandemic**

_Lanvin Concessao, Dheeraj Kumar Gupta and Pamli Deka_ write about how the Nav Jivan Hospital, established in 1961 in Palamu district, a 100-bed medical facility, is on the frontline of rural India’s fight against COVID-19. Today, this hospital has the only Acute Care Unit in the region, and also facilities to treat contagious diseases like tuberculosis.

This is How a Solar-powered Hospital in Jharkhand is Dealing with the COVID Pandemic

_Lanvin Concessao_ shares how to serve two of the most under-developed districts of the state—Palamu and Latehar—a hospital has, over the years, taken many proactive steps to add services to cater to the needs of the villagers.

Social Distancing, Safety, Sanitisation: Solutions for Post-lockdown Commute

_As Indian cities battle COVID-19 and work under an extended lockdown, Prateek Diwan documents the conversation that WRI India had with new mobility enterprises to understand the impact on companies, and the future of commuting with such mobility models in the ‘new normal’._

Nature-based Solutions Must be Integrated in Strategy to Rebuild the Economy

_Through this article, Ruchika Singh highlights that nature does not discriminate and that the pandemic is a clear indicator of how deforestation and fragmentation of landscapes have increased the risks of the outbreak of infectious diseases like COVID-19._

As Ambient Air Improved, Did a Spike in Indoor Pollution Go Unnoticed

_With new studies linking COVID-19 risk to bad air, India must collect and systematically study data from before, during and after the lockdown, and develop long-term strategies to reduce both indoor and outdoor pollution say Ajay Singh Nagpure and Nitya Kaushik._

Getting Metros to Move Again

_Referencing a post-lockdown scenario, Prateek Diwan, Shilpa Kharwal and Sudeept Maiti write about the important aspects that need to be addressed before metros can resume operations successfully through the country._
Could the ongoing COVID-19 Pandemic Help Rethink Informal Sector Issues in India?

*Gaon Connection English, Gaon Connection Hindi*

The current coronavirus induced crisis demands solutions for informal workers more urgently than ever. Anandi Mishra writes six points on how the government could help these workers in the present crisis.

**Securing India’s Tiger Habitats and Natural Assets for Preventing Future Pandemics**  
*Mongabay India*

While current economic growth models emphasise productivity improvements by building infrastructure, tiger reserves are colossal bedrocks of green infrastructure and ecosystem services with significant resilience and health benefits for people point out Madhu Verma and Amit Mallick.

**Adapt and Innovate: Urban Service Delivery Startups Respond to the COVID-19 Pandemic**  
*YourStory*

Aarathi Kumar and Monica Jain write about how some enterprises working in water, energy and waste management sectors are seeking ways to safely sustain or scale existing operations, while others are modifying their solutions or innovating new ones to find a new purpose.

**For India to Build Sustainable Cities Post-lockdown, Re-cycling Roads is Key**  
*Scroll.in*

Though is still no cure or vaccine against COVID-19, but cities have already started “unlocking”. This is because we cannot have an endless lockdown. Amit Bhatt and Advait Jani write about how instead of moving vehicles, cities should focus on moving people.

**Innovative Financing Will be Key to Restoring Public Transport**  
*Livemint*

A revival of economic activities will depend significantly on public transport, which typically runs in losses. Dr. OP Agarwal and Nitya Kaushik shed some light on how new ways of funding its expansion will, therefore, have to be found to meet demand and help the economy rebound.

**Needs of Children Must be Taken Into Account While Planning Indian Cities. Here is why**  
*Gaon Connection English*
Priyanka Sulkhan writes about how not considering the needs of children while designing roads may have tragic consequences.

How London and Bogota Built Cycling-friendly Streets – and What India Can Learn From This

Scroll.in

Amit Bhatt and Chetan Sodaye write about how can India re-introduce the cycle as a preferred mode of transport.

India Must Plan New Strategy for Cities to Reap Full Benefits of Aatma Nirbhar Initiative Post COVID-19

News18

Current transport networks available in large Indian cities are woefully inadequate for meeting mobility needs and nor do they integrate the potential labour market created by new growth clusters across metropolitan regions. Pavan Ankonapalli and Jaya Dhindaw write about this in the light of the pandemic.

EIA 2020, if Implemented Correctly, Could Reap Ecological and Economic Benefits

Business India

Madhu Verma writes about how India’s cultural and bio-physical diversity requires mechanisms to measure ecological damage and economic benefits in case of violations and how the EIA 2020 falls short of illustrating this significant requirement.

Life on Char Islands in the Brahmaputra - A Daily Struggle in Monsoon Floods

Gaon Connection English

Namrata Ginoya and Amala Devi write about chars, the riverine islands in the Brahmaputra formed through silt deposits and how during monsoons, many chars get partially or fully submerged affecting delivery of basic services.
India, it’s Time to Walk the Talk *Times of India Blogs*
A study by WRI India and Raahgiri Foundation after one year of organizing Raahgiri Day in Connaught Place (CP) showed that 89% of the surveyed business establishments supported closing the inner circle on Sundays.

Pandemic not just a Public Health Emergency: Echo Network Paper *The Hindu*
The paper, ‘India Journey Beyond COVID 19’, was brought out this month by Echo Network, a social innovation partnership between multi-disciplinary organizations steered by the Principal Scientific Adviser to the Government of India. The network includes representatives from several organizations including WRI India.

Five Years Later, Govt Relaunches Programme To Develop 200 'City Forests' In The Country *The Logical Indian*
A recent report published by Global Forest Watch said that the annual forest loss in the year 2016 was 3,310 hectares, followed by 3,060 hectares in 2017 and 3,537 hectares in 2018. The numbers have soared up drastically, as it has generally remained below 3,000 hectares, except in 2007, when it was 4,145 hectares.

Public Transport Agencies Will Need to Rebuild Confidence in Services: Experts *The Hindu*
A discussion organized by WRI India as part of their ‘Bus Karo’ webinar highlighted how mandatory masks, a policy for staggered office timings and the need to build confidence in bus services will be among the key strategies public transport agencies will need to adopt in response to post-lockdown challenges.

Post Covid-19: Shared Mobility Services to Undergo Changes *Hindustan Times*
While there have been talks on people shifting to personal transport in the post-Covid-19 world for safer travel, the panelists on a Bus Karo webinar organized by WRI India said that there will be a section that won’t have the wherewithal to do that.
Coronavirus: While Indians Were Rejoicing Over Clear Blue Skies, Indoor Pollution Was Rising

*Scroll.in, Business Standard*

The lockdown from March 25, which saw more meals being cooked at home than usual, may have led to an almost 2% – or about 150 tons per day – increase in total household PM 2.5 emissions in India, according to the preliminary findings of a yet-to-be published study by the World Resources Institute India.

Climate Change, a Crisis on Our Doorstep

*The Hindu Business Line*

Rising temperatures and droughts; warming oceans and mountains — the future’s dire warns ‘The Assessment of Climate Change Over Indian Region’, a report published recently. WRI India experts weigh in.

Let Me Breathe partners with YLAC & WRI India for #BengaluruMoving campaign

*LetMeBreathe*

To further the goal of creating liveable cities, Young Leaders for Active Citizenship (YLAC) in partnership with Let Me Breathe and WRI India, has joined hands with the #BengaluruMoving campaign to help reduce vehicular emissions and congestion in Bengaluru.

Looking for a clean energy economy

*Mint Climate Change Tracker, HT Smart Cast*

Mint in conversation with Ulka Kelkar about how the world is rapidly approaching a heat barrier.
“In cities and industrial clusters, rooftop solar can avoid air pollution. In remote rural hospitals where electricity supply is erratic, solar power could be used to run ventilators and other medical equipment at a lower cost.”

Ulka Kelkar in IndiaSpend

“शहरी अर्थव्यवस्था के लिए ये लोग जतिना योगदान दे रहे हैं। शहरी अर्थव्यवस्था उनका उत्तर खेल नहीं रख रही है। हमें उनकी भार नहीं बलुकी ज़रूरत समझना चाहिए और जब भी कोई चीज की ज़रूरत हो, हमें उसकी देखभाल करनी चाहिए।”

Dr. OP Agarwal in BBC Hindi

“Pedestrianisation of streets and market places is ‘not only feasible, but the only viable option’, and key to restoring safety, vibrancy and liveability in communities.”

Jaya Dhindaw in Thomas Reuters

“If we are able to create the right infrastructure, we can use this crisis for recycling of our cities.”

Amit Bhatt in Times of India

“Many major cities have resisted opting for automatic or digital payments over the years. Use of digital payments will stop cash leakage in the system and will provide data that will help plan our systems in a much better way.”

Madhav Pai in IndiaSpend

“India’s waste segregation plans have gone for a toss and people have gone back to mixing waste to avoid contact with waste collectors.”

Jaya Dhindaw in Indian Express

“Public transport ridership has two groups — captive users and choice users. Captive users are the ones who don’t own private vehicles and have no choice but to use public transport. It is this group that will return to (using) public transport.”

Amit Bhatt in Print

“Large cities like Mumbai always have an advantage since they are centres of economic activity. So they will bounce back in 2-3 years.”

Madhav Pai in Bloomberg Quint

Ulka Kelkar speaks to Faye D'Souza about the government’s decision to auction coal mines.

Youtube

“As before, enforcement will be the key. Else we are going to be discussing the same points again in the future.”

Deepak Krishnan in IndiaSpend
“Not everyone can afford to buy a vehicle, be it a four-wheeler or a two-wheeler. For public transport I see a greater dependence on technology and data – from automatic fare collection to having a way of knowing, say, only eight seats are available on the next bus.”

_Madhav Pai in Livemint_

“These people are in a lot of trouble…. They are independent, gig economy workers and don’t have any kind of protection and social services.”

_Madhav Pai in Wired_

“Getting across a 60-metre road in 10 seconds is very difficult. Many cover only half the distance.”

_Madhav Pai in Deccan Herald_

“They also need to plan for revival of rural livelihoods, the supplier of food and raw materials, which will suffer due to scarcity of labour.”

_Namrata Ginoya in China Dialogue_

“With each passing year we are compounding the impacts of climate change. And we can observe that in the increase frequency of adverse weather events. To avoid financial and political failure we need to focus on mainstreaming climate change adaptation and mitigation.”

_Chirag Gajjar in ET Prime_

“The Metro has had a positive impact on the lives of women and middle-class travelers. But it doesn’t serve the poor.”

_Madhav Pai in Quartz_

“Information in sectors such as agriculture, forestry, water, etc. is generated and consumed by sectoral officials. There is not much interaction between sectors and it is very compartmentalised in how the data is exchanged. PREP helps in data visualisation and understanding the symbiotic relationship between different sectors such as water and forestry or agriculture.”

_Nambi Appadurai in Mongabay India_

“Not even a 20% area might have been covered by these radars,” he says, referring to parts of the country lately blighted by locusts. While potentially useful in some places, radar-based detection clearly wouldn’t be possible everywhere.

_Raj Bhagat in OneZero_

“The industry demand is, I think, a 50% customs duty and this will result in a price increase for new projects. Those that are already bid out may not be impacted. Also, even if it does happen, ramping up of domestic manufacturing is unlikely to happen overnight and may need additional policy support.”

_Bharath Jairaj in The Third Pole_
India’s Journey Beyond COVID-19
Chirag Gajjar was invited to join an initiative of the Echo Network, steered by the Principal Scientific Adviser, Government of India, and a partnership of the Bill and Melinda Gates Foundation, Hindustan Unilever Limited, RoundGlass, the India Climate Collaborative, Ashoka Trust for Research in Ecology and the Environment (ATREE), and the Centre for Cellular and Molecular Platforms (C-CAMP). The Echo Network brought together leading experts to discuss how science and technology can play a role in India’s present and future, and in June 2020 published a white paper on “India’s journey beyond COVID-19.”  

Changing Our Clothes: Why the Clothing Sector Should Adopt New Business Models
Report by WRAP UK, contribution by Priyal Shah
Increasing the utilization of clothing is a daunting challenge in a world of ‘fast fashion’ and accelerating consumption. Many companies have responded to market demand and competition by reinforcing and enabling ‘fast fashion’ trends. But simply selling more new clothes to meet demand in high consuming and fast-growing economies is unsustainable. It puts more pressure on natural and human resources that are already over exploited. It will mean even greater negative impacts on the environment and society. ‘Changing our clothes: Why the clothing sector should adopt new business models’ demonstrates potential mass market appeal for re-use business models. Read More

Land Accelerator South Asia Cohort 2020
WRI India, along with Sangam Ventures, Delhi introduced the first Land Accelerator South Asia cohort in line with WRI’s successful global Land Accelerators across Africa and Latin America. By fostering entrepreneurship, this first-of-its-kind program supports leaders who develop sustainable and profitable business models to restore lands across South Asia. The program aims to support them by means of dedicated mentorship, technical expertise, marketing and networking, funding for scaling up and accessing global restoration ecosystem focussed at developing entrepreneurship. Read more

NEW APPOINTMENT
Ulka Kelkar Appointed by the DST and PSA, Government of India as an Expert for Drafting STIP 2020
Ulka Kelkar was appointed by the Department of Science & Technology (DST) and Office of Principal Scientific Adviser (PSA), Government of India as an expert member of the Energy, Environment and Climate Change thematic group for drafting India’s new Science, Technology, and Innovation Policy (STIP 2020).
LAUNCHED!

wricitiesindia.org

We are pleased to share the new look of the WRI India Cities website wricitiesindia.org
The revamped site’s improved interface offers one-click access to all cities-specific work. It is device agnostic and has been designed in a modular format that allows for quick (and regular) updates — from the homepage to specific program pages.

Key features of the site include: A floating menu and a landing page that features relevant inside content, a dedicated Urban Labs section for accelerators and challenges, 10 Practice Areas focusing on different work areas of our Sustainable Cities program, dedicated pages for each initiative and a Media Center that addresses press queries among others. The WRI India website wri-india.org also hosts a gateway to the sustainable cities website that can be accessed here.

We invite our readers to take advantage of this dynamic new site by sharing their updates regularly and we look forward to making wricitiesindia.org a platform that consistently showcases the latest and best work done by our urban researchers, planners, architects and interdisciplinary analysts.
How Electricity Distribution Companies In India Can Work With Commercial And Industrial Consumers For Renewable Energy Procurement | Working Paper | July 2020
by Ashok Kumar Thanikonda, Deepak Sriram Krishnan, Tirthankar Mandal and Parul Kumar

As a result of a multitude of factors, such as national and international commitments to Renewable Energy (RE), falling RE prices, government regulation promoting RE, and the advent of sustainability targets, Commercial and Industrial (C&I) consumers all over the world have begun to actively explore the possibility of increasing the share of RE in their power mix. This presents two opportunities: one, an opportunity for C&I consumers to drive the demand for RE products, and two, a unique opportunity for utilities to market new RE products to C&I consumers. This is a topic that merits deeper analysis in the Indian context. Download

Assessing the Sustainable Development Impacts of Renewable Power Technologies in India: An Economic Returns Framework | Working Paper | July 2020
by Ashwini Hingne, Juan-Carlos Altamirano, Apurba Mitra, Ranping Song and Neelam Singh.

Financial analyses, which consider financial costs and income, have typically informed energy-related decision-making and investment planning. Economic analyses, however, take societal impacts as a whole, and include social, economic and environmental costs and benefits, which are especially critical in energy policymaking and planning.

To support systematic consideration of such societal impacts in decision-making, this working paper proposes a framework to identify and assess the relevant socioeconomic and environmental impacts of renewable power technologies in India and to estimate their economic rate of return (ERR). The paper proposes ERR as an indicator that could be utilized to summarize the sustainable development impacts of RE in an understandable and comparable metric to guide decision-making. The working paper also demonstrates the application of the framework by estimating the ERR for Ground Mounted and Rooftop Solar, Wind, Biomass and Small Hydro power generation in India. These estimates highlight the drivers of costs and benefits for RE technologies in India. Download
COVID-19 Safety Measures for Public Bus Operations in India
9 June, 2020
by Krithi Venkat, Sudeept Maiti, Amit Bhatt, Chaitanya Kanuri, Prateek Diwan, Shilpa Kharwal and Anusha Chitturi
Buses are one of the most commonly used and popular modes of transport in India, with over 46% of urban passenger trips being serviced by public buses. However, they are also confined spaces with a lack of adequate ventilation, which makes them high-risk environments for the spread of diseases such as COVID-19. This document has been created to help prepare bus operations, following the emergency response phase of the pandemic and includes guidelines catered to Indian contexts, based on the best practices adopted by cities around the world. Download

COVID-19 Public Safety Measures for Metro Systems in India
9 June, 2020
by Prateek Diwan, Sudeept Maiti and Shilpa Kharwal
India’s metro system carries more than 8 million people across cities every day, forming an integral part of the country’s urban transport system. With the COVID-19 pandemic and the associated lockdown, public transportation came to a halt to avoid spreading disease further. To resume metro services safely, operators will need to implement a comprehensive post-lockdown operations plan, to prepare for various scenarios and improve ridership over the long term. This document contains pragmatic suggestions on how to adopt health and safety measures as set out by health agencies and how to communicate these to the public effectively. Download
PRIDE MONTH AT WRI INDIA!

This year in June, Rohit Tak, manager, Sustainable Cities, took an initiative to mark the celebration of Pride Month across WRI’s social media platforms. A small note from Rohit:

“Throughout the year, various countries mark their pride months to acknowledge and celebrate the LGBTQ community. In the US, pride month is celebrated in June. Lately, due to the power of social media, in many other countries, including India, June has become a universal pride month. During this time, people come together and celebrate love, diversity and self-pride. Since this year has been an anomaly and the ongoing COVID-19 crisis doesn’t allow people to gather together and celebrate the rainbow colors of Pride Flag, I thought of celebrating it symbolically. This was the occasion to celebrate not just the LGBTQ+ community within the organization and across the world but also to showcase our organization’s common values supporting diversity, equity, and inclusion. And, I am happy to share that it only took an exchange of a couple of emails with the Human Resource and Communications teams in Washington, DC and India to transform my idea into reality, and our business as usual WRI logos on social media became WRI’s Pride Logos. We also agreed to make it a practice to change logos during June, every year. Acceptance, acknowledgment, and celebration is the key to support minorities, and I am happy that we at WRI network are working towards the same.”
ABOUT WRI INDIA

WRI India is a research organization with experts and staff who work closely with leaders to turn big ideas into action to sustain a healthy environment - the foundation of economic opportunity and human well-being. We envision an equitable and prosperous planet driven by the wise management of natural resources. We aspire to create a world where the actions of government, business, and communities combine to eliminate poverty and sustain the natural environment for all people.

Mumbai
1st Floor, Godrej & Boyce Premises, Gasworks Lane, Lalbaug, Parel,
Mumbai 400012, India +91 22 24713591

New Delhi
LGF, AADI 2, Balbir Saxena Marg, Hauz Khas,
New Delhi 110016, India +91 11 40550776

Bengaluru
93/2 G Towers, South End Road, Basavanagudi,
Bengaluru 560004, India +91 80 26560027

www.wri-india.org

IMAGE CREDITS
Cover Image/Harshal Kate; pg 1: Saketh Upadhya/unsplash; pg 2: Harshal Kate;
pg 3: Timon Studler/unsplash; pg 6: FOLU, Ashwini Choudhury/unsplash, Atharva Tulsi/unsplash;
pg 7: Alfarnas Solkar/unsplash, Hiki Liu/unsplash; pg 9: Chuttersnap/unsplash; pg 11: Prashanth Pinha/unsplash;
pg 15: WRI India, Ashim D'Silva/unsplash, Nicolas Mirgueti/Flickr; pg 18: Justin Lim/Unsplash, McKay Savage/Flickr, Sayan Nath/Unsplash, Subhadeep Bhattacharjee/WRI India; pg 17: Rohit Tak/WRI India, IWMI Flickr Photos/flickr, Priyanka Sukhlan/WRI India, Urip Dunker/Unsplash; pg 19: Amala Devi/WRI India, WorldFish/Flickr, Priyanka Sukhlan/WRI India, Bernie Catterall/Flickr; pg 20: Praveen Khanna/Indian Express, tribune India/istock; pg 21: Sujith Devangari/Unsplash, Rahul Nainani, Adnan Abidi/Reuters, Priyanka Sukhlan/WRI India; pg 22: Amala Devi/WRI India, Pxfuel.com; pg 23: Gwydion M. Williams/flickr; pg 24: Jayanta Shaw/Reuters, Deccan Herald
pg 31: Hussain Badshah/unsplash

CONNECT WITH US

WRI-India.org
@WRIIndia
FB.com/wriindia
@wri_india

WRI INDIA