WRI INDONESIA

2020 ANNUAL REPORT
WRI INDONESIA

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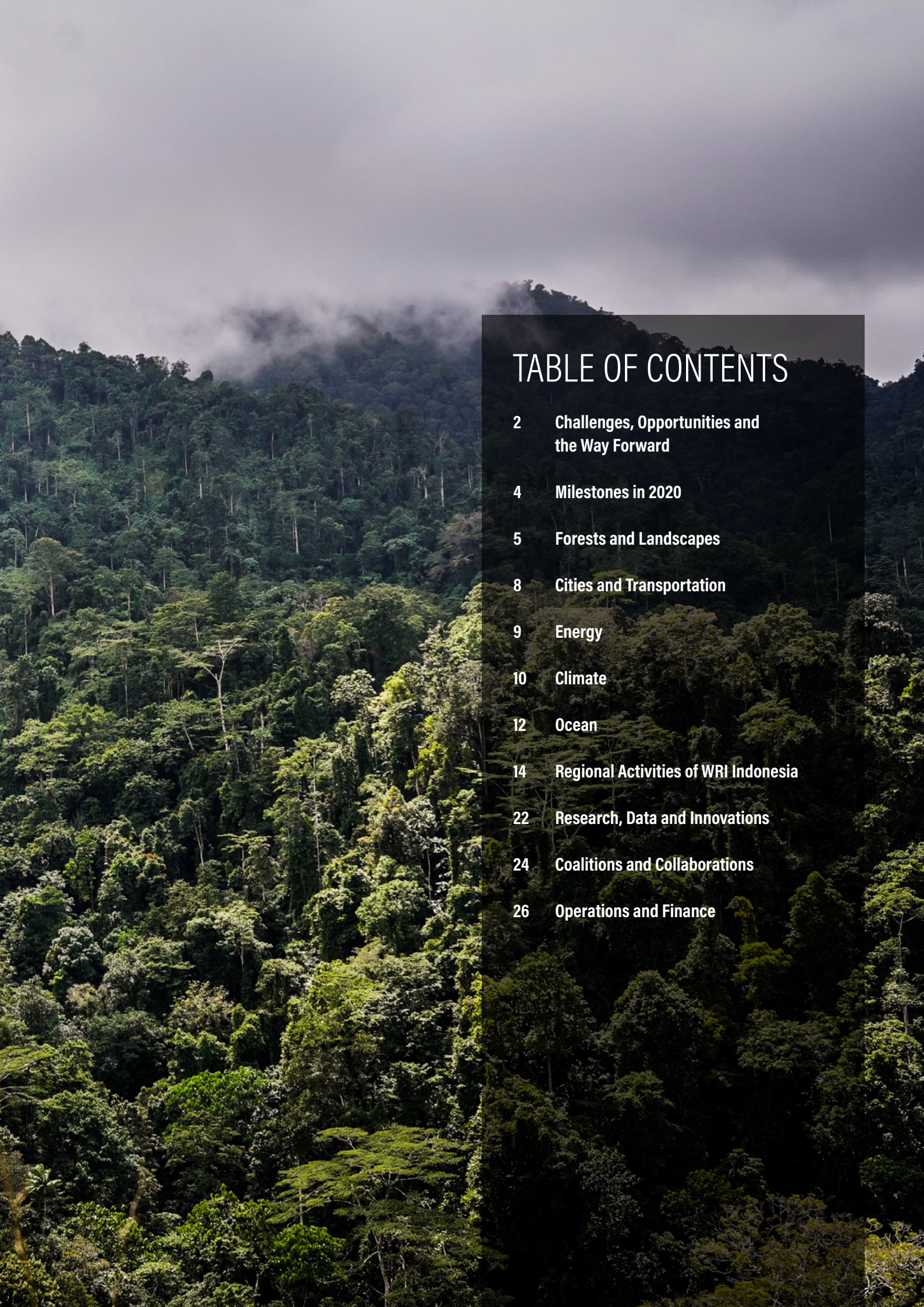

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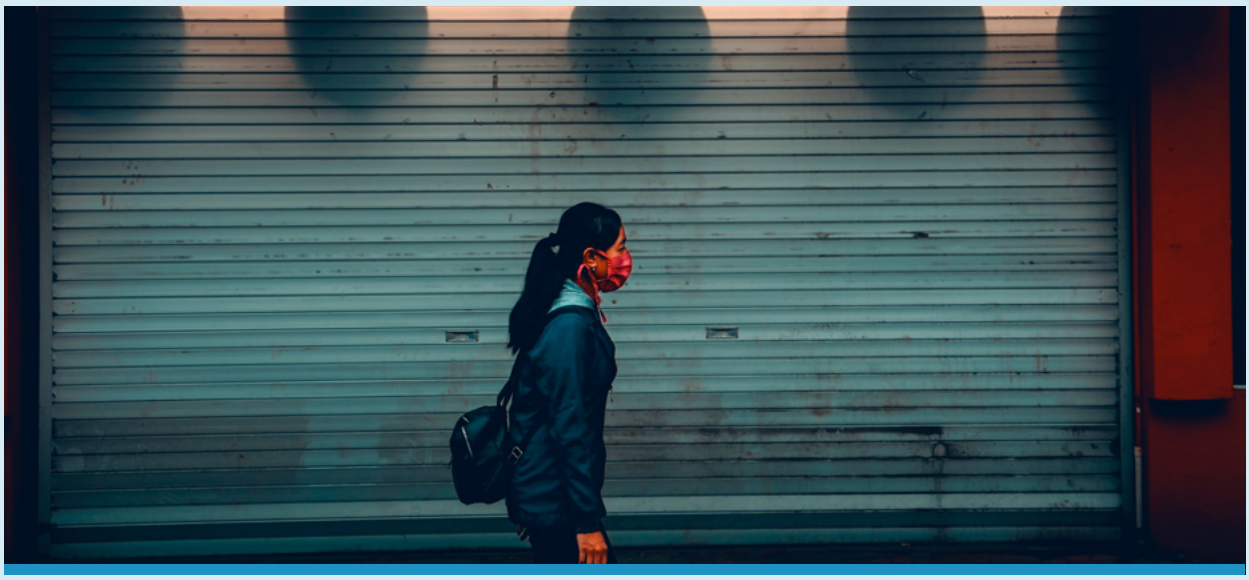
CHALLENGES, OPPORTUNITIES AND THE WAY FORWARD

At the beginning of 2020, it was almost incomprehensible that a tiny, invisible virus codenamed SARS-CoV-2, or better known as COVID-19, would upend the lives of seven billion people on Earth. And yet, by the end of the year, more than 1.8 million lives have succumbed to the virus. The pandemic is not the first humanitarian crisis of its kind, but the interconnectedness of human life thanks to the rise of technology over the past century have resulted in an unprecedented level of vulnerability and inequality. After showing consistent progress up to 2019, Indonesia's economic and social development were forced to a halt by effects of the pandemic. Communities lost their livelihood, and people experienced job cuts amid the looming threat of food insecurity. The Indonesian Central Statistics Agency (BPS) reported a national economic growth of negative 2.07 percent in 2020. As of March 2020,poverty rate was at 9.78 percent, an increase of 1.63 million people from September 2019. Meanwhile, the Indonesian Central Bank projected that Indonesia's economic growth in 2021 will be in the range of 4.3–5.3 percent.

In order to pursue economic recovery in the post-pandemic world, the government is forced to change the direction of national development priorities. As a result, efforts related to addressing climate change, air and water pollution, and deforestation, are likely to be sidelined. This is exemplified in Law Number 11 of 2020 on Job Creation (UU Cipta Kerja) issued in late 2020. The Job Creation Law—also referred to as the Omnibus Law, since the legislation encompasses many sectors—aims to create jobs and simplify the investment process by reducing regulatory requirements for business permits and land acquisition. Unfortunately, despite good intentions to promote economic recovery, the Job Creation Law can effectively weaken existing instruments for environmental protection. The right of affected communities to weigh in on the environmental impacts of issuing business permits will likely be diminished, minimum boundaries for forest areas are potentially reduced, and previous requirements of environmental impact assessment (Amdal) are now removed. All of this will undoubtedly affect Indonesia's commitment in the Paris Agreement to control climate change, and will hinder the achievement of the 2030 Sustainable Development Goals.



The COVID-19 pandemic has opened our eyes to the humbling realization that we are all more vulnerable than we think. At the same time, this crisis presents an opportunity to change the way we assess, reduce, and manage risks, and the lesson learned is that there needs to be concerted efforts that transcend geographic boundaries to address global challenges. The multitude of impacts caused by this crisis will not be resolved within one or two years. The government has taken steps to increase assistance and stimulus to accelerate economic recovery, but very little regard is given to environmental safeguards. It is imperative that efforts are made so as to not exacerbate other crises, such as those caused by air pollution and the already occurring climate crisis. Indonesia has the choice of either promoting economic growth through unsustainable high-carbon and "business as usual" development activities, or rebuilding a safer, more prosperous, and more resilient nation through low carbon and climate-resilient development.

In the face of a pandemic and insurmountable social and economic pressure on our society, WRI Indonesia puts forth a "Build Back Better" narrative to the government, private sector, and the public to promote a more sustainable and equitable approach in designing and implementing post-pandemic economic recovery. Drawing from experiences in post-disaster recovery, Build Back Better aims to eliminate previous vulnerabilities and ensure that the recovery process can also bring transformation for the better, which includes social, economic, and environmental transformations.

On an internal level, the ongoing pandemic has had and will continue to have a significant impact on WRI Indonesia's operations, including office environments and the way we work. As of March 2020, WRI Indonesia staff has instituted a work-from-home policy for its staff members while carrying out various adjustments in transitioning to a new normal. Apart from these challenges, WRI Indonesia managed to accomplish various milestones in 2020, thanks to the dedication of the entire staff who continued to work with utmost professionalism in the face of limitations.

This 2020 Annual Report presents the main activities that we have carried out throughout the year in the context of achieving low carbon development in Indonesia. We are convinced that in order to achieve this vision, WRI Indonesia needs to collaborate with stakeholders and partners in the public and private sector. In particular, we thank our partners and donors, for without their support, we would not have been able to carry out all of these activities.

We also invite you, our readers, especially those who are new to WRI Indonesia, to observe our activities, share ideas and suggestions, and join our community.

Thank you and warm regards,

WRI Indonesia Board of Trustees and Staff Members

OUR MAJOR MILESTONE IN 2020:
THE LAUNCH OF THE RENEWABLE ENERGY CERTIFICATE IN COLLABORATION WITH THE STATE ELECTRICITY COMPANY (PLN)

In early 2020, the State Electricity Company (PLN) and WRI Indonesia as part of the Clean Energy Investment Accelerator (CEIA) agreed to develop various product innovations in renewable energy in Indonesia. The initiative is aimed at promoting the use of renewable energy by all PLN customers, including industrial and corporate customers. Through this collaboration, CEIA supported PLN in conducting studies and research related to explore a renewable energy certification (REC) program by taking into account the state of Indonesia's electricity generation. REC is a market-based instrument in the form of a certificate to verify that the certificate holder has used certain units of MWh (megawatt hours) of electricity generated from renewable energy sources. Each certificate is issued in accordance with international standards for renewable energy generation and production (I-REC).

So far, PLN has played an active role in the global movement to reduce carbon emissions by optimizing renewable energy generation. As of December 2019, PLN has generated a total of 7,681 MW of electricity from renewable energy. PLN will continue to push for 15,000 MW generation of renewable energy by 2028.

In November 2020, through the CEIA initiative, WRI Indonesia successfully supported PLN in launching and issuing the first REC in Indonesia. This paved the way for various opportunities and options for commercial and industry players to obtain clean energy for their operation. For PLN customers, REC can be used as a procurement instrument to fulfill targets of renewable energy use in a transparent manner. Going forward, the existence of REC is expected to encourage the growth of the national renewable energy market in Indonesia.

"The REC is launched not only to meet the national target of 23 percent energy mix from renewable energy by 2025, but also to uphold PLN's responsibility to provide electricity for the current and future generations. This is embodied in our spirit of Power Beyond Generations."

– Zulkifli Zaini, President Director of PLN

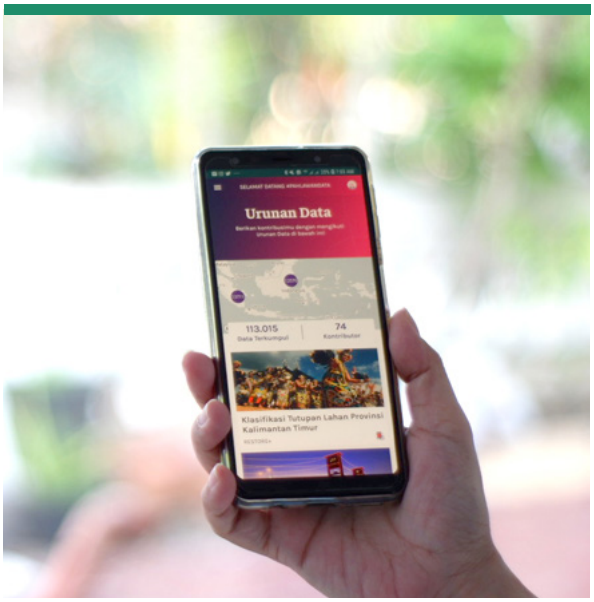
CEIA Indonesia is a coalition of public and private sector stakeholders initiated by Allotrope Partners, World Resources Institute (WRI) Indonesia, and the United States National Renewable Energy Laboratory (NREL) with a mission of encouraging the development of clean energy in Indonesia. In addition to Indonesia, CEIA employs innovative solutions to overcome barriers in scaling up clean energy distribution in Colombia, Vietnam, the Philippines, and Mexico.

FOREST AND LANDSCAPE

WRI Indonesia strives to achieve the vision of sustainably managed forests, which contribute to efforts in climate change mitigation and adaptation, improving people's welfare, and maintaining biodiversity. In particular, WRI Indonesia seeks to preserve existing forests and restore degraded forests and lands.

Forest and Land Use Monitoring

- WRI Indonesia launched a radar technology-based deforestation monitoring system. A coalition of eleven companies in the districts of Siak and Pelalawan in the Riau province has now been using WRI's latest deforestation monitoring system to ensure that their palm oil supply chains free from deforestation.
- The Provincial Government of Aceh has adopted the illegal logging monitoring system developed by WRI Indonesia. The "places-to-watch" methodology using satellite technology and custom filtering has been officially used by Gunung Leuser National Park and Forest Management Unit V, equipping them with a state-of-the-art system for monitoring one of Sumatra's most important ecosystems.
- The government has adopted the Peatland Ecosystem Restoration Information System (PRIMS Gambut) which is now equipped with a fire hazard rating system to further maximize the mitigation of peatland fires.
- The RESTORE+ consortium, which consists of WRI Indonesia, the Institute for Applied Systems Analysis (IIASA), the World Agroforestry Center (ICRAF), and WWF Indonesia supported forest and land restoration efforts in Indonesia by providing complete and credible data from the field to assist the policy making process related to forest and degraded land restoration in Indonesia. The data is collected in an inclusive manner using the Urundata mobile application. By the end of 2020, during the first phase of the campaign focusing on identifying changes in land cover, Urundata has carried out 21 campaign activities and established cooperation with 50 universities in Indonesia, amassed 1,058 contributors, and 4,410,415 data contributions. In November 2020, the Jelajah Nusantara (Jelantara) program for South Sumatra was launched. Jelantara is a crowdsource data collection activity to identify potential areas for land restoration. Jelantara program for East Kalimantan will be launched in early 2021.



One Map Policy

- WRI Indonesia supported the operationalization of Simojang, a Monitoring and Evaluation system for the National Geospatial Information Network (JIGN). The platform is managed by the Geospatial Information Agency (BIG) to monitor geoportals and evaluate policies, institutions, human resources, technology, and standards at network nodes in central and local governments. The system has also assisted in the online assessment for the 2020 Bhumandala Award (Geospatial Information System Award).
- Supported the updating of PetaKita, an application initiated by BIG for participatory mapping activities in the regions.
- Supported participatory mapping at the village level carried out through Student Community Outreach (KKN) Programsin collaboration with BIG, Universitas Riau, Kampar District Government, Universitas Sriwijaya, and Musi Banyuasin District Government. The activity produced thematic spatial data at the village level as well as modules for participatory mapping.
- Supported the Provincial Government of Riau in coordinating and organizing trainings related to the Implementation of One Map Policy's Geospatial Information Map for Oil Palm Plantation Licensing (ILOK and IUP), as part of the National Strategy for Corruption Prevention (Stranas PK) together with the Corruption Eradication Commission. The National Strategy for Corruption Prevention outlines the focus and targets of corruption prevention and is used as a reference for ministries, agencies, local governments and other stakeholders in implementing corruption prevention measures in Indonesia.

Agrarian Reform and Social Forestry

- WRI Indonesia supported the development of tenurial conflict resolution protocols compiled by the office of Deputy Minister of Agrarian Affairs and Spatial Planning and the Agrarian Reform Task Force as an initial step in developing the Tenurial Conflict Information System.
- Together with the Samdhana Institute, WRI Indonesia supported the Executive Office of the President (KSP) in drafting a Policy Paper on the Acceleration of Agrarian Reform and Social Forestry in Indonesia. The Working Paper contains recommendations for efforts to deal with tenurial conflicts, granting recognition of indigenous peoples, accelerating the designation of social forestry areas, agrarian reform, community oil palm management and the potential consequences of the Job Creation Law.

- Completed six Indigenous Forest Management Plans (RPHA) and three Business Development Plans for Non-Timber Forest Products (HHBK) and Ecosystem Services in the provinces of Riau and South Sumatra, which are part of the implementation of forest and land management upon recognition of Indigenous Forest status.
- In collaboration with the Papua Provincial Forestry Service, the Sarmi District Government, WWF Indonesia, the Limited Association for the Study and Empowerment of Indigenous Peoples (PT PPMA), and the Universitas Cendrawasih, WRI Indonesia has proposed an indigenous forest scheme in Sarmi District.
- Supported the initiation of an agroforestry program in the Tandun Village Forest in Riau as a model for implementing conflict resolution and efforts to restore forest land from oil palm plantation.
- Together with the Working Group for the Acceleration of Social Forestry, WRI Indonesia supported the South Sumatra Forestry Service in developing a Social Forestry Information System (SIPS) and database as a tool for monitoring and evaluating the progress social forestry implementation in South Sumatra.

Applying Sustainability Principles in Commodity Supply Chains and Business Practices

- WRI Indonesia facilitated the formulation of a joint engagement strategy involving a coalition of NGOs from Indonesia, Singapore and Malaysia to help small and medium-sized palm oil supply companies adopt deforestation-free commitments in their supply chains. This is an embodiment of WRI Indonesia's role as the host of the Accountability Framework Initiative Secretariat in Southeast Asia.
- Provided technical assistance to the Papua Province Regional Development Planning Agency (BAPPEDA) in reviewing the permits of 107 oil palm plantations. A review of the legality and spatial data aspects will be carried out as part of the follow-up recommendations. Another recommendation is to revoke inactive permits to save Papua's forests from future deforestation.
- Facilitated the Roundtable on Sustainable Palm Oil (RSPO) certification for hundreds of oil palm farmers in Riau Province.

CITIES AND TRANSPORTATION

WRI Indonesia strives to achieve a vision of livable cities by implementing climate change mitigation and adaptation strategies, particularly in the water, air pollution and waste sector.

Emission Reduction and Sequestration Initiative (EMISI)

EMISI is an app that helps its Indonesian users study, monitor, and participate in climate action.

- On Indonesia's Independence Day, August 17 2020, WRI Indonesia and partners launched the EMISI app to help individuals, communities, and/or institutions measure the carbon emissions and pollutants that they produce in order to reduce and support the sequestration of carbon footprints. EMISI uses a science and technology-based approach to help change the behavior and lifestyle of individuals and organizations in order to reduce the impact of emissions on the climate crisis.
- WRI Indonesia's partners in the environmental campaign organized an online seminar and a crowdfunding initiative that managed to raise IDR 330,000,000 to plant and care for 15,000 trees in Aceh, Jambi, West Kalimantan, and Jakarta, absorbing 1,500 tons of CO2e over the next 20 years.
- Facilitated online transportation companies and helped them adopt methods for calculating urban transport emissions at the individual level and implement carbon sequestration programs through tree planting based on Indonesians' individual trips.

Cities4Forests Initiative

Cities4Forests is a coalition of more than 65 cities around the world, including Jakarta, which aims to integrate urban forests, surrounding forests, and forests far from the cities into urban development programs and planning.

- The DKI Jakarta Provincial Government approved and adopted WRI Indonesia's recommendations for the final draft of the governor's regulation on trees and the governor's regulation on park design.
- Prepared tree cover maps and land cover maps through a participatory approach in Jakarta as a baseline for the implementation of the tree inventory and as input for strategies for developing and managing Green Open Spaces.
- Increased the institutional capacity of the provincial government and students through participatory mapping activities for 2020 tree cover maps and land cover maps.
- Assisted the City Park and Forestry Service of Jakarta in achieving the 2020 Regional Strategic Activity target by developing a tree inventory implementation method guideline, developing tree inventory platform features, and supporting the implementation of the manual digitalization process for tree crowns in five subdistricts.
- Organized a webinar on the importance of city parks with the City Park and Forestry Service of Jakarta, attended by the SCOs and the public.
- Campaigned on the importance of green open space for residents and the urban environment on the City Park and Forestry Service of Jakarta's social media

ENERGY

WRI Indonesia supports the effort to achieve energy security and emissions reduction targets by optimizing the renewable energy potentials and reducing dependence on coal, while encouraging energy efficiency efforts.

- **WRI Indonesia supported the procurement of renewable energy in corporations**
  - In collaboration with the State Electricity Company (PLN), WRI Indonesia launched the first national Renewable Energy Certificate (REC) (see: Our Major Milestone in 2020)
  - Partnered with Nike on a solar rooftop pilot project. Through the CEIA coalition, WRI Indonesia provided technical assistance to a Nike supplier in Indonesia in procuring solar rooftop vendors for factories in Indonesia. This process will be used as a case study to encourage the adoption of renewable energy use by the commercial and industrial sectors in Indonesia.

- **WRI Indonesia collaborated with the Bali Provincial Government to formulate an E-mobility strategy in Bali.**
  - Developed an acceleration task force for electric vehicle policy.
  - Implemented pilot projects and capacity building in the e-mobility planning module for provincial governments and private enterprises.

- **WRI Indonesia supported the green bond strategy for energy corporations.**
  - Developed an initial compatibility assessment method for electric utilities to access the green bond market.
  - Conducted an assessment of the green bond market for renewable energy projects in Indonesia.

CLIMATE

WRI Indonesia strives to ensure the transition to a low carbon economy by increasing emission reduction targets and implementing a long-term climate change strategy.

- **Low Carbon Development in Indonesia**
  WRI Indonesia supports low carbon development by conducting comprehensive research and analysis, building collaborations with partners at the local, national, and international levels, and coordinating with policymakers.
  - The Low Carbon Development Initiative (LCDI) was successfully integrated as a priority program in the National Target 6: "Building the environment, increasing disaster and climate change resilience" in the 2020-2024 National Medium Term Development Plan (RPJMN). For the first time ever, greenhouse gas (GHG) emission reduction was included as one of the indicators in the 2020-2024 RPJMN Macroeconomic Framework, along with other indicators such as economic growth, poverty reduction, Gini ratio, open unemployment rate, and human development index.
  - Supported the updating of the LCDI dynamics system model to integrate the impact of the COVID-19 pandemic on the economy and GHG emission reduction targets.
  - Supported the formulation of Build Back Better policy recommendations and efforts to increase more ambitious emission reduction targets through various studies, including study of food loss and waste, study of carbon taxes, regulatory impact assessments for carbon pricing policies, study related to final energy intensity targets, study of the interrelationship between biodiversity and climate change, as well as a study of green fiscal stimulus.
  - Supported communication and engagement efforts with a number of prominent persons to participate as LCDI Commissioners, in order to expand their reach at the national and international levels. The LCDI Commissioners include M. Jusuf Kalla (the 10th and 12th Vice President of Indonesia), M. Chatib Basri (economist and former Minister of Finance of the Republic of Indonesia), Shinta Kamdani (President of Indonesia Business Council for Sustainable Development) and Dyah Roro Esti Widya Putri (Green Economy Caucus; Indonesian House of Representatives).

- **Tracking and Strengthening Climate Action (TASCA)**
  Through the TASCA project, WRI Indonesia together with the University of Papua supported efforts to implement low carbon development in West Papua through modeling studies, training on modeling systems dynamics, and compiling a special module for West Papua on the Climate Watch Indonesia platform.
  - Together with the Environment Institute and the Indonesian Climate Change and Forestry Expert Network (APIKI), WRI Indonesia organized a webinar to increase understanding of climate ambition and Build Back Better.
  - Elaborated a study on West Papua's contribution to the achievement of its Nationally Determined Contribution from the land, forest, waste, and industrial sectors. The results of these studies have been presented in the International Symposium on Earth, Energy, Environment Science and Sustainable Development.

- Supported the University of Papua in conducting a study of the West Papua's contribution scenarios to support the achievement of a Nationally Determined Contribution through a system dynamics approach. WRI Indonesia also supported the capacity building of researchers at the University of Papua with regard to system dynamics skills. Furthermore, WRI Indonesia together with APIKI are preparing a journal on the Build Back Better scenarios in West Papua in relation to climate action at the provincial level. This journal is currently being submitted to the Forestry Policy Analysis Journal, managed by R&D division of KLHK.
- Together with five climate experts, WRI Indonesia conducted a study to explore opportunities for GHG reduction through a sectoral approach.

Partnership to Strengthen Transparency for Co-Innovation (PaSTI)

PaSTI aims to enhance innovative collaboration between stakeholders in order to strengthen transparency in the strategies to reduce greenhouse gas emissions and to improve ambitious climate action in Indonesia.

- Developed knowledge products such as practice notes on climate data transparency, economic analysis, and guidelines for implementing the One Gate Reporting System (OGReS)
- The technical working group, consisting of the Ministry of National Development Planning/BAPPENAS, the Ministry of Environment and Forestry, the Ministry of Energy and Mineral Resources, the Ministry of Industrial Affairs, business actors, and climate experts, has agreed on the early initiation in designing OGReS.
- Disseminated a number of research products to international audiences to increase the involvement and contribution of the international community to the PaSTI initiative.
- Launched the "Enhancing Data and Ambition Loops in Indonesia and Southeast Asia" initiative to support the recommendations of the PaSTI project, which focuses on applying science-based targets to business actors in Indonesia and Southeast Asia.

Food and Land Use (FOLU)

FOLU is a global initiative that works with partners to transform the world's food and land use systems through the development of science-based solutions and ambitious collective action.

- WRI Indonesia updated the Action Agenda draft to include the context of the COVID-19 pandemic and other supporting studies, including:
  - a study of the hidden costs of current food and land use systems;
  - study of business opportunities for the new food economy and land use;
  - study of the political economy of the current food and land use systems;
  - scenarios and market assessments for sustainable agriculture in the East Kalimantan landscape.
- Supported the national baseline calculation process, carried out by LCDI together with the Ministry of National Development Planning/ BAPPENAS, by developing a systematic review of the discussion and methodologies of food loss and waste in Indonesia, including the proposed baseline framework and loss hotspots.
- Supported the West Papua Food Security Advisory Committee as a follow-up to the food security study conducted in the first phase.
- Engaged with practitioners and observers in health and nutrition issues by organizing the webinar "Transforming Food Systems and Land Use in Indonesia to Fulfill Nutritional and Health Needs for All" with the Faculty of Medicine, University of Indonesia. This activity also marked the transition to Phase Two of FOLU Indonesia.
- Supported FOLU partners, including the Global Alliance for Improved Nutrition (GAIN) in organizing the webinar "Reducing Food Loss and Waste during COVID-19", and The Jakarta Post and the Surplus Community in organizing the webinar "A Sustainable Future for Food" on World Food Day.
- Collaborated with partners in discussions and independent dialogues on the Indonesian food system to gain input from civil society organizations in preparation for Indonesia's entry for the 2021 UN Food System Summit.
- Participated in dialogues on food systems led by the Directorate of Food and Agriculture, Ministry of National Development Planning/ BAPPENAS, presenting findings from analyses and studies.

OCEAN

WRI Indonesia strives to create healthy and productive seas by preserving marine ecosystems, increasing fisheries productivity, and improving the lives of coastal communities.

National Plastics Action Partnership (NPAP)

NPAP is a multi-stakeholder collaboration that aims to reduce 70 percent of plastic waste in Indonesia's oceans by 2025 and 100 percent of plastic waste by 2040.

- Launched a multi-stakeholder action plan containing key recommendations to address marine plastic waste, and appointed co-chairs for the five Indonesian NPAP task forces and encouraged them to be actively involved.
- Developed a design activity strategy for the Indonesian NPAP Task Force.
- Participated as one of the panelists in *Blue Hope*, a webinar on plastic waste organized by the British Government in Malaysia.
- Developed strategies and guidelines to ensure gender responsive action in the effort to eliminate plastic waste.

Natural Capital Accounting for Coastal Ecosystem (NCA)

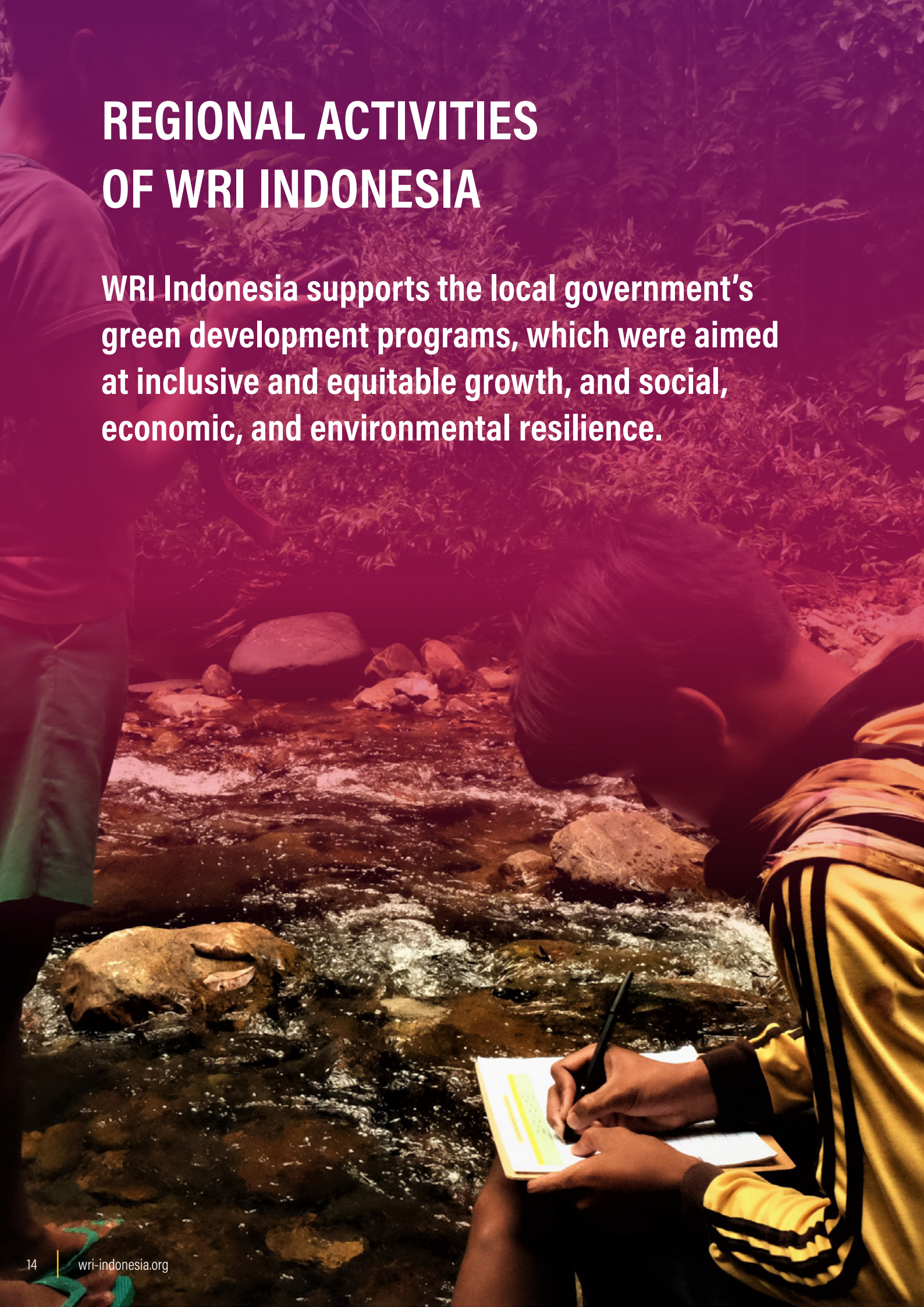
NCA is an activity that supports the management of coastal ecosystems based on scientific data, and supports the sustainable development agenda and blue carbon in Indonesia.

- Developed technical analyses, database, and policy briefs on coastal ecosystems (mangroves, seagrass, and coral reefs) and coastal spatial planning at national and subnational levels, with support from the World Bank. The findings were presented to various stakeholders, including the Ministry of Marine Affairs and Fisheries.
- Participated as a panelist of *Ocean Accounts, Data and Statistics* in the Asia-Pacific Day of the Oceans event held in October 2020 by the United Nations Economic and Social Commission for Asia and the Pacific. In addition, WRI Indonesia became a member of the Global Ocean Accounts Partnership, a collaborative partnership at the global level in supporting activities related to the development of a coastal ecosystem scale.
- Developed knowledge products on mangrove management and coastal ecosystem services, including coastal ecotourism.

- **Trenlaut Platform and Report for Trends in Marine Resources and Fisheries Management in Indonesia**
  Trenlaut is a platform that provides information concerning data and analyses of marine resources and fisheries management, aimed at supporting evidence-based decision making and encouraging collaboration across partners.
  - ☐ Consulted with experts who are also WRI Indonesia's partners in the production process for final analysis reports and platforms on capture fisheries, aquaculture, and management of marine conservation areas and important coastal ecosystems (mangrove forests, seagrass beds and coral reefs).
  - ☐ WRI Indonesia received input from the Advisory Forum which, which are the decision-makers, including government officials and senior colleagues from partner organizations for the final results of the analysis and its political aspects.
  - ☐ WRI Indonesia is at the final stage of the improvement process for the report "Trends in Marine Resources and Fisheries Management in Indonesia: A 2021 Brief ", for immediate dissemination on the http://trenlaut.id platform.
  - ☐ Participated in discussions regarding sustainable fisheries management, with the support of analysis and lessons learned from the report results.
  - ☐ Developed communication products to disseminate the report's perspective on management and policy, in the form of blog posts and social media campaigns.

REGIONAL ACTIVITIES OF WRI INDONESIA

WRI Indonesia supports the local government's green development programs, which were aimed at inclusive and equitable growth, and social, economic, and environmental resilience.



I. RIAU PROVINCE

Encouraging the Implementation of One Map at the Site Level

- Collaborated with the Riau University's Geospatial Information Infrastructure Development Center (PPIIG) in providing assistance and strengthening of the Regional Geospatial Information Network (JIGD) in Riau Province, by strengthening capacity in spatial data processing and formulating policies and standards, as well as the Governor's Regulation on One Data.
- Together with BIG, WRI Indonesia supported the formation and strengthening regional geospatial information network in Kampar District, by increasing the capacity of the JIGD team in spatial and geoportal data processing, strengthening other spatial data infrastructure, and revising the Regent's Regulation on One Data.
- Supported the capacity building of the JIGD team in standardizing spatial data according to the Indonesian National Standard and the Catalog of Indonesian Geographical Elements in Siak District.

Participatory Mapping through Thematic Student Community Outreach (KKN) Programs

- Together with PPIIG, Riau University, the Siak District Government, and BIG, WRI Indonesia completed the participatory mapping through a Thematic Student Community Outreach (KKN) Program that began in 2019. This activity resulted in a village map and a village participatory mapping module.
- Together with PPIIG, University of Riau, WRI Indonesia replicated the participatory mapping through a Student Community Outreach Program (KKN) for Kampar District.

Transformation of Conflict in Natural Resource Management

- WRI Indonesia supported the formulation of conflict resolution policies and standards that have been formalized by the head of the Suligi Batu Gajah Forest Management Unit (KPH).
- In collaboration with the Riau Province Forestry Education and Training Center, WRI Indonesia supported the human resource development of the conflict handling working group.
- Supported efforts to propose a Tandun Village Forest permit that has gone through technical verification by the Ministry of Environment and Forestry (KLHK). The issue of territorial boundaries with Kabun District has also been resolved through a mutual agreement between the two subdistrict heads.
- Supported various capacity building activities for strengthening institutional management, conflict resolution, and agroforestry cultivation in the Tandun Village Forest Management Institute. By the end of 2020, over 40,000 seedlings had been collected in the nursery as a form of support from the Riau Province Environment Office, BPDAS Indragiri Rokan, and WRI Indonesia. Some of the seeds had been planted in the demonstration plot area and farmers' gardens. The Tandun Village Government is committed to supporting agroforestry activities and other activities contained in the Tandun Village Forest Management Plan (RPHD) and these activities will also be included in the upcoming Tandun Village Medium-Term Management Plan.

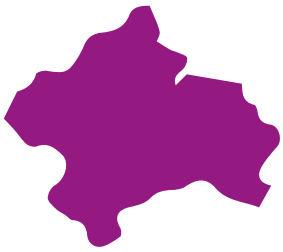
Recognition and Sustainable Management of Customary (Forest) Areas

- Assisted seven customary forests in Kampar District in the process of obtaining a Recognition Decree from the district head, two of which had received permits from the Ministry of Environment and Forestry. To ensure sustainable customary forest management, WRI Indonesia facilitated the preparation of an Customary Forest Management Plan (RPHA) in six customary/village forests using a participatory approach.
- Built livelihood development initiatives in six customary forest areas as a follow-up. Three initiatives that are currently ongoing include:
  - Pandan woven handicraft business in four villages in Kampar Kiri Hulu (Batu Sanggan, Gajah Bertalut, Aur Kuning, and Terusan). The Indigenous Women Craftsmen Group (KPPA) had been formed, and capacity building in processing and manufacturing products had also been carried out. The four groups had obtained Business Identification Number (NIB) and micro and small enterprise licenses.
  - Kelulut Honey (Trigona) cultivation in Petapahan and Kampa. The Traditional Forest Management Institute in Kampa and women's group in Petapahan had received cultivation training. Both groups had registered to obtain business licenses from the relevant agencies.
  - Tree adoption efforts in two villages in the Kampar Kanan area (Petapahan and Kampa) and two villages in the Kampar Kiri Hulu area (Gajah Bertalut and Terusan). An introduction to the foster tree business model and a brief training on tree inventory have been carried out. Currently, an average of 40 trees per village with specific criteria have been inventoried in four indigenous forest locations.
- In collaboration with the Riau Province Environment and Forestry Service, the Riau Malay Customary Institution (LAM), and other local counterparts, WRI Indonesia supported the proposal for recognition of several indigenous forests in Siak, Bengkalis, and Pelalawan districts. By the end of 2020, the proposals for Siak and Bengkalis districts were ready to be submitted to the district head and governor.

Encouraging the Transformation of Sustainable Smallholder Plantation Management

- Assisted four smallholder palm oil groups/cooperatives in meeting the standards of sustainable palm oil plantation management in accordance with the Roundtable Sustainable Palm Oil (RSPO) for Independent Smallholders (ISH) Standard. In Siak District, two assisted groups had passed external audits and were the first two independent smallholder groups in the world to have successfully obtained RSPO certification on peatlands. Meanwhile, two groups in Rokan Hulu District were making various improvements in response to the findings of the second phase of the external audit.

II. SOUTH SUMATRA PROVINCE



Encouraging the Implementation of One Map at the Site Level

- Assisted the JIGD team of South Sumatra Province and Musi Banyuasin District in preparation for the 2020 Bhumandala Award. South Sumatra Province received two awards, a Bhumandala Kencana in the best regional network utilization category, and a Bhumandala Kanaka in the best regional network category. Musi Banyuasin District received Bhumandala Rajata in the best district network category.
- Together with the South Sumatra DAS Forum, WRI Indonesia supported the Forestry Office in developing a Forest and Land Fire Monitoring Information System (SI PAKAR HUTAN). This online-based system aims to showcase data and information sourced from credible data trustees, to be used in an open and measurable manner to support monitoring, analysis, and decision-making processes by stakeholders at the provincial and district levels, as well as personnel of forest and land fires control at site level.

Participatory Mapping through Thematic Student Community Outreach (KKN) Programs

- In collaboration with Sriwijaya University and the Government of Musi Banyuasin District, WRI Indonesia supported participatory mapping of village boundaries and potentials through the Student Community Outreach (KKN) Program. By the end of 2020, several stages had been completed, including: preparation of workflows and methods; building students' capacity in Geographical Information Systems and the technical aspect of Participatory Mapping of Village Boundaries and Potentials (PPBPD); verification of village boundaries and potentials segments, and; assistance in processing verification results.

Transformation of Conflict in Natural Resource Management

- Together with the Working Group for the Acceleration of Social Forestry and the Forestry Office of South Sumatra Province, WRI Indonesia initiated the development of an Information System for Conflict of Tenure and Customary Forest Mapping (SI-PAKTHA). By the end of 2020, the formulation of parameters and variables, and methods of determining priority in conflict handling, and the development of system designs had been carried out.

Encouraging the Transformation of Sustainable Smallholder Plantation Management

- Facilitated the development of a strategic land cover and plantation automation platform using Google Earth Engine (GEE). By the end of 2020, the process of finalizing and refining the results of the mapping and automation platform was still ongoing.
- Supported the mapping of plantation parcels/ Cultivation Registration Certificate (STDB) in Musi Banyuasin District, through the use of information technology both using E-STDB and mobile STDB. The STDB mobile application was tested in December 2020 and officially launched by the district head.

Recognition and Sustainable Management of Customary (Forest) Areas and Social Forestry

- Facilitated the Tebat Benawa indigenous community in preparing a Customary Forest Management Plan (RPHA). In November 2020, the 2021-2030 Mude Ayek Tebat Benawa RPHA was successfully finalized and presented to the local government in a workshop. The RPHA had been formalized by the

Chairperson of the Customary Forest Management Institute (LPHA), the Head of FMU Region X Dempo, and the Forestry Office of South Sumatra Province. In this event, the Minister of Environment and Forestry's Decree on Indigenous Forest Communities (MHA) and Mude Ayek Tebat Benawa Customary Forest was also handed over.

- Provided assistance to LPHA Tebat Benawa, through capacity building in administrative management and institutional assets, as well as business and entrepreneurship development. In addition, WRI Indonesia also assisted the LPHA in the formulation of the articles of association and bylaws (AD/ART) and the development of livelihood initiatives in the form of:
  - Foster trees in the Tebat Benawa Customary Forest. The Tebat Benawa Indigenous Community had received capacity building to identify prospective foster trees and carried out independent data collection for trees with a diameter of more than 30 centimeters.
  - Development of tourist villages in Tebat Benawa and Rempasai. LPHA had registered Tebat Benawa and Rempasai for the Tourism Village program in December 2020. Two representatives from the LPHA and the organizers of the village tourism program had participated in the training organized by the City's Pagar Alam Tourism Office.
- Together with the South Sumatra Social Forestry Acceleration Working Group, WRI Indonesia initiated the development of the Social Forestry Database and Information System (SIPS). The system's design framework had been prepared and consulted with the South Sumatra Provincial Forestry Office.

III. PAPUA AND WEST PAPUA PROVINCES

Implementation of the One Map Initiative at the Site Level

- Collaborated with the Public Works and Public Housing Office of West Papua Province in the accelerated implementation of the One Map policy in institutional and human resource development.
- Facilitated consultation processes between the West Papua government, the Papua government and BIG, BAPPENAS, and the Coordinating Ministry for Economic Affairs for the One Data policy.
- Collaborated with the South Manokwari District Government in the formulation of a One Data policy.
- Supported institutional and human resource development at PPIIG University of Papua and University of Cendrawasih.

Mapping of Indigenous Territories and Conflict Transformation

- Together with the Limited Association for the Study and Empowerment of Indigenous Peoples, the Participatory Mapping Network, the Papuan NGOs Cooperation Forum (Foker), and the Ancestral Domain Registration Agency (BRWA), WRI Indonesia supported the mapping of the indigenous territories of Bhuyaka, Jayapura District. By the end of 2020, the mapping of indigenous territories had been completed in 28 villages in Jayapura District.
- Facilitated the technical team for MHA and regional verification to resolve the overlapping of spatial data on the customary area of Isirawa, Sarmi District, and in the administrative process for proposing a customary forest. This process received full support from the Papua Province Forestry Office and the District Head of Sarmi District.
- Supported the Jayapura District Indigenous Peoples Task Force in formulating policies and standards, developing institutions and human resources, and improving the quality of conflict resolution and registration of indigenous territories. A Cooperation Agreement between the Jayapura District Government and the Regional Office of Ministry of Land and Spatial Planning/ National Land Agency (ATR/BPN) to develop a registration process and accelerate the mapping of indigenous territories had been issued.
- Together with the University of Cendrawasih, the University of Papua, and the University of Ottow Geissler, WRI Indonesia supported the initiative to establish a Spatial Planning School or Geospatial Information System youth research group in order to improve the quality of human resources for mapping indigenous territories.
- Presented the learning process of participatory mapping of indigenous territories as a form of agrarian reform in the Papuan context to the Deputy Minister of ATR/BPN and the President of the Republic of Indonesia. One of the important stages in the implementation of agrarian reform in Papua was the social mapping of the indigenous Papuan peoples (274 tribes) and the mapping of indigenous territories.
- Encouraged recognition, protection, and advancement of indigenous peoples and territories, through a number of policy studies on indigenous territories in Papua and West Papua, including:
  - A study on special autonomy and the rights of indigenous Papuans to natural resources

- A study on indigenous Papuan women and their rights to their indigenous territories and natural resources
- A policy and institutional study on the recognition and protection of the rights of indigenous peoples and territories in the Land of Papua

- Together with development partners, WRI Indonesia supported the acceleration of the thematic maps of indigenous territories in West Papua Province through the consolidation of the results of participatory mapping of indigenous territories with an area of 3.7 million hectares.
- Together with the University of Cendrawasih and the University of Papua, WRI Indonesia invited young Papuan researchers to contribute to the process of documenting the tenurial dynamics in indigenous territories through a call-for-essay activity. Out of 26 studies that were submitted, 6 of which were selected as best studies. This documentation activity served as a baseline for WRI Indonesia to understand the mechanisms for resolving conflicts in customary areas based on local wisdom.

Encouraging the Transformation of Sustainable Smallholder Plantation Management

- Supporting the Plantation Office of South Manokwari District and Jayapura District for smallholder cocoa plantation surveys. The survey in Jayapura Regency was carried out across 13 villages in the districts of South Gresi, Yapsi, and Kaureh, with a total plantation area of 545.57 hectares. Meanwhile in South Manokwari District, the survey was conducted in six subdistricts—Oransbari, Ransiki, Momiwaren, Tahota, Isim, and Neney—with a total plantation area of 2,207.2 hectares.
- Supported the Manokwari and Jayapura District Plantation Offices in developing human resources to improve the quality of spatial data and information. The independent cocoa plantation survey was intended to produce thematic maps of smallholder plantations, build a useful database platform for local governments in planning sustainable plantation land management, and facilitate assistance to smallholders.
- Conducted a cocoa value chain study in South Manokwari District, West Papua. WRI Indonesia, in collaboration with the Mnukwar Papua organization, had carried out tracing of cocoa produced from farmers' farms, starting from mapping farmers' farms, the cocoa produced, to the cocoa sold. The results of this study provided an illustration of the decreasing productivity of cacao produced by smallholder farms due to poor farming patterns and maintenance, as well as limited access to marketing support.

Analysis of Oil Palm Plantation Licensing

Throughout 2020, WRI Indonesia provided technical assistance in legal and spatial analysis to the Papua Provincial Government to carry out an inventory, an analysis of land-based permits especially for licenses for large oil palm plantations, and an audit of permit holders' compliance. This activity was in line with the National Strategy for Corruption Prevention (Stranas PK) by the Corruption Eradication Commission. This licensing review was aimed at structuring, supervising, and controlling oil palm plantation permits in order to realize good licensing governance in Papua Province. Eight priority districts includes Jayapura, Sarmi, Kerom, Boven Digoel, Merauke, Mappi, and Nabire. By the end of 2020, a total of 114 licenses were identified, including for 70 palm oil companies, 20 non-palm oil companies, and 24 plantation companies, whose commodities were not identified. ILOK data identified the plantation permit concession area had reached 1,137,323 hectares, while according to IUP data, it had reached 952,132 hectares, Meanwhile, land use rights (HGU) data showed that the area had reached 306,749 hectares.

Learning Circles in Papua and Relevant Research

- Approximately 18 online Papua Learning Circles (LBTP) were organized virtually, and they were attended by 1,000 participants. LBTP themes were in line with the framework of WRI Indonesia in Papua.
- WRI Indonesia, in collaboration with the University of Cendrawasih and the Papua Province BAPPEDA, conducted a research to produce an academic paper proposing a policy plan for developing environmental funding, particularly in protecting and preserving Papua's tropical forests.
- WRI Indonesia was involved in the Preparation of Academic Draft Commitment of 70 Percent of the Land Area of West Papua Province as a Protected Area. This research was an implementation of the cooperation agreement between WRI Indonesia and Balitbang Papua Province. The team also consisted of partners from the Bogor Agricultural Institute, the University of Papua, and relevant agencies. By the end of 2020, a literature review had been carried out on existing initiatives related to biodiversity, spatial, economic and socio-cultural aspects of the indigenous Papuan people.

RESEARCH, DATA AND INNOVATIONS

WRI Indonesia supports quality research based on scientific evidence, that contributes to strengthening the research culture in Indonesia.

The Research, Data, and Innovation (RDI) Division plays one of the most important roles in WRI Indonesia; it ensures all knowledge products produced by WRI Indonesia have gone through a rigorous peer review process, and engages internal and external experts to ensure quality, accuracy, institutional coherence and minimize research bias. Throughout 2020, the WRI Indonesia RDI Team has published over ten publications including two book chapters, three articles for international journals, and six knowledge products such as studies and technical notes.

- Key Activities:
  - Carried out policy analysis on three topics: (1) Implementation of Sustainable Provinces in West Papua: A Multidisciplinary Study; (2) Literature review of Sustainable Financing; and (3) Desk study on the suitability of Jayapura to become a Forest City.
  - Conducted research roadshows to increase research capacity at WRI Indonesia offices (Jakarta, Pekanbaru, Palembang, and Manokwari), whereas before only the Jakarta office received capacity building for research. Seizing the momentum of the arrival of one of WRI Global's Director of Science and Research (S&R), this activity also reached out to WRI Indonesia staff at the regional offices. Moreover, activities in these areas were WRI Indonesia's "research laboratories", therefore it was only fitting that WRI Indonesia's staff in the regional offices received knowledge transfer on the general standards of conducting research at WRI.
  - Conducted research seminars/discussions to present the research results of WRI Indonesia staff and to get input from both WRI Global S&R and fellow researchers. These activities are essential to achieve synergy between projects, in order to make room for new collaborations. Sessions like these were held six times a year; they covered a variety of topics and also invited speakers from outside the WRI Indonesia organization, such as Dr. Faisal Basri and Prof. Budi Resosudarmo. In addition, WRI researchers had also presented their research results at several conferences, such as the *World Bank Poverty Conference, International Peat Congress*, and the *Indonesia Regional Science Association*.
  - Writing workshop
    The purpose of this event is to hone the writing skills of WRI Indonesia researchers. In this event, we invited a number of facilitators from the University of Indonesia who had published many scientific publications in national and international journals. At the end of the workshop, participants had prepared a draft manuscript that was ready to be included in scientific journals or other knowledge products of WRI Indonesia.
  - Publication
    - Technical Note: Indonesia Zero Emissions Application (EMISI), October 2020

This note elaborates on the methods used in the EMISSION application to calculate individual level greenhouse gas (GHG) emissions and air pollutants from transportation activities and proposes the required carbon sequestration through reforestation and afforestation.

- Working Paper - Looking Past the Horizon: the Case for Indonesia's Long-Term Strategy for Climate Action, March 2020.

This paper provides an initial overview of the benefits and urgency of establishing a long-term strategy (PGS) for climate action in Indonesia, and highlights current opportunities for effective strategy development.

- Three articles in international journals:
  - *Designing the Special Pilot Economic Zone: An Alternative Approach to Revitalize Livelihoods on Peatlands;*
  - *Progress of paludiculture projects in supporting peatland ecosystem restoration in Indonesia*
  - *Risk Governance of Peatland Management in Indonesia*

COALITIONS AND COLLABORATIONS

Accountability Framework Initiative (AFi)

AFi is a product of collaboration by businesses and civil society organizations to accelerate increased accountability in the supply chain. AFi, which was launched in mid-2019, provides clear, consistent, and effective guidance to bring about increased accountability in the commitment to achieve environmentally and socially responsible supply chains.

Clean Energy Investment Accelerator (CEIA) Indonesia

CEIA Indonesia is a coalition of public and private sectors initiated by Allotrope Partners, the World Resources Institute, and U.S. National Renewable Energy Laboratory (NREL) to encourage the development of new and renewable energy in the commercial and industrial sectors in Indonesia.

Food and Land Use Coalition (FOLU)

Food and Land Use Coalition (FOLU) is a global initiative that seeks to leverage collaboration to improve the global food and land use system. Indonesia is one of the countries leading this initiative, along with Colombia, Ethiopia, China, India, Australia, the Nordic countries, and the United Kingdom. In Indonesia, the FOLU initiative is led by the Ministry of National Development Planning Agency (BAPPENAS). The four major transitions that are the focus of the FOLU coalition in Indonesia are healthy eating patterns, productive and regenerative agriculture, nature conservation and restoration, and healthier and more productive ocean.

Indonesian Conservation Alliance (AKSI)

Founded in 2015 under its previous name Indonesian Conservation Communication Forum (FKKI), the Indonesian Conservation Alliance (AKSI) is a discussion forum comprising of nine civil society organizations engaged in nature conservation and sustainable development.

Low Carbon Development Indonesia (LCDI)

The Indonesian Low Carbon Development Initiative (LCDI), led by the Ministry of National Development Planning (BAPPENAS), analyzes various development policy options that can increase economic growth and reduce greenhouse gas emissions. Findings from the low carbon development analysis have been incorporated into the 2020-2024 National Mid-Term Development Plan (RPJMN) to ensure that Indonesia's development direction has taken into account the environment's capacity and constraints.

Pantau Gambut

Pantau Gambut is an online platform that aims to raise awareness on the importance of peatland protection and monitor the progress of peatland ecosystem restoration activities and commitments undertaken by the government, civil society organizations, and businesses in Indonesia. In carrying out its activities, *Pantau Gambut* is supported by various organizations across eight provinces in Indonesia.

South Sumatra Social Forestry Acceleration Working Group (Pokja PPS)

Pokja PPS consists of stakeholders from the local government, academics, civil society organizations, Forest Management Units (KPH), and businesses. South Sumatra Pokja PPS has facilitated Social Forestry proposals and licensing as well as provided input on suitable crops and business plans, supported capacity building for smallholder groups and social forestry businesses, verified technical requirements in social forestry proposals, and supported conflict resolution through forestry partnership.

Konsorsium Perencanaan Restorasi Gambut Sumatra Selatan (KPRGSS)

South Sumatra Peatland Restoration Planning Consortium (KPRGSS)

WRI Indonesia is affiliated with the KPRGSS Consortium together with the World Agroforestry Center (ICRAF) and Wetlands International Indonesia. This consortium was established to help formulate peatland restoration plans in South Sumatra that is based on science, tailored to actual situations in the field, and involves local stakeholders. KPRGSS has completed the 2018-2023 South Sumatra Peat Ecosystem Restoration Plan (RREG) and the 2019 Annual Action Plan (RTT) for peat restoration, covering six Peat Hydrological Units (KHG) in the province.

Sustainable District Association (LTKL)

LTKL is a forum that facilitates support for district governments from a network of national and global development partners, including civil society, academics, and the private sector in order to achieve sustainable development. LTKL supports development agenda at the district level to ensure a balance of economic, social, and environmental aspects.

The RESTORE+ Consortium

RESTORE + is an initiative by the International Institute for Applied Systems Analysis (IIASA) involving the World Agroforestry Center (ICRAF), WRI Indonesia, and WWF Indonesia. RESTORE + examines landscape restoration policy options that can simultaneously address concerns related to environmental, food, energy security and sustainable land use issues. RESTORE + in Indonesia developed the Urundata mobile application as a data collection platform to assist in developing restoration plans.

Peatland Restoration Information and Management System (PRIMS)

The PRIMS Gambut Team organized the event Journalism Fellowship, in collaboration with Alliance of Independent Journalist (AJI) Jakarta. This event was targeted for journalists all over Indonesia; 10 of them received the fellowship. The outcome of this activity was 15 in-depth reports on peatlands in six provinces, using data from the PRIMS Gambut platform. These reports had been published in various mass media publications including Detik.com, the Jakarta Post, Mongabay Indonesia, and Liputan6.com.

Sustainable Use of Peatland and Haze Mitigation in ASEAN (SUPA)

The SUPA program, an initiative funded by the European Union, aims to support ASEAN Peatland Management Strategy (APMS) through collective actions and enhanced cooperation among Non-State Actors (NSA) to improve sustainable peatland management. As an initial step, the consortium consisting of WRI Indonesia, the Tropical Rainforest Conservation & Research Center, and the Green Trade Initiative, successfully conducted a series of virtual conferences along with Non-State Actors (NSA) from eight Southeast Asian countries.

OPERATIONS AND FINANCE

The trust of our partners and supporters is invaluable to our work in WRI Indonesia. In 2020, we received funding from foreign governments and independent philanthropic organizations. One hundred percent of our revenue was allocated directly to support WRI Indonesia's mission. To maintain our credibility and effectiveness, our revenues and expenditures are reviewed regularly by professional auditors. Our auditors certified that WRI Indonesia allocates funds and resources effectively and efficiently to achieve our mission.

Consolidated Financial Statements
*FY2020 (Jan. 1 to Dec. 31, 2020) with comparison to FY2019
*In IDR 000,000s

SOURCES OF OPERATING FUNDS	FY 2020	FY 2019
Grants/Contributions	12,548	198,030
Total	**12,548**	**198,030**

EXPENSES	FY 2020	FY 2019
Program Activities	77,593	82,021
General Administration	6,887	12,071
Development		
Total	**84,480**	**94,091**

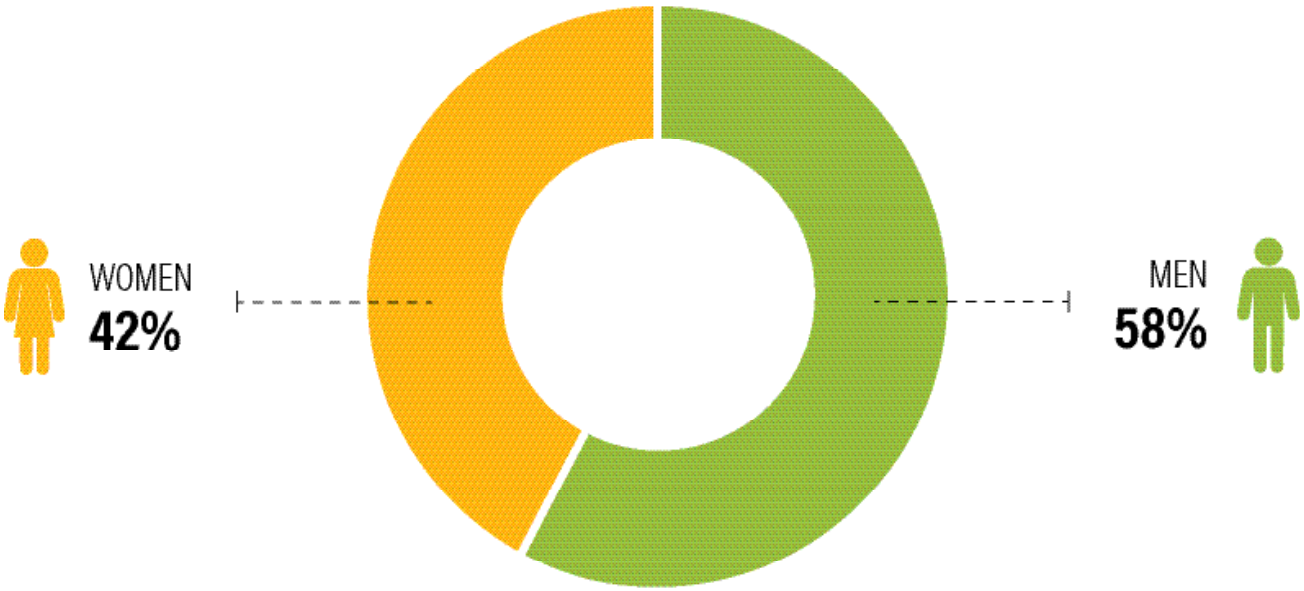
NET ASSETS	FY 2020	FY 2019
Beginning of year net assets	204,724	100,785
Change in Operating Net Assets	-26,621	3,758
Change in Fixed Net Assets	-45,310	100,181
Total Change in Net Assets	-71,931	103,939
Ending Net Asset	**132,793**	**204,724**

Details of Program Revenue and Expenditure

REVENUE	FY 2020		FY 2019	
Philanthropic Organizations	22%	2,773	2%	4,148
Foreign Governments	78%	9,726	98%	193,845
Other Revenues	0%	49	0%	37
Total Revenue	**100%**	**12,548**	**100%**	**198,030**

EXPENDITURE	FY 2020		FY 2019	
Food, Forest, and Water	76%	64,327	73%	69,014
Climate	12%	10,103	9%	8,528
Energy	2%	2,110	2%	2,345
Strategy/ Administration	1%	682	1%	958
Cities & Transport	0%	371	1%	1,176
Operations	8%	6,887	13%	12,071
Total Expenditure	**100%**	**84,480**	**100%**	**94,091**

Staff members in 2020: **227**
Gender composition: Men: **132 (58%)**, Women: **95 (42%)**



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