October 23, 2024

Urgent concerns regarding the Bank's continued support for major hydropower dams

Dear World Bank Senior Leadership and Executive Directors,

We are writing to express our collective alarm at the notable surge in proposed and recent World Bank support for extensive hydropower development. Specifically, we take this opportunity to highlight urgent concerns surrounding proposed financing for the Rogun dam in Tajikistan, the Upper Arun dam in Nepal, and the Inga Hydroelectric scheme in the Democratic Republic of the Congo (DRC). Facilitating the expansion of hydropower projects at this time fails to take into account lessons learned from the Bank's own past project evaluations in the sector as well as the track record of grievances from affected communities. It also lacks consideration for environmental realities of the climate crisis and the ample availability of lower-impact, lower-cost energy options.

More broadly, we firmly assert that the hydropower projects in the World Bank Group's project pipeline and recent portfolio will not bring the reliable, environmentally sustainable, affordable, accessible electricity needed to meet pressing energy needs. In the midst of extreme weather events and global heating leading to drying riverbeds, there is no sound basis for categorizing hydropower dams as climate mitigation or adaptation. As outlined below, we urge you to **proactively commit to steering new financing away from expanding utility-scale hydropower dams** (including technical assistance, bonds, equities, financial intermediaries or direct financing) and to **ensure redress and remedy for those who have faced dispossession or other harms due to World Bank Group-supported projects**.

Reconsider Funding for Proposed Projects

I. Rogun Hydropower Project, Tajikistan (Proposed Support: $2.9 billion)

For over a year, civil society groups have consistently raised serious concerns about the ways in which the Rogun Hydropower Project will irreparably harm the livelihoods of tens of thousands of people and vast stretches of riparian ecologies, violating the Bank's own environmental and social standards. Located on a tributary of the transboundary Amu-Darya river basin, Rogun would be the world's tallest dam and impound 13.3km^3 of water. It would displace an estimated 60,000 people in Tajikistan, destroy critical habitats for endangered species and an area of tugay forest floodplains declared as a UNESCO World Heritage site, as well as lead to serious dewatering downstream affecting riparian communities in downstream countries. Construction began in the 1970s and has repeatedly stalled, including due to a serious lack of structural stability and unforeseen cost overruns. With a conservative price tag of over US $11 billion (with at least US$6 billion estimated to be required for completion). Rogun would rank among the costliest dams ever built and by far the largest dam the Bank will have supported in decades. Rogun's construction and reservoir filling is projected to take at least another 15 years; in the meantime, other renewable options for generating electricity sourced

from solar and wind are already cheaper and readily available. By the time Rogun is complete, the cost of its electricity will be significantly more expensive than readily available alternatives, even before factoring in the high likelihood of continued cost overruns that already undermine the project's economic viability as well as the likely impacts that climate change will have on Rogun's output. In the short-term, there remain significant risks, cited by the IMF, that the costs of constructing Rogun could lead to an unsustainable debt burden while preventing needed public investments in other sectors, including health and education. Meanwhile, Rogun has been already associated with human rights violations (documented for instance, by Human Rights Watch in 2014) and, given extremely restricted civic space in Tajikistan, civil society groups cannot raise questions about the project, let alone monitor its development and impacts without risking reprisals.

II. Upper Arun Dam, Nepal (Proposed support: $1.65 billion)

The Upper Arun dam is proposed as part of a cascade of five dams in a remote mountainous area in Nepal about 10km from the border with China, directly causing forcible physical, cultural and economic dislocation of close to 2000 Indigenous Peoples from their ancestral lands and from the Arun River, which is central to their identity. Meanwhile, the required blasting of fragile ecological areas around the Makalu Barun National Park, which includes major tunneling for a water diversion channel, will have irreversible impacts on endangered and vulnerable species, such as the Himalayan red panda, Himalayan black bear and clouded leopard. As the dam scheme will function on a peaking basis, water levels will fluctuate without warning, raising safety risks for those living downstream as well as their livestock, while also having serious consequences for aquatic life, which are particularly vulnerable to sudden changes in water flow. Significantly, the project is also extremely risky given current climate change-related trends, as the dam would be susceptible to glacial lake outburst floods, which are becoming more frequent in the midst of the climate crisis and have already led to dams overtopping and collapsing in the Himalayan region. Upper Arun's design also means its ability to generate power is extremely dependent on consistent flows, at a time when climate change-induced variability has significantly disrupted Nepal's hydropower generation.

III. Inga Hydropower Scheme (Proposed Support: Undisclosed)

The proposed Inga Dam on the Congo River in the Democratic Republic of Congo (DRC) entails a significant number of risks: Inga 3's reservoir alone would displace over 30,000 people, flooding over 30 villages in the territories of Seke-Banza, Luozi and Songololo leading to loss of land and livelihood. Many of the families impacted will be forcibly relocated for a second time, having already experienced economic, social and cultural dislocation a generation earlier by the building of Inga 1 and 2 in the 1970s and '80s, inflicting intergenerational harms. The communities have been living in limbo for years, uncertain of their fate, as plans for the Grand Inga project - a sequence of up to eight major dams - consistently change.

Over this time, different financiers, construction firms and prospective power offtaking entities have announced intentions to be involved and then subsequently stepped out. Most notably, the

World Bank canceled its support for the project in 2016 due to considerable governance-related concerns.

In the past two years, the Inga site was proposed as part of a scheme to generate hydrogen for export to Germany – a deal which has since collapsed. The fixation on developing Inga in spite of its severe challenges has also stunted progress on more modest-sized and realistic proposals for energy generation that could meaningfully address persistent energy poverty in the DRC. Depending on the size and scale of the project, Inga 3 would solely require billions of dollars in financing, with a conservative estimate of US $14 billion for the first phase alone. An earlier assessment found that Inga represents a major threat to the DRC's debt burden, while investing in the project would constitute a massive opportunity cost that would reduce investment in other critical sectors.

At the same time, civil society has little confidence that the revenues generated by the project would be used towards services, programs and infrastructure required to address existing economic disparities. Under most scenarios, Inga's power would be evacuated over thousands of kilometers to propel mining interests in eastern DRC and industrial and urban centers within the region - bypassing Congolese who are not served by the nation's limited grid. In the most likely scenarios, Inga would generate little electricity for domestic users in the DRC. In the worst-case scenario, domestic consumers would receive no additional power at all. The dam's impacts on climate change and biodiversity, meanwhile, would be significant. It would flood the Bundi Valley, trapping sediments, generating significant methane emissions, and due to the modifications of flows out to the Atlantic Ocean would affect the climate-regulating mid-Atlantic plume, which is key to the planet's carbon cycle.

Other projects of concern

In addition to the project-specific concerns outlined above, there are several other hydropower projects proposed or recently approved to receive support from the Bank, including Ruzizi 3 (in the border region of Burundi/Rwanda/DRC), Mpatamanga (in Malawi), Mphanda Nkuwa (in Mozambique), Batoka Gorge and Ngonye (in Zambia) as well as Madyan and Dasu (in Pakistan), which also are considered by civil society groups as having highly damaging social and ecological tolls.

Heed Project Track Records of Social & Ecological Harms and Climate Risks

Large hydropower has rightfully fallen out of favor, experiencing several years of decline globally in the face of high costs, dwindling output, the declining costs of renewable alternatives, and the steep environmental and social costs that the sector entails. Meanwhile, the climate crisis has emerged as the Achilles heel for the sector. The World Bank's path of investing billions in expanding support for hydropower in the midst of the current climate and biodiversity crises, and at a time of widespread constraints on civic space cannot be considered economically, environmentally, socially responsible or 'climate smart'.

I. Hydropower is Not Reliable in the Face of the Climate Crisis

The realities of prolonged periods of drought and instances of extreme flooding are a stark reminder of the impacts of the climate crisis. As the most recent State of Global Water Resources by the World Meteorological Organization reported, the world has experienced five consecutive years of below-normal river flows and reservoir inflows at the same time that a record number of extreme weather events have caused flooding and significant glacial melt, with increasing instances of glacial lake outburst floods. Over the course of September 2024, over one million people are estimated to have been displaced by a dam collapse in Nigeria due to it overtopping after unprecedented days of heavy rainfall; extreme electricity shortages with power outages reported for consecutive days have been reported in Zambia due to extreme drought rendering the Kariba dam non-functional, and floods in Nepal led to the full shut down of four major dams, while damaging 11 operational dams and 15 dams under construction[1]. The evidence on the ground speaks for itself: building new large hydropower dams comes with massive risks, both to the physical safety of entire populations downstream in cases of extreme weather, while dams are increasingly rendered incapable of generating promised power as temperatures rise and riverbeds dry up.

Expanding hydropower developments also jeopardizes worldwide efforts to protect freshwater ecosystems, including under the Global Biodiversity Framework and the Convention on Biological Diversity. Although World Bank project documents consistently suggest that inundation or clearing of land for dams – including critical habitats for endangered and at risk species, UNESCO World Heritage Sites, designated national parks and ancestral domains of Indigenous Peoples - can be 'offset' by allocating alternative lands elsewhere to set aside for protection, it fails to consider land and water-based biodiversity as not only inherently unique from one place to another, but also the deep cultural and inherited place-based ties of river and forest dependent communities for which there is no equivalent calculation.

II. Hydropower Is Not 'Carbon Neutral' or 'Low Carbon'

The latest climate science exposes the myth that hydropower can be considered green energy. Dams generate methane and carbon dioxide when vegetation and organic matter are flooded in the reservoirs and start to decay underwater, as well as when areas are deforested to make way for building the project. Dam reservoirs represent a significant source of methane globally, equivalent to the greenhouse gas footprint of Canada, and scientists have found in some cases that dam reservoirs can cause more warming than coal-fired power plants. The methane generated during the first 10-20 years of operations are particularly intensive, so any new dams

[1] Critically, it was the communities living in the areas surrounding these dams that bore the brunt of the collapses, with entire homes being swept away. See for instance: https://www.fiscalnepal.com/2024/09/28/18126/flooding-in-sisneri-bazaar-after-kulekhani-dam-release-30-houses-swept-away/. See also: https://thediplomat.com/2024/10/nepals-hydropower-ambitions-at-the-crossroads-of-climate-shocks/.

would decisively undermine the global imperative to immediately curb methane emissions as laid out in IPCC's Assessment Report 6.

III. Hydropower Does Not Generate Low Cost Energy

Globally, when considered against the backdrop of rapidly declining costs for installation of solar and wind, the costs associated with hydropower dams simply do not make economic sense. According to a recent report by IRENA, the global weighted average levelized cost of energy (LCOE) of newly-commissioned utility-scale solar PV projects stands at USD 0.044/kWh, wind power projects on average stand at USD 0.033/kWh and hydropower at USD 0.057/kWh; meanwhile construction costs associated with hydropower show a trend of increasing year on year (in contrast to solar and wind projects which are decreasing in cost), for example on average being calculated as 20% more expensive than solar projects in 2022, and 30% more expensive in 2023. As costs are passed on to consumers, this also means that at this point in time, developing new solar and wind projects operated to maximize complementarity would lead to significant savings. Notably, while hydropower project construction timelines can span over a decade or more, solar and wind can be installed quickly and flexibly and can be easily designed to ensure significantly less encroachment onto land and watersheds by maximizing available spaces (e.g. stacked or rooftop solar PV). In addition, global surveys of dams construction timelines and costs have revealed that project development typically ends up significantly longer than initial estimations, and correspondingly, substantive cost overruns are the norm rather than the exception.

IV. Hydropower Cannot be Considered a 'Poverty-Alleviation' Opportunity

Hydropower schemes are typically associated with significant physical, economic and cultural dispossession, forcing those living in the direct reservoir inundation zone to move, and disrupting the livelihoods of those living upstream, downstream as well as along adjacent tributaries. Riparian communities facing pressure to make way for dam developments are often those who practice subsistence based livelihoods, many of whom are Indigenous Peoples, pastoralists or ethnic minority populations who are socially marginalized. Community advocates who raise questions or critical viewpoints about dams face serious threats of reprisals, risking their physical safety and even their lives, as documented by Global Witness reports on environmental and land defenders as well as by the assessments published by Business and Human Rights Resource Center, such as "Drying up: Tracking the environmental and human rights harms caused by hydropower in the Caucasus and Central Asia". In addition, where dam infrastructure is sited in border regions, on transboundary rivers or considered as national security assets, police and military presence around dams creates a disabling environment for community groups or broader civil society to operate and engage meaningfully in discussions about project siting, impact assessments or mitigation plans, let alone to call for authorities to consider alternative options at the outset. If breaches of dam walls happen on transboundary waters, it also raises serious questions about how communities downstream, located outside of the national borders of where projects are sited can seek accountability, given that project and financier grievance mechanisms typically only apply to those in the host state.

Finally, although dam affected communities have sought over the years to bring their grievances forward through the World Bank Group's accountability mechanisms, actual remedy and redress for the harms incurred on communities has for most remained elusive. In particular, this is evident in cases where after pursuing the complaints process for years, communities are faced with situations when the World Bank Group may exit the very investments in question, and find themselves with limited options for recourse, such as in the case of "Cambodia: Financial Intermediaries 01-03," related to the impacts of the Lower Sesan 2 Dam.

Moving Forward

In sum, we urge the World Bank Group to:

- Immediately reconsider support currently proposed for the Rogun, Upper Arun and Inga dam projects.
- Add greenfield utility-scale conventional hydropower projects to its list of prohibited investments, given the track record of associated irreparable ecological and human rights harms.
- Review all current financial intermediary facilities to screen for exposure to utility scale hydropower projects, disclose the results and duly ensure affected communities are informed of their rights to access the World Bank Group's accountability mechanisms.
- Respond and proactively address any grievances arising at dam sites where financing from the World Bank has already been approved, is being disbursed or has recently ended.
- Undertake a comprehensive review of the legacy of social and environmental harms and exacerbated climate change risks at all dam sites that have received support from the World Bank Group and develop as well as publicly disclose practical, timebound commitments to address and rectify these problems.

We look forward to hearing your responses to the matters raised herein and are open to discussing at further length.

Submitted by the following organizations:

International
BRICS Feminist Watch
Defenders in Development Campaign
Indigenous Peoples Movement for Self-Determination and Liberation (IPMSDL)
International Rivers
Merdeka West Papua Support Network
Recourse
Rivers Without Boundaries Coalition

Regional/National

Accountability Counsel
African Centre for Democracy and Human Rights Studies
African Coalition on Green Growth
Africa Network for Environment and Economic Justice (Nigeria)
All India Union of Forest Working People (India)
Alternative Law Collective (Pakistan)
Asia Indigenous Peoples Network on Extractive Industries and Energy
Asia Pacific Network of Environmental Defenders
Asian Forum for Human Rights and Development (FORUM-ASIA)
Asian Peoples' Movement on Debt and Development
Association for an Environmentally Clean Fergana (Central Asia)
Baikal Reserve (Russia)
BALAOD Mindanaw (Philippines)
Balkanka Association (Bulgaria)
Biodiversity Conservation Center (Russia)
Bio Vision Africa (BiVA) (Uganda)
Borok Indigenous Tiprasa Peoples' Development Centre (India)
Building and Wood Workers International (Asia Pacific)
Bureau for Regional Outreach Campaigns (Russia)
CAGRN/KC (DRC)
CECIDE (Guinea)
Central Asian Water and Climate Change Platform
Center for Ecosystem Solutions EcoMind Public Foundation (Kazakhstan)
Centre for Climatology and Applied Research (Africa regional)
Centre for Environmental Justice (Sri Lanka)
Centre for Research and Advocacy Manipur (India)
Coastal Livelihood and Environmental Action Network (Bangladesh)
Community Empowerment and Social Justice Network (Nepal)
Community Resource Centre (Thailand)
Dynamique pour le Droit, la Démocratie et le Développement Durable (DRC)
Daray-e-Swat Bachao Tehreek (River Swat Protection Movement (Pakistan)
CORAP (DRC)
CounterCurrent/GegenStroemung (Germany)
Daray-e-Swat Bachao Tehreek (River Swat Protection Movement, Pakistan)
Dynamique pour le Droit, la Démocratie et le Développement Durable (DRC)
Earthlife Namibia
Kaoko - Epupa Development Foundation (Namibia)
Katribu Kalipunan ng Katutubong Mamamayan ng Pilipinas (Philippines)
Ecosistemas (Chile)
Elopa Etugu Community Eco-Cultural Preserve (India)
Emmaus International (Zimbabwe)
Equitable Cambodia
Freedom from Debt Coalition (Philippines)
Friends of the Earth Japan
Friends of the Earth US
GAIA Asia Pacific
Gender Action (USA)

Go Green Group Manipur (India)
Greater Kaziranga Land and Human Rights Protection Committee (India)
Green Advocates International (Liberia)
Green Alternative (Georgia)
groundWork, Friends of the Earth South Africa
Groupe de travail Habitat, énergie et développement (DRC)
Idara Baraye Taleem wa Taraqi (IBT) (Pakistan)
IDEL/ASBL (DRC)
Integrated Research and Action for Development (India)
INFOE - Institute for Ecology and Action Anthropology (Germany)
Interamerican Association for Environmental Defense (Latin America & the Caribbean)
INWOLAG (Nepal)
Jamaa Resource Initiatives (Kenya)
Justiça Ambiental (JA!) / Friends of the Earth Mozambique
Himdhara Collective (India)
Kazakh-British Technical University (Kazakhstan)
KRuHA - People's Coalition for the Right to Water (Indonesia)
Legal Rights and Natural Resources Center-Friends of the Earth Philippines
Latinoamérica Sustentable (Latin America)
Mekong Watch (Japan)
Micronesia Climate Change Alliance (Mariana Islands)
Mouvement des Jeunes en Actions pour le Changement en Republique Démocratique du Congo (DRC)
Movement for Land and Agricultural Reform (Sri Lanka)
National Union Of Domestic Employees (Trinidad and Tobago)
Nash Vek Public Foundation (Kyrgyzstan)
NGO Forum on ADB (Regional - Asia-wide)
NGO UNCG (Ukraine)
Nouvelles Alternatives pour le Développement -Universite de Kinshasa (DRC)
North East Human Rights Organization (India)
North South Initiative (Malaysia)
Oyu Tolgoi Watch (Mongolia)
Pakistan Fisherfolk Forum (Pakistan)
Policy and Environmental Justice (Lesotho)
Possibility Thinkers (Namibia)
Rivers without Boundaries-Mongolia
3S Rivers Protection Network (Cambodia)
SANDRP: South Asia Network on Dams, Rivers & People (India)
Social Rights Advocacy Centre (Canada)
Socio-Ecological Union International (Russia)
SNAPAP (Algeria)
Southern Africa Climate Change Coalition
Tarai Indigenous Peoples and Marginalized Group's Development & Research Council (Nepal)
Together (DR Congo)
Ukraine War Environmental Consequences Work Group (Regional-Europe)

urgewald (Germany)
Witness Radio (Uganda)
Zimbabwe Climate Change Coalition
350.org Asia (Asia Regional)