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Inspection Panel Report and Recommendation on a Request for Inspection

The Republic of Tajikistan

Sustainable Financing for Rogun Hydropower Project (P181029) And Technical Assistance for Financing Framework for Rogun Hydropower Project (P178819)

26 June 2025

The Inspection Panel Report and Recommendation
on a
Request for Inspection

Tajikistan:
Sustainable Financing
for Rogun Hydropower Project (P181029)
and
Technical Assistance for Financing Framework
for Rogun Hydropower Project (P178819)

A. Introduction

1. The World Bank[1] Inspection Panel (the "Panel") received a Request for Inspection (the "Request") on February 24, 2025, regarding the Technical Assistance for Financing Framework for Rogun Hydropower Project (the "TA") and the Sustainable Financing for Rogun Hydropower Project (the "SFRHP"). Both the TA and the SFRHP contribute to developing the Rogun Hydropower Plant (the "Rogun HPP" or "the Project"), the funding for which is based on a financing package of an estimated total cost of US$6.29 billion equivalent, including financing from the Government of Tajikistan, revenues generated by the Rogun HPP itself, and grants and loans from development partners. IDA grant funding provided by the SFRHP is included in the latter.[2]

2. The Request was signed by two individuals (the "Requesters"), one each from Turkmenistan and Uzbekistan, who claim to represent their respective communities in these riparian countries downstream of the proposed Rogun HPP. The Requesters asked the Panel to keep their identities confidential for fear of retaliation. The Request was submitted by the Rivers without Boundaries Public Fund – a civil society organization (CSO) based in Almaty, Kazakhstan – representing the two Requesters. The Requesters sent a letter to the Panel explaining that appropriate local representation is not available because CSOs in Turkmenistan and Uzbekistan fear the retaliation that could result from submitting a Request for Inspection to the Panel.[3] The Requesters have asked for the Bank Information Center (Washington, DC, USA), to receive

[1] For the purposes of this report, the term "World Bank" or "Bank" refers to the International Development Association (IDA).
[2] The World Bank, Project Appraisal Document on a Proposed Grant in the Amount of SDR 258.1 Million (US$350 Million Equivalent) to the Republic of Tajikistan for a Sustainable Financing for Rogun Hydropower Project as Phase 1 of the Multi-phase Programmatic Approach of the Rogun Hydropower Program with an Overall Financing Envelopment of US$650 Million Equivalent ("SFRHP PAD"), November 19, 2024, pp. 9-12.
[3] The letter, sent to the Panel separately from the Request, explained the fear of threats and retaliation in the Requesters' respective countries. The Requesters asked the Panel to keep it confidential.

information about the complaint on their behalf,[4] and for International Rivers (San Francisco, USA) and CEE Bankwatch (Prague, Czechia) to serve as their advisors during the Panel process.

3. The Request alleges that the Rogun HPP will likely cause wide-ranging socioeconomic and ecological harm downstream of Tajikistan's Vakhsh Hydropower cascade – including in the riparian countries of Turkmenistan and Uzbekistan. It claims the Bank did not comply with its Environmental and Social Framework (ESF) and has failed to ensure that a "*robust*" Environmental and Social Management Plan (ESMP) and Environmental and Social Commitment Plan (ESCP) have been developed for the Rogun HPP. The Request contends Bank "*errors and omissions*" in the design and implementation of the Rogun HPP will likely contribute to ecological harm and associated, negative, environmental, social, and human health impacts on downstream communities. The Request also alleges there were no meaningful consultations or stakeholder engagement in Turkmenistan and Uzbekistan.

4. On April 8, 2025, the Panel registered the Request, and Bank Management ("Management") submitted its response to the Request (the "Management Response" or the "Response") on May 25, 2025.[5] A Panel team (the "Team") visited Tajikistan, Turkmenistan, and Uzbekistan June 1–7, 2025, to inform the Panel's Report and Recommendation to the Board of Executive Directors (the "Board") as to whether an investigation into the matters alleged in the Request is warranted.

5. Based on the information provided in the Request and the Management Response, as well as during the meetings held with various stakeholders in Tajikistan, Turkmenistan, and Uzbekistan, the Panel has determined that the Requesters and the Request for Inspection meet the technical eligibility criteria set forth in the Resolution.

6. The Panel acknowledges Management's view that the ESIA, the cumulative impact assessment, and the ESMP are in their final stages of approval. The Panel also appreciates Management's view that covenants are included in its legal agreements with the Government of Tajikistan for the latter to adhere to agreed water allocations and seasonal flow. The Panel is of the view that, without an in-depth review of the Bank's due diligence and supervision of the Project, it is not possible at this stage – when several assessments are still ongoing – to assess whether Management has appropriately dealt with the issues raised or sufficiently demonstrated that it is following and complying with applicable Bank policies and procedures.

7. In consideration of the analysis set out in this report, the Panel recommends an investigation. If approved, the investigation would take into account the ongoing assessments and associated documents mentioned above once these are completed.

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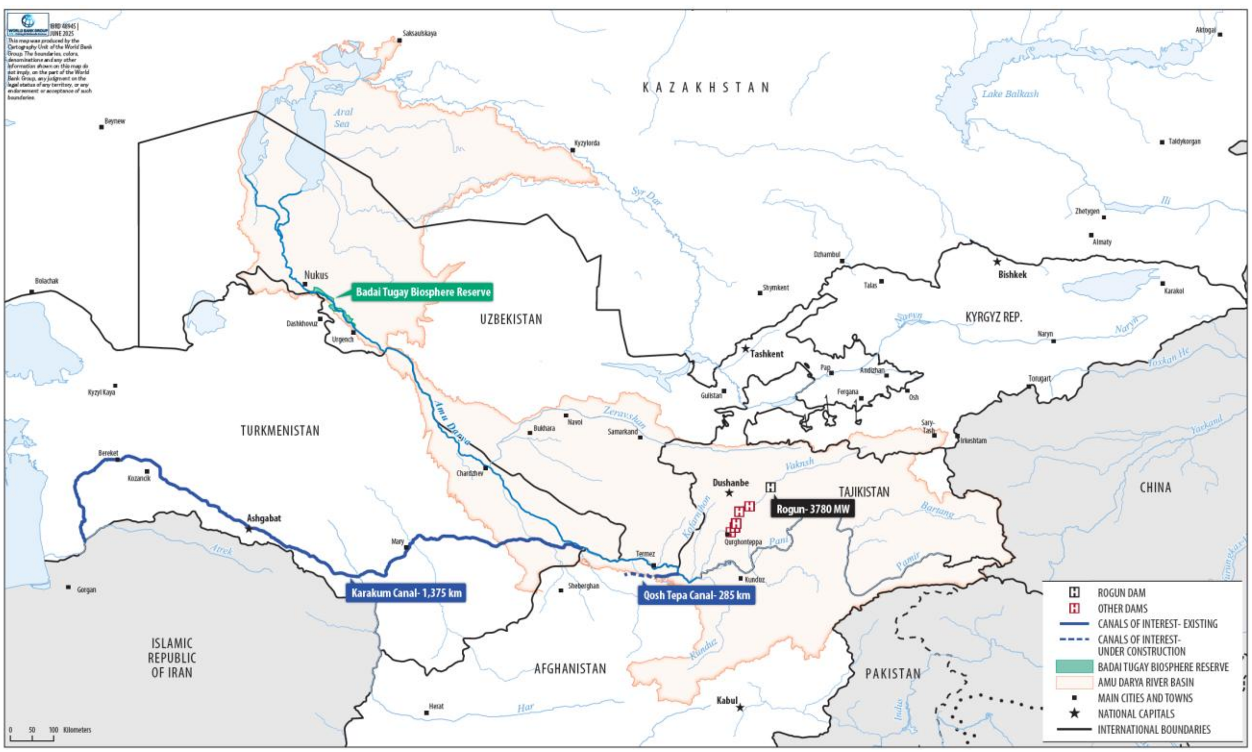
[4] The Panel notes there is no defined role in its legal framework (Resolution or Operating Procedures) allowing an entity that is neither representing the Requesters nor serving as their advisor to receive information on their behalf. If the Requesters ask, the Panel will consider the Bank Information Center an advisor to the Requesters.

[5] On April 14, 2025, Bank Management requested the Board of Executive Directors (the "Board") for a postponement of the deadline for submitting its Management Response. The Board approved this request, and the deadline was extended from May 7 to May 23, 2025.

B. Description of the TA and the SFRHP

8. **Background:** The Rogun dam is the uppermost of a cascading series of hydropower plants (HPPs) on the Vakhsh River, a tributary of the transboundary Amu Darya[6], that feeds the Aral Sea. Construction of the Rogun dam was first proposed in the late 1950s and designed in the mid-1960s as part of the former Soviet Union's plan to expand agricultural production in Central Asia, together with the extensive canal systems built at least from the 1950s. These canals have been and continue to support cotton and wheat production in the water-scarce regions of Turkmenistan and Uzbekistan. The regional division within the former Soviet Union had Tajikistan and the Republic of Kyrgyzstan supplying water and hydropower, Turkmenistan providing hydrocarbons, and both Turkmenistan and Uzbekistan developing irrigation-based agri-monocultures along these canals. The longest is the 1,300-kilometer-long Karakum canal, which crosses the Karakum Desert of Turkmenistan and is the main source of water for the capital, Ashgabat. In Uzbekistan, canals were also dug upstream of the Aral Sea within the autonomous region of Karakalpakstan. As this region is the most downstream in the Amu Darya Basin and the most severely affected by any diversion of river water in other regions of Tajikistan, Afghanistan, Uzbekistan, or Turkmenistan (see Map 1 below).



Map 1 – Amu Darya Basin

9. A technical design for the Rogun HPP was completed in 1978. Construction started in 1982 but experienced several stop-and-resume cycles due to the break-up of the Soviet Union in 1991, tensions over agreements on water-sharing, a major flood that destroyed key infrastructure related

[6] In old Persian, "darya" means "river".

to the dam in 1993, and a civil war in Tajikistan (1993–1997). The Project was revived by the Government of Tajikistan in 2008, with limited construction continuing until 2011.[7]

10. The Bank's became involved in the Rogun HPP from 2010-2011, responding to a request from the Government of Tajikistan to finance several studies for the Rogun HPP under the Energy Loss Reduction Project, including preparing a Techno-Economic Assessment Study (TEAS), developing core Environmental and Social Impact Assessment (ESIA) and related instruments, and establishing two independent expert panels, respectively, for dam safety and Environmental and Social (E&S) matters.

11. In October 2010, the Panel had received a Request for Inspection relating to the Energy Loss Reduction Project from two requesters in Uzbekistan on behalf of a local non-governmental organization. Regarding that request, the Panel noted that the only issues that were relevant and to be considered under the purview of the Panel, were those related to the activities supported through Bank-financing, namely conducting the above-mentioned assessments. The Panel's view at that time was that the Bank had made efforts to ensure that potential riparian issues are being examined as part of these. The Panel was satisfied there was adequate evidence of the Bank's intention to comply with applicable operational policies and, therefore, it did not recommend an investigation.[8] The Panel notes that in that report, the Panel observed that the Bank support was limited to the Assessment Studies.[9] The Panel further observed that its recommendation did not preclude the possibility of a future claim in the event that the Bank decides to finance activities for the construction of the Rogun HPP or a related alternative.[10]

12. With financing from the state budget, construction of the Rogun dam has accelerated since 2016-2017,[11] after Uzbekistan eased its opposition to the Project. Partial operation and first electricity production commenced in 2018.[12]

13. Map 2 shows the Vakhsh Hydropower cascade, where the Nurek HPP, is located 70 kilometers downstream of the Rogun HPP. Nurek HPP was commissioned in 1972 and has operated since 1980. Six additional dams follow downstream, before the Vakhsh River joins the Panj River to form the Amu Darya.

[7] WSP (2023). Rogun Hydropower Project- Updated Environmental and Social Impact Assessment, Volume I, pp. 50-60.

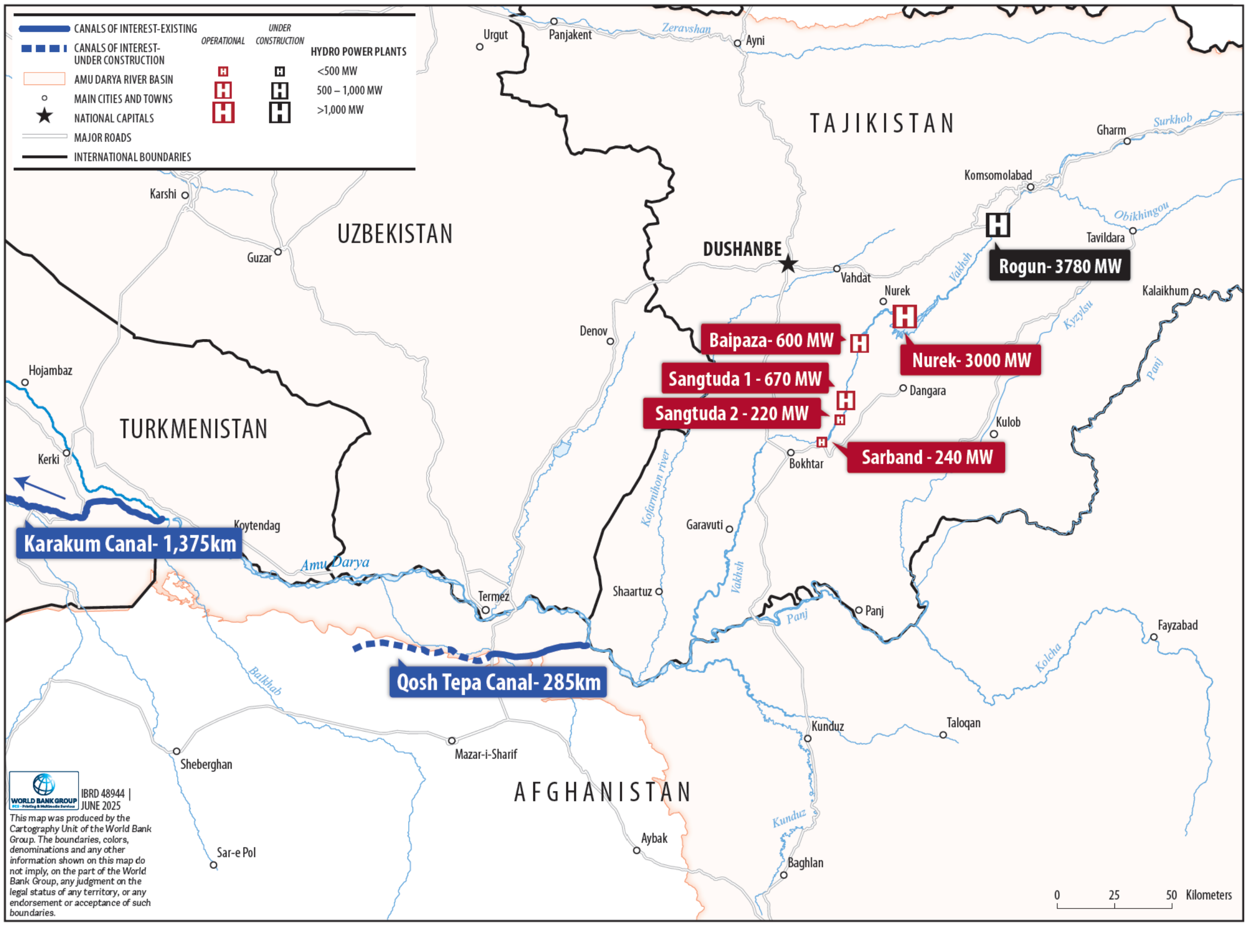
[8] See, Statement of Mr. Roberto Lenton, Chairman of the Inspection Panel Inspection Panel Report and Recommendation on Eligibility Tajikistan - Energy Loss Reduction Project For Board Meeting of February 3, 2011. See also, the Inspection Panel, Report and Recommendation on Request for Inspection Tajikistan: Energy Loss Reduction Project (Rogun HPP) (Credits Nos. 40930-TJ and H1780-TJ) ("Panel Report and Recommendation on Request for Inspection Tajikistan: Energy Loss Reduction Project (Rogun HPP)"), December 23, 2010.

[9] Panel Report and Recommendation on Request for Inspection Tajikistan: Energy Loss Reduction Project (Rogun HPP), p. 8, para. 36.

[10] Panel Report and Recommendation on Request for Inspection Tajikistan: Energy Loss Reduction Project (Rogun HPP), p. 11, para. 54.

[11] SFRHP PAD, p. 42, Annex 4, para. 1.

[12] SRFHP PAD, p. 42, Annex 4, para. 3.



Map 2 – Vakhsh River cascade and Amu Darya confluence

14. **Technical Assistance for Financing Framework for Rogun Hydropower Project (P178819) (the "TA").** The TA was approved on January 12, 2023, with an expected closing date of December 31, 2026.[13] The total cost is US$20 million, of which the Bank is providing an IDA grant of US$15 million equivalent and the Asian Infrastructure Investment Bank is providing a grant of US$5 million.[14] The Borrower of the TA is the Ministry of Finance of the Republic of Tajikistan and the Implementing Agency is the Project Management Group for Energy Facilities Construction ("PMG").[15] Environmental and social (E&S) risks were rated "High" at the time of TA approval, with several Environmental and Social Standards (ESSs) considered relevant.[16]

[13] The World Bank, Project Appraisal Document on a Proposed Grant in the Amount of SDR 11.7 Million (US$15 Million Equivalent) to the Republic of Tajikistan for a Technical Assistance for Financing Framework for Rogun Hydropower Project ("TA PAD"), December 12, 2022, p. 1.
[14] TA PAD, p. 2.
[15] TA PAD, p. 2.
[16] TA PAD, p. 35, para. 90. The Environmental and Social Standards (ESSs) considered relevant at the time of TA approval are: ESS 1 – Assessment and Management of Environmental and Social Risks and Impacts, ESS 2 – Labor and Working Conditions, ESS 3 – Resource Efficiency and Pollution Prevention and Management, ESS 4 – Community Health and Safety, ESS 5 – Land Acquisition, Restrictions on Land Use and Involuntary Resettlement, ESS 6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources, ESS 8 – Cultural Heritage, and ESS 10 – Stakeholder Engagement and Information Disclosure.

15. The Project Development Objective of the TA is "[t]*o strengthen Rogun HPP's financial and commercial frameworks, enhance its environmental and social sustainability, improve the transparency, and support establishment of Rogun HPP's benefit sharing program*."[17] The TA comprises four components:

- Component 1: Development of a macroeconomically sustainable financing plan and a commercial framework for the Rogun HPP,
- Component 2: Improvement of dam safety,
- Component 3: Strengthening of the E&S framework and benefit-sharing aspects of the Rogun HPP, and
- Component 4: Strengthening of the institutional capacity of the Rogun PMG and the Rogun Open Joint Stock Company (OJSC).[18]

16. **Sustainable Financing for Rogun Hydropower Project (P181029) (SFRHP).** Building on the TA Project, the SFRHP was approved by the World Bank's Board of Executive Directors on December 17, 2024, as part of a Multiphase Programmatic Approach (the "MPA Program") covering a financing envelope of US$6.29 billion for the Rogun HPP.[19]

17. The MPA Program comprises two phases. Phase 1 is estimated to cost US$3.387 billion and Phase 2 is estimated at US$2.903 billion. The overarching Program Development Objective for the MPA Program is "[t]*o increase supply of clean, affordable and climate resilient hydroelectricity for consumers in Tajikistan and the Central Asia region*."[20] The MPA is considered best suited because the Rogun HPP requires "*sustained financing and technical assistance to undertake longer term planning, concerted policy reform and regulatory measures, and infrastructure interventions to achieve the desired development outcomes.*"[21]

18. The SFRHP contributes an IDA grant of US$350 million equivalent to Phase 1 of the MPA Program.[22] The expected closing date is June 30, 2029. The Recipient is the Republic of Tajikistan, and the Implementing Agency is the Rogun OJSC, which includes the Rogun PMG, responsible for construction under the President of the Republic, as well as the Directorate of the Flooding Zone (DFZ).[23] At the time of SFRHP approval E&S risks were rated "High" and several ESSs were considered relevant to the Project.[24] For Phase 2 an additional IDA grant of US$300 million equivalent is expected to be approved around June 2026.[25]

[17] TA PAD, p. 23, para. 47.
[18] TA PAD, pp. 24 and 25, paras. 50-53.
[19] SFRHP PAD, pp. i and ii.
[20] SFRHP PAD, p. i.
[21] SFRHP PAD, p. 8, para. 26.
[22] SFRHP PAD, p. 12, para. 32.
[23] SFRHP PAD, p. ii.
[24] SFRHP PAD, p. v, and p. 12, para. 33. The ESSs considered relevant at the time of SFRHP approval are: ESS 1 – Assessment and Management of Environmental and Social Risks and Impacts, ESS 2 – Labor and Working Conditions, ESS 3 – Resource Efficiency and Pollution Prevention and Management, ESS 4 – Community Health and Safety, ESS 5 – Land Acquisition, Restrictions on Land Use and Involuntary Resettlement, ESS 6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources, ESS 8 – Cultural Heritage, and ESS 10 – Stakeholder Engagement and Information Disclosure.
[25] SFRHP PAD, p. 12, para. 32.

19. The specific Project Development Objective for Phase 1 of the MPA Program – and, therefore, also for the SFRHP – is "[t]*o increase supply of clean, affordable, and climate resilient hydroelectricity for consumers in Tajikistan and the Central Asia region by 2 TWh*."[26] Phase 1 of the MPA Program has four components that the SFRHP's Phase 1 IDA grant funds:

- Component 1: Specific construction activities,
- Component 2: Project implementation support,
- Component 3: Implementation of Resettlement Action Plan and Livelihood Restoration Plan, and
- Component 4: Hydrometeorological activities.[27]

20. According to the PAD, US$2.25 billion in grants and concessional funds are expected from several other Development Partners (DPs) to complement the Bank's two-phased IDA grant totaling US$650 million.[28] Rogun HPP's remaining costs are to be covered from the state budget (US$2.14 billion) and revenues from selling electricity generated by the dam (US$1.25 billion).[29] DPs formed the Rogun Coordination Group (RCG), led by the Bank.[30]

C. Summary of the Request

21. This section summarizes the main concerns raised in the Request, attached in full to this Report as Annex 1.

22. **Alleged downstream water shortages.** The Request states construction of the Rogun HPP, the filling of the reservoir, and plant operations will inevitably result in water shortages downstream in the Lower Vakhsh River and the Amu Darya. It says the Requesters believe desertification and ecosystem degradation in the Amu Darya Basin will accelerate significantly due to cumulative effects "*caused primarily by the construction of the Rogun hydroelectric station*." It further alleges that filling the Rogun HPP reservoir over 13–16 years will reduce "*at least 25 percent of the current flow into the Amu Darya Delta*." According to the Request, this will create a "*progressive catastrophe*" in an area that is already degraded, and this water shortage will potentially have numerous impacts on the downstream, riparian states of Uzbekistan and Turkmenistan, as described below.

23. *Impact on Biodiversity and Culture Heritage.* The Request alleges that the change in the flow regime, sedimentation, and loss of habitat caused by the Rogun HPP may lead to the

[26] SFRHP PAD, p. 12, para. 32.
[27] SFRHP PAD, pp. 13-15, paras. 35-39.
[28] The ten Development Partners include the World Bank, European Investment Bank (EIB), European Union (EU), Asian Infrastructure Investment Bank (AIIB), Asian Development Bank (ADB), Islamic Development Bank (IsDB), Kuwait Fund, Saudi Fund for Development (SFD), OPEC Fund, Abu Dhabi Fund, and other financial institutions. SFRHP PAD, p. 1, footnote 1. According to the International Monetary Fund First Review Under the Policy Coordination Instrument and Request for Modification of a Quantitative Target and a Reform Target-Press Release and Staff Report, p. 10, para. 16, Rogun HPP-related agreements were signed in 2024 with the IsDB, the SFD, and the OPEC Fund and loan negotiations were underway with other Arab development funds (Abu Dhabi Fund and the Kuwait Fund for Development).
[29] SFRHP PAD, p. 10, para. 30.
[30] SFRHP PAD, p. 7, footnote 11. QAZ.

extinction of the International Union for Conservation of Nature listed critically endangered Amu Darya shovelnose sturgeon. According to the Request, changes in the downstream flow would also affect tracts of floodplain Tugay forests,[31] including the Tigrovaya Balka Nature Reserve, recognized as a UNESCO World Heritage site in 2023.[32]

24. *Socioeconomic Impacts.* According to the Request the people and communities living downstream have "*felt throughout all their lives*" the negative consequences of dams, canals, and other hydraulic structures that have altered the flow of the Amu Darya and caused the "*destruction*" of the Aral Sea. The Request states that eight to ten million people live in the wider, downstream area of the Amu Darya in Uzbekistan and Turkmenistan, including where canal systems have been established. The Request alleges that the compound effects of the Rogun HPP and climate change will significantly worsen socioeconomic issues there. The Request claims the Rogun HPP ESIA overlooked this existing baseline of the region.

25. The Request states that increased desertification – and water and soil salinization due to reduced waterflow – will further diminish soil fertility in large, irrigated areas and may lead to falling agricultural productivity and deteriorating living conditions. As a result, according to the Requesters, there could be greater unemployment and poverty in the downstream and riparian countries. Moreover, the Request claims out-migration may increase, severing people's connections to their land and cultural heritage. It adds that socioeconomic pressures in downstream areas may be compounded by in-migration from those displaced by the growth of the Rogun HPP reservoir over time. Additionally, the Request alleges that the alteration of the river flow system could reduce the recreational value of the Amu Darya Basin.

26. *Alleged Health Impacts.* The Requesters claim the populations of most of the lower reaches of the Amu Darya and its delta have been on the "*brink of extreme physical survival*" for many years due to the salinization and desertification of the soil. The associated toxic dust storms and low-quality water supplies, often laden with unhealthy concentrations of salts, have affected human health. According to the Requesters, the redistribution of river flows and the additional shortage of water caused by the Rogun HPP can exacerbate these impacts.

27. **Project assessments and documentation.** The Request alleges that Project documents do not comply with the ESF. It claims the ESIA documentation is incomplete and based on outdated data and concepts, that many adverse impacts were not rigorously assessed, and that the interests of people living downstream were ignored. The Request adds that the Project failed to develop a "*robust*" ESMP and ESCP for the Rogun HPP, claiming that these documents lack the mitigation of potential impacts on the population and ecosystems of the Amu Darya Basin.

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[31] "*The Tugay Forests of the Tigrovaya Balka Nature Reserve represent one of the largest remaining tugay ecosystems, a form of riparian forest associated with fluvial and floodplain areas in arid climates*." World Heritage Site, for World Heritage Travelers, Tugay Forests, https://www.worldheritagesite.org/list/Tugay+forests. *See also* UNESCO, World Heritage Convention, Tugay Forests of the Tigrovaya Balka Nature Reserve, https://whc.unesco.org/en/list/1685/, and UNESCO, World Heritage Convention, Amudarya State Nature Reserve, https://whc.unesco.org/en/tentativelists/5436/.

[32] See Mugue, N. & Karimov, B. 2022. Pseudoscaphirhynchus kaufmanni. The IUCN Red List of Threatened Species 2022: e.T18601A120872031. https://dx.doi.org/10.2305/IUCN.UK.2022- 1.RLTS.T18601A120872031.en.

28. The Request states that the ESIA did not consider the influence that the reservoir of the Rogun HPP will have on the Amu Darya's flow regime, or on the ecosystems and the downstream communities that depend on the river. The Request also claims that the ESIA fails to analyze alternatives comprehensively – including the "no project" option – using environmentally, socially, and economically sound data. Furthermore, the Request alleges that the cumulative impacts during different stages of the Rogun HPP life cycle (construction, reservoir filling, and operations) in conjunction with other existing and planned water and energy infrastructure projects downstream along the Amu Darya were inadequately considered.

29. **Dam safety and emergency preparedness.** The Request states that the risk of collapse of the sequential dams in the Vakhsh cascade threatens downstream populations. They noted that the local inhabitants are not informed of the likely consequences of such accidents, and of any emergency action plans. Additionally, the Request alleges that the Rogun HPP documentation does not provide for compensation measures and damage compensation mechanisms for losses incurred due to a dam burst or malfunction.

30. **Consultation and disclosure of information.** The Request asserts that the Stakeholder Engagement Plan lacks clear procedures and timelines for consultations on key, Project-related, environmental and social documentation. It alleges that the safeguard documents were not disclosed to affected persons and communities, and that meaningful consultations were not held, including during preparation of the ESIA. This, according to the Request, violates both national law and the Aarhus Convention.[33] The Requesters claim that the ESIA for the Rogun HPP was not available in Uzbek, Karakalpak, and Turkmen languages, which are language spoken in the downstream areas.

31. **Affordability and reliability of electricity.** The Request alleges that the Rogun HPP is one of the "*most expensive and time-consuming false solutions*" to alleviate power shortages in winter and reduce greenhouse emissions. The Request alleges that electricity tariffs are soaring in Tajikistan to recover costs for the Rogun HPP and that the price of electricity will also increase for the population of the countries purchasing power generated by the Project. The Request further alleges that blackouts occur in Central Asia due to the malfunctioning of large generation units and that adding the Rogun HPP as a "*single source of maneuvering capacity*" will likely increase the risk of blackouts for neighboring countries in case of plant malfunctions.

D. Summary of the Management Response

32. The section below summarizes Management's Response to the Request, attached in full to this Report as Annex 2.

33. **World Bank's involvement with the Rogun HPP**. Management states that the Bank has been involved with the Rogun HPP since 2011.[34] Between 2011 and 2014, the Bank financed studies for it, including the preparation of the TEAS, development of the ESIA, and the

[33] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), Aarhus, Denmark, June 25, 1998, https://unece.org/DAM/env/pp/documents/cep43e.pdf.
[34] Management Response, p. 4, para. 17.

establishment of two independent Expert Panels.[35] After completing the TEAS, Bank support to the Project was discontinued, mainly driven by concerns raised by some riparian countries regarding the impacts of the Rogun HPP on the availability of water. In 2017, relying on the results of the TEAS and the 2014 ESIA, Tajikistan began construction using its own financial resources.[36]

34. The Management Response notes that in 2021 the Bank commissioned a Financing Options Study at Tajikistan's request to evaluate the options for financing the completion of the Project in a sustainable manner.[37] The Financing Options Study assessed the progress of the Rogun HPP focusing on construction costs, contracts, and environmental and social management. It outlined requirements for potential financing from international development partners, which were discussed at a high-level roundtable organized by the Government of Tajikistan in December 2022. This led to development partners expressing interest in Rogun HPP. The outcomes from this study were supported by potential financiers. The Bank adopted a phased approach to supporting the Project financially, beginning with the TA in 2023, followed by the SFRHP in 2024, which is the first phase of the MPA.[38]

35. **Alleged downstream water shortages.** Management asserts it is "*acutely aware*" of the crisis affecting the Aral Sea Basin and its potential impacts on downstream populations. Management states that the operations of the Rogun HPP will have "*no influence*" on said water crisis as it will keep the Vakhsh River flow pattern unchanged.[39] Management adds that a Bank assessment confirmed that the Rogun HPP can be constructed and operated with "*no appreciable harm*" to the riparian countries, and that annual waterflow volumes into the Vakhsh are expected to increase gradually through 2100 due to glacial melt and increased precipitation. Reservoir operation simulations show that the Rogun HPP can operate without altering historical flow regimes. According to Management, a 2024 internal assessment concluded that filling the Rogun HPP reservoir at an average of 1.2 km^3/year, Tajikistan's historically unused water share, will reduce water availability by only 2.2 percent in the upper Amu Darya Basin – at the confluence of the Vakhsh, Panj, and Kofarnihon Rivers – and cause no appreciable harm to the downstream countries.[40]

36. The Management Response points to the water allocation arrangements in place since the 1980s and refers to the 1992 "Almaty Agreement."[41] Management emphasizes that the Bank's Financing Agreement for the Rogun HPP contains Tajikistan's commitment to continue adhering to regional, water-sharing agreements and the management rules for the main reservoirs of the Vakhsh River Basin to avoid causing appreciable harm to riparian countries during construction, impoundment, and operation of the Rogun HPP.[42] Management adds that the Bank will closely monitor Tajikistan's commitment during implementation, based on a series of data transparency and disclosure measures. Moreover, the Management Response states Tajikistan has a strong

[35] Management Response, p. 5, para. 17.
[36] Management Response, p. 5, para. 19.
[37] Management Response, p. 5, para. 21.
[38] Management Response, p. 6, para. 22.
[39] Management Response, p. 24, para. 84.
[40] Management Response, p. 24, para. 85.
[41] Management Response, p. 24, para. 86.
[42] Management Response, pp. 24 and 25, para. 87.

record of compliance with the Basin's water-sharing agreements and is committed to operating the Vakhsh cascade accordingly.[43]

37. *Impact on Biodiversity.* Management contends that the impacts of the dam are limited to the dam area and are well-managed. According to Management, there will be no adverse impacts on critical habitats or endangered species. Management states that Rogun HPP has a Biodiversity Management Plan (BMP) to protect habitat that will be affected within the Project's area of influence and adds that approval of the BMP is a condition of disbursement. In the assessments conducted, Management notes that impact would mostly occur in juniper woodlands and floodplain habitats. The baseline ecological assessment revealed the absence of endangered fish species in the Project area.[44]

38. Management states that since the Rogun HPP will not change the flow regime, it will produce no additional, tangible impacts on critical habitats and endangered species downstream. It adds that the Project site is a "*brownfield with heavily disturbed/altered habitats*."[45] Management stated that "the *tugay forest in the Tigrovaya Balka Nature Reserve has already been affected by Nurek dam and other cascades on the river*."[46] Management notes this finding is consistent with the updated cumulative impact assessment which, while not yet public, was discussed during the riparian consultations in Tashkent in October 2024. Management states the Rogun HPP will produce no additional, negative effect on the Tigrovaya Balka Nature Reserve, adding that this Reserve is within Tajikistan and the Requesters are not from there.[47]

39. *Socioeconomic Impacts.* According to Management, no project-affected people have moved to Uzbekistan or Turkmenistan; resettlement is occurring only within Tajikistan. Management also states that the Directorate of the Flooding Zone (DFZ), which has been tracking project-affected people, reports that most have resettled on land provided by the Government of Tajikistan, although some have opted to receive cash and moved to cities in Tajikistan.[48]

40. Regarding increased desertification, Management states that the Rogun HPP has integrated hydrometeorological aspects to ensure comprehensive management of water resources. Rogun HPP includes hydrological and meteorological monitoring systems to track waterflow volumes, precipitation patterns, and glacial melts.[49] According to Management, these systems provide data for optimizing reservoir operations and mitigating floods and droughts. Management adds that the Rogun HPP will protect all downstream reservoirs of the Vakhsh cascade from Probable Maximum Flood and enhance the climate resilience of the Vakhsh and Amu Darya Basins.[50]

41. *Alleged Health Impacts.* Regarding concerns that the Rogun HPP will worsen water quality in the Amu Darya Basin by increasing salinity levels, Management states that variations in salinity levels are independent of the Rogun HPP, and this is a natural process occurring in the downstream

[43] Management Response, p. 39, Item No. 5 of Annex I: Claims and Responses table.
[44] Management Response, pp. 26 and 27, para. 94.
[45] Management Response, p. 26, para. 94.
[46] Management Response, p. 26, para. 95.
[47] Management Response, p. 27, para. 95.
[48] Management Response, p. 48, Item No. 20 of Annex I: Claims and Responses table.
[49] Management Response, p. 25, para. 90.
[50] Management Response, pp. 32-34, Item No. 2 of Annex I: Claims and Responses table.

regions of Uzbekistan and Turkmenistan. Management added that the Rogun HPP will not influence water quality since operation of the Rogun HPP will keep the Vakhsh River flow pattern unchanged.[51]

42. **Project assessments and documentation.** The Management Response states that the Rogun HPP was approved for financing by the Board in December 2024 and that approval was based on the draft assessments and plans prepared and disclosed during the appraisal stage, with support from the TA. Management added that this is in accordance with paragraph 51 of the ESF's Environmental and Social Policy for Investment Project Financing. Management states that in 2023 the Borrower prepared and disclosed the draft ESIA and ESMP.[52] According to Management, these documents incorporated advice from the Environmental and Social Panel of Experts and were reviewed by the Bank. Management states that the documents identified E&S risks and impacts as well as provided the main mitigation measures to be able to sufficiently inform stakeholders and the Bank's decision-making. Management asserts that all internal clearances were obtained to ensure compliance with the ESF for projects classified as "High" E&S risk.[53]

43. In their Response, Management highlighted that the Project is not yet effective, and that the E&S Commitment Plan (ESCP) includes the requirements to manage the E&S risks and impacts of the Rogun HPP in compliance with the ESF, including updating the relevant E&S documents. The conditions of effectiveness are included in the Financing Agreement and therefore are legally binding. The effectiveness conditions require the disclosure, finalization, and adoption of updated E&S instruments acceptable to the Bank, such as the ESIA, updated cumulative impact assessment, ESMP, amongst others. Management states that there will be several updates of these studies, for instance a broader geographical scope for cumulative impacts compared to the rapid cumulative impact assessment, and more details on the dam safety, including for example the Emergency Preparedness Plans, in-depth analysis of climate change and biodiversity.[54] Management adds that these legal conditions seek to secure that no Bank financing will be disbursed for the Rogun HPP before the relevant assessments are completed and approved by the Bank, in accordance with the ESF.[55]

44. Regarding the analysis of alternatives, Management notes that in 2014 the Government of Tajikistan selected the highest dam alternative considering its superior economic, technical and environmental performance.[56] Management states that the TEAS assessed three full supply levels (fsl), corresponding to dam heights of, respectively, 335, 300, and 265 meters.[57] Management also notes that the highest dam option could be built and operated within international safety norms.

45. Regarding the cumulative impact assessment, Management notes that the updated version is expanding its spatial coverage to consider the entire Amu Darya Basin. According to Management, the preliminary results showed that Rogun HPP will not have further impacts to the

[51] Management Response, p. 26, para. 93.
[52] Management Response, pp. 14 and 15, para. 50.
[53] Management Response, pp. 14 and 15, para. 50.
[54] Management Response, p. 15, para. 51.
[55] Management Response, p. 15, para. 52.
[56] Management Response, p. 21, para. 76.
[57] Management Response, p. 22, para. 76.

Aral Sea or the downstream stretches of Amu Darya.[58] Management states that any recommendations from the cumulative impact assessment regarding potential contributions by the Rogun HPP will be integrated into the revised ESMP.

46. **Dam safety and emergency response.** Management asserts that the design and construction plans are aligned with ESS4 – Annex 1, international standards, and best practices of dam safety.[59] Design and construction have undergone rigorous scrutiny by independent experts applying international standards best practices.[60] Management adds that the Dam Safety Panel of Experts (DSPOE) confirmed the robustness of the design and this Panel will provide oversight on dam safety during Project implementation. Management states that there are currently 11 seismic stations in operation for monitoring the dam and reservoir areas during construction, filling, and operational phases.[61] Management emphasizes that, considering the geological sensitivity of the right bank downstream of the dam, comprehensive geotechnical investigations, surveys, and monitoring have been carried out to evaluate risks, including mitigation measures reviewed and approved by the DSPOE.[62] Monitoring will continue during implementation of the Project. At least 12 months before each impoundment, an Emergency Preparedness Plan (EPP) will be completed and then activated, in accordance with ESS4 – Annex 1.[63] Management adds that local communities will receive communication materials with required actions in case of emergencies well before such situations warranting such actions might arise. Additionally, a flood forecasting system is operational, providing monitoring and early warnings during construction. Other emergency management measures will also be adopted and/or enhanced corresponding to the reservoir water level.[64]

47. **Consultation and disclosure of information.** Management emphasizes that since 2011, there has been more than 90 consultations on various aspects of the Rogun HPP, with the frequency and scope intensifying since the Bank's re-engagement with the project.[65] Management states that a high-level regional riparian consultation took place in November 2023 in Almaty, Kazakhstan. Follow-up consultation took place in Tashkent, Uzbekistan, in October 2024. According to Management these consultations were conducted at the ministerial level, involved CSOs, and comments from these meetings have been taken into account as the Project finalized the ESIA/ESMP for disclosure.[66] Management added that additional riparian consultations are planned to take place in Ashgabat, Turkmenistan and Bishkek, Republic of Kyrgyzstan. According to Management, those participating in these consultation events received advance drafts and the non-technical summary of the 2023 ESIA/ESMP, as well as other E&S instruments.[67]

48. Management states that the Bank will continue to assist the Government of Tajikistan with riparian consultations, and it will engage with riparian countries to support further consultations

[58] Management Response, p. 55, Item No. 28 of Annex I: Claims and Responses table.
[59] Management Response, p. 30, para. 105.
[60] Management Response, p. 30, paras. 107-109.
[61] Management Response, p. 30, para. 107.
[62] Management Response, p. 30, para. 108.
[63] Management Response, p. 30, para. 109.
[64] Management Response, p. 30, para. 110.
[65] Management Response, p. 19, para. 67.
[66] Management Response, p. 16, para. 54.
[67] Management Response, p. 20, para. 68.

with Government bodies and CSOs, including by offering to translate the ESIA non-technical summary into local languages. According to Management, once the finalized 2025 ESIA is disclosed, riparian countries will be notified, and the Bank will discuss with each riparian county how it can support consultations at the national level and in local languages.[68]

49. **Affordability and reliability of electricity.** The Management Response explains that electricity demand in Central Asia is projected to at least double by 2050, and that to meet this demand it is essential to scale up renewable, baseload technologies and variable, renewable energy (VRE) sources.[69] Management adds that hydropower capacity will provide energy and crucial balancing services to integrate a larger share of VRE. According to Management, the cost of electricity generated by the Rogun HPP remains highly competitive compared to alternative baseload sources, making it a crucial part of the least-costly supply options for both Tajikistan and the broader Central Asia region. The Management Response states that the ability of the Rogun HPP to export surplus electricity to neighboring countries further enhances regional energy security and cooperation. The Response states that about 70 percent of the energy generated by Rogun HPP would be exported, helping to replace fossil-fired generation in Kazakhstan and Uzbekistan at an affordable cost and supporting a regional electricity market in Central Asia.[70]

E. Panel's Eligibility Assessment, Observations, and Review

50. The Panel's review is based on information presented in the Request, the Management Response, other documentary evidence received in-country, and information gathered in conversations with different stakeholders, especially during the Panel Team's visit to Tajikistan, Turkmenistan, and Uzbekistan.

51. Panel Members Evelyn Dietsche (Lead Inspector) and Ajay Deshpande, Investigations Officer Cristiane Bena Dias, Senior Policy Advisor Serge Selwan, and Senior Environmental Specialist Richard Wyness visited Tajikistan, Turkmenistan, and Uzbekistan June 1–7, 2025, to inform the Panel's eligibility assessment. During its visit to Uzbekistan, the Team met with representatives from the Ministry of Foreign Affairs, the Ministry of Water and Energy, the Ministry of Ecology, Environmental Protection and Climate Change, and the Ministry of Emergency Situations, staff of the International Fund for Saving the Aral Sea, and experts from the Karakalpakstan branch of the Academy of Science, the Requester, civil society organizations, and members of the community. In Turkmenistan, the Team met with the Requester, representatives of civil society organizations, and water and environmental experts. In Tajikistan the Team held meetings with the Ministry of Finance, the Ministry of Energy and Water, and the Rogun HPP Implementation Unit (PIU). The Panel also met with Bank Management. The Panel is grateful to all stakeholders for taking the time to share their views and perspectives. The Panel extends particular thanks to the staff of World Bank Country Offices in Tajikistan, Turkmenistan, and Uzbekistan for their assistance with logistical arrangements, guidance, and protocols for the Team's visit, and to the PIU for showing the construction site to the Team and providing site-specific explanations.

[68] Management Response, p. 20, para. 68.
[69] Management Response, p. 23, para. 81.
[70] Management Response, p. 2, para. 8.

52. The following sections cover the Panel's determination of the technical eligibility of the Request in accordance with the criteria set forth in the Resolution (subsection E.1.), observations on the alleged harms (subsection E.2.), and the Panel's review (subsection E.3.), supporting its recommendation (section F).[71]

E.1. Determination of Technical Eligibility

53. The Panel considers that the Request meets the six technical eligibility criteria set out in its Resolution.[72] Technical eligibility is based on verifiable facts which relate to the allegations in the Request. The Panel notes that confirmation of technical eligibility in no way implies any judgment on the substance of the claims made in the Request.

- Criterion (a): "*The affected party consists of any two or more persons with common interests or concerns and who are in the borrower's territory*." The Request was signed by two individuals who are not in the Borrower's territory, one is based in Uzbekistan and the other in Turkmenistan. The Panel met with both Requesters.

  The Panel notes that the Project is located on a tributary of a transboundary river. The Requesters' claims relate to impacts from the Project in Tajikistan on the volume and seasonality of downstream waterflows in Turkmenistan and Uzbekistan. The concerns of the Requesters are legitimate, regardless of their accuracy. Based on Panel precedents, where a project's adverse impacts are alleged to occur in a territory downstream the borrower/recipient country, requesters from the downstream countries who claim to be directly affected by these impacts, can be eligible.[73] The Panel considers this criterion met.

  The Panel reviewed Management's Response in this regard. It notes that the Panel's eligibility determination for the 2010 Request for Inspection, relating to the Energy Loss Reduction Project, considered the two requesters in Uzbekistan eligible based on "*the literal and legalistic reading of the eligibility criterion referred to in this criterion*," as well as relevant precedents. The Panel reiterates "*These precedents adopted an interpretation which calls for a focus on where the material adverse effect of the Bank-financed Project occurs, even if it is in a territory that happens not to be that of the Borrower.*" This interpretation remains consistent with others that the Board had previously accepted, including the Yacyretá Hydroelectric Project and the West African Gas Pipeline Project.[74]

  Regarding the claim in the Request that the Requesters need international representation, the Panel learned there was knowledge of the Request for Inspection during its visits to

[71] The World Bank Accountability Mechanism: Inspection Panel and Dispute Resolution Service, Resolution No. IBRD 2025-0001, March 7, 2025 (the "Resolution"), paras. 13-15 and 29.
[72] The Resolution, paras. 13-15 and 29.
[73] The previous Panel cases are: Tajikistan: Energy Loss Reduction Project (Request from Uzbekistan) (2010); Argentina: Yacyreta Hydroelectric Project (1996); Argentina: Second Yaceryta HPP Project (being financed by Loan N.2854 – AR/Argentina – SSEGBA V Power Distribution Project (Loan No. 2854 – AR) (2002); Ghana: West African Gas Pipeline Project (2006), and Mongolia: Mining Infrastructure Investment Support and Mining Infrastructure Support – Additional Financing (2015).
[74] Statement of Chairman of the Inspection Panel on the Report and Recommendation on Eligibility of Tajikistan: Energy Loss Reduction Project during the February 3, 2011, Board Meeting

Turkmenistan and Uzbekistan and in the discussions held with civil society and the Government of Uzbekistan. The Panel also understood that the issues raised in the Request are of concern in both countries. Therefore, the Panel determines that international representation is not needed for the specific matters relating to transboundary impacts from the Rogun HPP. If the Requesters so ask, the Panel will consider the international representative as an advisor to them. The Panel notes that the issue of international representation does not affect the eligibility of the Requesters.

- Criterion (b): "*The Request does assert in substance that a serious violation by the Bank of its operational policies and procedures has or is likely to have a material adverse effect on the Requester*." The Requesters are concerned the Project will disrupt the annual discharge and seasonal flow of the Amu Darya to downstream countries. The Request states that initial impoundment of the Rogun HPP reservoir will decrease water availability far downstream in the Amu Darya Basin and in the canal systems that depend on water drawn from the Amu Darya. It claims the reduction in available water and any changes to the seasonal flow would negatively impact biodiversity and socioeconomic conditions for communities in Turkmenistan and Uzbekistan, especially for those dependent on irrigation-based agriculture. The Request adds that less water will increase salinity and aggravate health conditions. They raise concerns whether the analyses conducted adequately considered the safety of the dam, which is being built in a seismically active area. Additionally, the Requesters allege a lack of meaningful consultation and disclosure of Project documents in Turkmenistan and Uzbekistan.

  Notwithstanding the distance between the Rogun HPP and the downstream areas where Requesters claim impacts would be felt, the Panel considers that, as Rogun HPP is under construction and the assessments are ongoing, there could be a plausible link between the Project and Requesters' allegations related to: (i) downstream water shortages (annual and seasonal flow, and water governance), (ii) the scope and adequacy of the various Project analyses (ESIA, and transboundary and cumulative impact assessments), and (iii) disclosure and consultation processes with riparian stakeholders. The Panel considers this criterion met.

  While the Panel considers that the concerns of affordability and reliability of electricity could potentially be relevant to the Requester and stakeholders in Uzbekistan, it notes that the construction of Rogun HPP is not the only factor conditioning the tariffs for and the reliability of electricity. The Panel does not consider a plausible link between these concerns and the associated alleged harm and the Project.

- Criterion (c): "*The Request does assert that its subject matter has been brought to Management's attention and that, in the Requesters' view, Management has failed to respond adequately demonstrating that it has followed or is taking steps to follow the Bank's policies and procedures*." The Request includes earlier correspondence exchanged between the Requesters and Bank Management regarding these issues. The Panel considers this criterion met.

- Criterion (d): "*The matter is not related to procurement*." The claims do not raise issues of procurement and, thus, this criterion is met.

- Criterion (e): "*For projects approved by the Executive Directors before the date of this Resolution* [September 8, 2020], *the related loan has not been closed or substantially disbursed or for projects approved by the Executive Directors on or after the date of this Resolution fifteen months have not yet passed from the date the related loan has been closed*." At the time of receipt of the Request, the TA was approved in January 2023 and was 37 percent disbursed, and the SRFHP was approved in December 2024 and was undisbursed. The Panel considers this criterion met.

- Criterion (f): "*The Panel has not previously made a recommendation on the subject matter or, if it has, that the Request does assert that there is new evidence or circumstances not known at the time of the prior Request*." Although the Panel had received a Request for Inspection from Uzbekistan in October 2010 concerning the Bank-supported Energy Loss Reduction Project in Tajikistan, which financed several studies for the Rogun HPP, the Panel notes that the TA and the SRFHP as well as the current Request differ from the earlier project and the 2010 request. Hence, the Panel considers this criterion met.

E.2. Panel Observations Relevant to its Recommendation

54. In making its recommendation to the Board on whether an investigation is warranted, consistent with paragraph 48 of its Operating Procedures[75] the Panel also takes into account:

- whether there is a plausible, causal link between the harm alleged in the Request and the Project,
- whether the alleged harm and possible non-compliance by the Bank with its operational policies and procedures may be of a serious character,
- whether Management, in the Panel's view, has dealt appropriately with the issues raised in the Request and demonstrated clearly that it has followed or is taking steps to follow the required policies and procedures, or Management acknowledged that it did not comply with relevant policies and procedures, and
- whether Management has provided a statement of specific remedial actions, and whether, in the judgment of the Panel and taking into account the view of the Requesters, these proposed remedial actions may adequately address the matters raised by the Request.

55. The Panel provides its preliminary observations on the alleged and potential harm and compliance below, noting that in doing so, it is making no definitive assessment of the Bank's compliance with its policies and procedures or any adverse material effects that potential non-compliance may have caused.[76]

56. Preceding the Panel's observations are a brief description of the topography of the Vakhsh River and Amu Darya Basin and the applicable regional water arrangements. Thereafter follow

[75] Inspection Panel Operating Procedures, 2020, pp. 17-18, para. 48.
[76] Inspection Panel Operating Procedures, 2020, p. 18, para. 49.

the Panel's observations on concerns about alleged downstream water shortages; the comprehensiveness of Project assessment and documentation; dam safety and emergency preparedness; the adequacy of consultation and disclosure of information, and the affordability and reliability of electricity.

57. **Topography of the Vakhsh River and Amu Darya Basin.** The 375-kilometer-long Vakhsh River joins the Panj River in the south of Tajikistan to form the Amu Darya. After the point of confluence, the Kofarnihon River connects to the Amu Darya which then runs through several countries, including Tajikistan, Afghanistan, Turkmenistan, and Uzbekistan. As shown in Map 1, the Panj and the Amu Darya rivers forms the border between Afghanistan and Tajikistan. The Amu Darya also defines Afghanistan's border with Uzbekistan and Turkmenistan. It then flows through Turkmenistan before forming part of that country's border with Uzbekistan. The Amu Darya is some 1,500 kilometers long and feeds the southern part of the Aral Sea in Uzbekistan. The northern part of the Aral Sea, in Kazakhstan, is fed by the 2,200-kilometer-long Syr Darya, which originates in the Republic of Kyrgyzstan.

58. **Regional Water Agreements.** The regional water agreements that were first drawn up during the era of the former Soviet Union govern the amount of water the Central Asian riparian countries have been allocated from the Amu Darya and the Syr Daria. Under the former Soviet Union regional water allocations were managed centrally and created interdependencies among the former Soviet Republics, which are now the five independent Central Asian countries of Tajikistan, Kazakhstan, Uzbekistan, Turkmenistan, and the Republic of Kyrgyzstan. By the mid-1980s the Soviet authorities became concerned about the growing water crisis in the Aral Sea Basin resulting from the elaborate canal systems developed to support irrigation-based agri-monocultures downstream of the Amu Darya and the Syr Darya. This triggered several protocols and agreements aimed at agreeing principles as well as annual discharges and seasonal allocations for water sharing.

59. *Protocol 566:* Water-sharing principles and allocations for the Amu Darya and the Syr Darya Basins were established on March 12, 1987, by the Scientific and Technical Council of the Ministry of Water Resources of the former Soviet Union. These principles and quota-based allocations are formally established in Protocol 566 which was endorsed on September 10, 1987, by the riparian states of the water basins of the Amu Darya and the Syr Darya. Although Afghanistan is not a party to it, Protocol 566 nevertheless assumed a volume of 2.1 km^3 per year as a nominal share of water allocated to Afghanistan from the upper Amu Darya Basin.

60. *The Almaty Agreement:* After the breakup of the former Soviet Union, Kazakhstan, the Republic of Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan signed the Almaty Agreement on February 18, 1992, which stipulated cooperation on joint management, use, and protection of transboundary water resources. The Almaty Agreement adheres to the transboundary water sharing principles and allocations set out in Protocol 566. The Interstate Commission for Water Coordination (ICWC) was created as an entity responsible for agreeing and reconfirming seasonal water allocations twice yearly, taking into account annual and seasonal variations in water availability. The ICWC consists of the heads of the water authorities of Kazakhstan, the Republic of Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan.

61. *The Nukus Declaration:* On September 20, 1995, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan signed the Nukus Declaration, affirming their cooperation in addressing the environmental and socioeconomic problems of the Aral Sea.

62. **Alleged downstream water shortages.** The key concern of the stakeholders with whom the Panel met is the alleged reduction in the downstream, transboundary waterflow which they expect to result from the reservoir impoundment and operation of the Rogun HPP. Many stakeholders in Turkmenistan and Uzbekistan – including the Requesters, community representatives, experts, and CSOs – said that, while they did not oppose the Rogun HPP, they fear it will add to the already severe water shortages in the region. They claim Project assessments and documentation are not comprehensive and do not sufficiently analyze these impacts.

63. CSOs and experts with whom the Panel met in Turkmenistan and Uzbekistan raised concerns about the governance of water allocations across the Amu Darya riparian states. They emphasized that the 1992 Almaty Agreement, managed through the ICWC, is not legally binding and that there are no means available to enforce compliance. They are concerned that Tajikistan may choose to ignore the agreed allocations. Given existing pressures on water resources coupled with climate change, stakeholders in Uzbekistan stated that they would like the covenants included in the Financial Agreement between the Borrower and the Bank to be reflected in their bilateral Power Purchase Agreement (PPA) as an assurance that the Government of Tajikistan would adhere to the agreed water allocation. In Turkmenistan, experts said it is necessary for the riparian countries to enter into a legally binding agreement focused on the construction of Rogun HPP, its reservoir impoundment, operation, and dam safety. They gave examples of agreement-based partnerships between Turkmenistan and Uzbekistan, where reservoirs are operated jointly by both countries.

64. Most CSOs and experts were concerned that additional pressures on downstream water availability would exacerbate regional tensions and could result in armed conflict. The Requesters and CSOs in Turkmenistan and Uzbekistan told the Panel that Tajikistan's intention to use its full water allocation under the water-sharing agreement for the filling of the reservoir would result in less water flowing downstream. CSOs, community representatives, experts, and Government authorities in Uzbekistan told the Panel that Uzbekistan already faces severe water shortages for agricultural. During the Panel's visit to the Badai Tugai Biosphere Reserve in the lower Amu Darya region in Uzbekistan, staff responsible for managing the Reserve told the Panel about the severe water shortages in the Amu Darya this spring. They said water levels had been down every year since 2017 and that this has negatively affected the Reserve's protected forest. While reserve staff were unsure why waterflows were reduced, they worried that the Rogun HPP would further exacerbate water shortages in the region.

65. Experts in Turkmenistan and from the International Fund for Saving the Aral Sea and from the Academy of Sciences in Karakalpakstan, Uzbekistan, also raised concerns about seasonal waterflows. They told the Panel that the expected increase in winter energy production will result in more water flowing downstream of the Rogun HPP when it is not needed in the downstream countries. They added that this increased waterflow in the winter period will elevate groundwater, bringing salt closer to the surface, damaging buildings and infrastructure, and adversely impacting the flora and fauna in the region – particularly endemic species.

66. The Panel notes that stakeholders in Turkmenistan and Uzbekistan raised concerns about the Qosh Tepa Canal, which the Government of Afghanistan started building in 2022 (see Map 2) in the upper Amu Darya downstream of the Vakhsh cascade. The canal is expected to run 285 kilometers – the first 100 kilometers of which have already been constructed as Phase 1 and the remainer is planned to be completed by 2029. The concern raised relates to Afghanistan not being a party to the regional water sharing agreements but this canal also exacerbating the cumulative impacts of water withdrawn from the upper Amu Darya for those further downstream. The Panel notes that, based on available literature, the Qosh Tepa canal is estimated to divert significantly greater amount of water from the Amu Darya than the nominal water allocation of 2.1 km^3 per year, which Protocol 566 has been assuming for Afghanistan.[77] The Panel also notes that, according to Management, this canal and its impact lies well beyond the scope of the Rogun HPP.

67. Management acknowledges the concerns about the water shortages in the Amu Darya Basin, but states that many other factors affect waterflows downstream, especially large-scale irrigation. The PIU told the Panel that Tajikistan has never fully drawn on the quota allocated to it under existing water sharing arrangements, and that there has never been a dispute or concern raised in relation to the country's water use. The PIU added that, on the contrary, Tajikistan has many times released additional water through the Vakhsh cascade when downstream countries requested it. Moreover, the PIU informed the Panel that potential waterflow impacts during reservoir impoundment were being further analyzed through a hydrology study currently underway to confirm waterflow simulations, and that this work will be completed by September 2025.

68. Management and the PIU separately informed the Panel that the Rogun HPP is designed to operate without altering the flow regimes of the Vakhsh River. Both said the Government of Tajikistan is committed to adhering to its water allocation under the regional, water-sharing agreements throughout all phases of the Project – construction, reservoir impoundment, and operations – and to maintaining seasonal flow regimes to prevent any appreciable harm to downstream, riparian countries. Both stated that the Project's Financing Agreement contains legally binding covenants, including the requirement that Tajikistan comply with the existing water sharing agreements. Uzbekistan officials emphasized that the legal covenants in the Bank's Project's Financing Agreement should be included in its PPA with the Government of Tajikistan.

69. During the visit to Tajikistan, Government officials told the Panel that the Vakhsh River contributes less than 25 percent of the waterflow of the upper Amu Darya Basin, with a further five percent coming from the Korfarnihon River, and more than 70 percent coming from the Panj River and its upstream tributaries. They confirmed that the principles and allocations for water sharing agreed by the ICWC will be met at all times. The officials further explained that the Amu Darya allocations are based on the estimated water availability for the respective year minus a quantity for "*environmental discharges*" supporting the river systems and the nominal volume earmarked for Afghanistan.

70. The water authority in Tajikistan and the PIU explained that seasonal releases from the Rogun HPP will be regulated by the Vaksh cascade and that waterflow simulations had been

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[77] See for example, [Impact of the Qush-Tepa canal on the agricultural sector in Uzbekistan](), June 2023; [Navigating Water Conflict in Central Asia: The Amu Darya River and the Qosha Tepa Canal Project](), August, 2023.

modeled for Rogun HPP operations along the whole of the cascade. It added that the water simulations showed that the cascade can regulate winter seasonal flows to the effect of maintaining typical seasonal flows downstream.

71. Management stated that the studies conducted as part of the earlier Bank-funded TEAS, included modeling Rogun HPP's potential downstream impact based on optimizing energy generation within the constraint of not altering the historical downstream waterflow pattern and staying within the limits of Tajikistan's annual water allocations. Management added that the volume of water withheld during the impoundment period will be kept within the limits of Tajikistan's historically unused water allocations and will not exceed more than the 2.2% of the average annual flows in the upper Vakhsh River. In Management's view this estimated impact will cause no appreciable harm to the downstream riparian countries. Management also stated that it is water flow monitoring systems upstream of the Rogun HPP as well as downstream beyond the border of Tajikistan to ensure such commitments as referred in the Financial Agreement.

72. **Comprehensiveness of Project assessment and documentation.** During its meetings in Uzbekistan, including with Government authorities, the Panel was told that the ESIA disclosed in 2023 for the Rogun HPP relies on incomplete and outdated data from 2014 and does not consider the effects of climate change. Experts in Turkmenistan raised similar concerns. Stakeholders in both countries complained that the ESIA limited the area of influence of the Project to the Nurek HPP, some 70 kilometers downstream of the Rogun HPP. In their views the area of influence should have been extended to the Aral Sea to provide a comprehensive assessment of transboundary impacts. According to authorities in Uzbekistan and experts in Turkmenistan, the ESIA lacks sufficient quantitative and qualitative data on water use, including irrigation, and impacts on downstream countries. They added that it did not consider the potential cumulative impacts relating to ongoing and future projects in the Amu Darya Basin. Experts and civil society representatives with whom the Panel met in Turkmenistan called the ESIA "*inadequate*" as it only refers to Tajikistan and does not analyze the transboundary impacts on downstream countries. Furthermore, they questioned the adequacy of the analysis on alternative dam heights.

73. The experts and civil society representatives in Turkmenistan maintained that the ESIA has three major shortcomings: i) it does not consider droughts (they said Turkmenistan suffered droughts from 2021 to 2023), ii) it does not consider climate impacts, particularly on water availability in the Amu Darya, and iii) it does not assess cumulative impacts. They added that the latter two factors are relevant for understanding the effects on water quality downstream because with reduced water quantity, quality deteriorates. They added that the cumulative impact assessment should cover the hydrology (water availability) of the Amu Darya – including the various sources of withdrawal, such as the Qosh Tepa canal – social impacts, biodiversity loss, and carbon footprint effects of water quality and quantity decline. In Turkmenistan, experts shared scientific documentation in the public domain on the potential downstream impacts of the Rogun HPP. They added that more than 70 percent of Turkmenistan is desert and 98 percent of its water comes from transboundary flow, with 95 percent of it coming from the Amu Darya.

74. Management stated that the ESIA for the Rogun HPP was initially developed in 2014 with Bank support and was limited to impacts in Tajikistan because the above-mentioned modelling showed that downstream impacts on riparian countries would be very minimal. Management added

that the initial ESIA was updated in 2023 as part of the TA to bring it in line with the Bank's ESF. Management emphasized to the Panel that the updated ESIA remained in draft, and that the Project had been approved based on this draft ESIA, amongst other documentation. Management added that the Environmental and Social Panel of Experts had also cleared the 2023 draft ESIA.

75. Management and the PIU told the Panel that they acknowledged the inputs and comments received from stakeholders during consultations, including concerns on transboundary impacts. They decided to update the ESIA, prepare a more comprehensive cumulative impact assessment and conduct a climate impact and hydrology study, as well as update mitigation management plans on the basis of these documents. Management highlighted that the financing agreement for the Rogun HPP is not yet "*effective*" and that the update, finalization, and disclosure of these E&S-related documents to Management's satisfaction are conditions of effectiveness for financing.

76. Regarding the concern raised in the Request about weak analysis of alternatives in the ESIA, Management notes that this is a "brownfield" Project, and the analysis was confined to the alternatives available for its continuing development. Management told the Panel that according to the three dam heights assessed in the TEAS, the selected dam configuration is the most economically viable.

77. **Dam safety and emergency preparedness**. Experts and CSOs from both Turkmenistan and Uzbekistan raised significant concerns regarding the safety of Rogun HPP. They stated that the Rogun HPP is in a seismic zone prone to frequent earthquakes, some of which have been severe. They added that the seismic risk will increase as the reservoir is filled.

78. The PIU told the Panel that seismic risk has been comprehensively studied using multiple earth tremor simulations and an expert review to arrive at the optimum design of the Rogun HPP. They explained that the worst-case earthquake scenario modeled includes a 1-in-10,000-years event and a maximum earthquake 12 on the Richter Scale. They told the Panel that the model earthquake scenarios covered both deterministic and probabilistic approaches to establish the dam's structural requirements and foundations. The PIU added that no dam in the world has been designed to this level of worst-case scenario analysis. The PIU also highlighted that, since Rogun HPP is being built as an earth-filled embankment dam, it will be able to accommodate fault movements and earthquake displacement, and will be able to withstand the maximum, ripple effects. The PIU explained the highest risk to dam safety arises during the impoundment phase. They added that gradual impoundment of the dam over a period of 15 years is required to mitigate this risk.

79. Experts and CSOs from both Turkmenistan and Uzbekistan also stressed that there is a salt dome beneath the dam that could affect its stability and integrity if water ingresses the salt dome. They feared this risk could result in a future, catastrophic failure of the dam. The PIU told the Panel that the presence of the salt dome beneath Rogun HPP had been extensively studied by geotechnical and geological investigations and its risk assessed by modeling. Based on these studies, a concrete sarcophagus covering the dome has been constructed to prevent water ingress. The PIU added that, for continuous monitoring, piezometers have, and are being, installed in the dam's foundations. Management added that structural design will be adapted to any change to ensure ongoing stability.

80. Management informed the Panel that the design of the Rogun HPP has been further evaluated by independent experts, including the DSPOE set up specifically to oversee and advise on dam safety. According to Management, the DSPOE has confirmed that the design of the dam is robust and added that the DSPOE will continue its work during the construction and impoundment of the dam. Management and the PIU told the Panel that emergency response procedures and emergency preparedness plans are being developed and will be ready prior to the start of reservoir impoundment activities, and that emergency instructions will be shared with communities and relevant entities in the riparian countries.

81. **Adequacy of consultation and disclosure of information.** The CSOs and the communities in Uzbekistan and the CSOs and experts in Turkmenistan with whom the Panel met described the consultations on the Project conducted in riparian downstream countries as inadequate. According to many of them, documents that were disclosed were too technical to understand. In Uzbekistan, the Requester and some local CSOs attended an online meeting in November 2023. However, the scientists from the Academy of Science in Karakalpakstan told the Panel that they have never been invited to any consultation meeting about the Rogun HPP and were unaware of any disclosed documents. In Turkmenistan, experts and civil society representatives, told the Panel that the first time they were invited to a consultation concerning the Project was for a meeting which took place on May 23, 2025 (the date of submission of the Management Response).

82. Officials from Tajikistan's Ministry of Water and Energy informed the Panel that Tajikistan is sharing Project information with stakeholders, although some documents, such as the cumulative impact assessment, are still being finalized before being made available for public consultation. They added that between 2011 and 2014, five consultation meetings on the TEAS were held in Almaty with riparian countries; more recently a consultation meeting with riparian countries took place in November 2023 in Almaty.

83. Management told the Panel that consultations were held in 2023 based on the draft ESIA, which was disclosed in local languages. Management added that this is in compliance with the ESF. Management told the Panel that since 2011 the Project has held 90 consultation meetings with stakeholders in Tajikistan. Management added that between 2011 and 2014 Tajikistan held four high-level consultations with riparian countries. Management stated that a high-level regional riparian consultation took place in November 2023 in Almaty, Kazakhstan. Follow-up consultation took place in Tashkent, Uzbekistan, in October 2024. Most recently, in May 2025, a virtual meeting took place with stakeholders in Turkmenistan. Management informed the Panel that further riparian country consultations are being planned for later in 2025 once the updated ESIA, cumulative impact assessment, and the ESMP have been disclosed.

84. **Affordability and reliability of electricity.** Although the affordability and reliability of electricity were raised in the Request, the Panel notes that none of those with whom it spoke in the two riparian countries reiterated these concerns. During its meeting with the Panel, Management explained that electricity demand is expected to double by 2050, and the Project is helping to ensure that sufficient baseload will be available at a highly competitive price compared to current reliance on fossil-fired generation.

E.3. The Panel's Review

85. The Panel appreciates the detailed discussions it held with the officials of the Governments of Tajikistan and Uzbekistan, with Requesters, CSOs, experts, and community participants, in Turkmenistan and Uzbekistan, and with the PIU in Tajikistan, as well as with Bank Management. The Panel has also valued the additional information and site-specific explanations it received during the field visit and meetings with the PIU.

86. The Panel acknowledges the significance of the Rogun HPP for Tajikistan's energy security and the potential it could hold for the transformation of the country's economy. The Panel understands the importance of this export-oriented Project, which is associated with significant domestic and regional benefits and the decarbonization of regional power grids. The Panel understands the Bank's leadership role and the importance of the multi-donor platform for the Project's financing. The Panel also understands that the Project is important for Tajikistan harnessing its water resources to produce electricity for export and generate foreign exchange and public revenues for its economy.

87. The Panel appreciates the thorough and constructive discussions it held with the stakeholders whom it met in Turkmenistan and Uzbekistan – including the Requester, community representatives, experts and CSOs – and the additional information they provided during the eligibility visit, as well as the trust they have placed in the Panel's process. The Panel observed that none of the stakeholders, including the Requesters, oppose the construction of the Rogun HPP. The Panel understands that the arguments put forth by the Requesters and experts in both countries are focused on the annual discharge and seasonal waterflow in the Amu Darya. They are concerned these could significantly affect agriculture-based livelihood and human health. Specific to Uzbekistan, the concerns were predominantly framed in the context of the potential impact on the Karakalpakstan region and the Aral Sea hundreds of kilometers further downstream.

88. The Panel recognizes that the concerns Requesters have raised pertain to: i) alleged downstream water shortages; ii) the comprehensiveness of Project assessment and documentation; iii) dam safety and emergency preparedness; and iv) meaningful consultation and disclosure of Project-related documents. The Panel notes that, from the perspective of Requesters and other stakeholders it spoke with, these concerns are further elaborated as (a) an alleged lack of comprehensive analysis of downstream waterflow and impacts, including the limited scope and timing of existing or ongoing studies (including climate change and cumulative impact assessments); (b) alleged insufficient assurances regarding annual water discharge and seasonal waterflow in the Amu Darya; (c) dam safety concerns linked to seismicity; and, (d) an alleged lack of meaningful consultations with riparian stakeholders downstream.

89. The Panel observes that the Amu Darya Basin is subject to competing interests associated with water withdrawn for various uses by different countries in various locations. The Panel notes that in its discussions with the stakeholders it met, little distinction was made between the various uses of water, such as for power generation, irrigation, or other consumptive uses, and the respective implications of these uses on the volumes released back into Amu Darya Basin. The Panel appreciates that the operation of Rogun HPP along with that of Nurek is intended to regulate

the waterflow through the Vakhsh cascade for electricity generation while at the same time maintaining the annual discharge and seasonality of the waterflow for downstream water users.

90. The Panel acknowledges Management's views that this Project has been extensively studied. The Panel observes that the 2014 assessments guided Management's initial perspective that the Project will have no appreciable harm or impact on the waterflows in the upper Amu Darya and even less farther downstream. The Panel observes that between 2011 and 2014 concerns were raised by stakeholders in the riparian countries and that these have been reiterated more recently. The Panel also observes that since the TA began in 2023 Management has been reviewing the assessments completed in 2014 to bring them in line with the requirements of the ESF, as well as taking on board and responding to more recently undertaken stakeholder consultations and concerns heard. The ongoing review includes: i) updating the ESIA, ii) preparing a more comprehensive cumulative impact assessment, including a climate impact assessment and a hydrology study, and iii) updating the ESMP accordingly. The Panel notes that Management is also of the view that further riparian country consultations will be conducted once the respective documents have been disclosed.

91. The Panel observes that Management considers it has correctly and thoroughly applied the Bank's policies and procedures relevant to the Project and the matters raised by the Request. Although the distance is considerable between the Rogun HPP and the downstream areas where Requesters claim impact would be felt, the Panel considers that, as the construction of Rogun HPP and the assessments are still ongoing, the Requesters' concerns could be plausibly linked to the Project and may indicate possible non-compliance of a serious character with Bank policies and procedures.

F. Panel Recommendation

92. The Panel notes the divergence of views between the Requesters and Management on the specific issues listed above which relate to the downstream impacts of the Rogun HPP. It also notes that there are conflicting assertions by the Requesters and Management regarding the following three issues: (i) the downstream waterflow shortages (annual discharge and seasonal flow, and water governance), (ii) the scope and adequacy of the various Project analyses (ESIA, and transboundary and cumulative impact assessments), and (iii) the disclosure and consultation processes with and between riparian stakeholders.

93. The Panel further notes that the Requesters and the Request for Inspection meet the technical eligibility criteria set forth in the Resolution in relation to these three issues. The Panel acknowledges Management's view that the ESIA, the cumulative impact assessment, and the ESMP are in their final stages of approval. The Panel also appreciates Management's view that covenants are included in its legal agreements with the Government of Tajikistan for the latter to adhere to agreed water allocations and seasonal flow.

94. The Panel is of the view that, without an in-depth review of the Bank's due diligence and supervision of the Project, it is not possible at this stage – when several assessments are still ongoing – to assess whether Management has appropriately dealt with the issues raised or

sufficiently demonstrated that it is following and complying with applicable Bank policies and procedures.

95. In consideration of the analysis set out above, the Panel recommends an investigation. If approved, the investigation would take into account the ongoing assessments and associated documents mentioned above once these are completed.

96. If the Board of Executive Directors concurs with the Panel's recommendation, as per paragraph 72 of the Resolution, the Head of the Dispute Resolution Service shall offer an opportunity for dispute resolution that has a scope which "*is limited to project-related issues raised in the Request for Inspection and identified as the issues to be investigated in the Inspection Panel's report to the Executive Directors recommending investigation*."[78] The Panel will commence its investigation if there is no dispute resolution.

[78] The Resolution, para. 72.

Annex 1

Request for Inspection
(Redacted)

To: The Chair, Inspection Panel
The World Bank Accountability Mechanism, MSN: MC 10-1007, 1818 H St., NW, Washington, DC 20433, USA. Fax: +1(202)-522-0916. Email: ipanel@worldbank.org

Dear Chairman:
Esteemed Members of the Inspection Panel of the World Bank:

Re: Complaint concerning World Bank investments in and financing to Rogun HHP Project.("Sustainable Financing for Rogun Hydropower Project" (P181029) and "Technical Assistance for Financing Framework for Rogun Hydropower Project" – (P178819**))**

Representatives of the Complainants are submitting this complaint to the Inspection Panel on behalf of the project-affected Complainants and their communities regarding the World Bank's USD 350 million investment in Project#P181029 "Sustainable Financing for Rogun Hydropower Project", which was approved by the Board on December 17, 2024. To co-finance the subsequent Rogun Hydropower Project (P181029), the World Bank invited a coalition of international finance institutions, nine of which, allegedly, pledged additional USD 1185 million.

Preparation of above mentioned Project (P181029) is supported by a corresponding Technical Assistance (TA) Project# 178819 approved and signed in January 2023. The borrower has received a US$15 million grant/loan package from the World Bank and AIIB for the project, which has the objective to strengthen Rogun HPP Project's financial and commercial frameworks and enhance its environmental and social sustainability by "updating" "Environmental and Social Instruments" (E&S) developed in 2014.

The World Bank and several co-financiers have approved financing for construction of the Rogun HPP (Project#P181029) despite the current ESIA documentation being incomplete and based on outdated data and concepts and not addressing key concerns related to the environmental and social consequences of the project. Although, the World Bank claims that the whole project will be implemented according to the standards of its ESF, other co-financiers have already issued calls for tender for specific engineering works, which do not reference the ESF requirements and do not contain the provision that adjustments could be made based on outcomes of the ESIA finalization (e.g. see tender(s) announced by the Islamic Development Bank[1]).

[1] General Procurement Notice Construction of Rogun Hydro Power Plant Project (Lot-4 Left Bank Structures) Financing No.TJK1042. https://www.isdb.org/project-procurement/tenders/2024/gpn/construction-rogun-hydro-power-plant-project-gpn

As outlined below, given current scientifically sound evidence related to the impacts of climate change and the hydrology of the region as well as the well documented context of closed civic space in Central Asian countries, we expect the project will contribute to a wide range socio-economic and ecological harms, including but not limited to water deficit, degradation of globally important riverine ecosystems, extinction of critically endangered species, economic and physical displacement of local communities and increased cost of living.

Much of the impacts capable of causing harms have not been assessed rigorously, or those assessments have not been disclosed, while the complainants (and their communities) had no chance to participate in any meaningful public consultations, as one riparian consultations were held in secrecy in early November 2023 before the World Bank disclosed the draft ESIA, while another one hastily held in Tashkent on 28 October 2024 was not based on any specific E&S documentation made available for comment prior or even after the meeting and violated many other requirements of the WB standards[2].

Do the complainants live in the project impact area? YES

The Complainants are citizens of Uzbekistan (Republic of Karakalpakstan) and Turkmenistan, living in the environmental disaster zone of the Aral Sea region stretching along Amu-Darya River and its Delta, have united to file a complaint about violations of the "Sustainable Financing for Rogun Hydropower Project" (P181029) in Tajikistan, which poses numerous threats to the health and economic survival of their communities and the health of the region's environment.

Harm to be caused by the Project

Complainants and their communities are likely to be harmed by the World Bank's errors and omissions in the design and implementation of the "Sustainable Financing for Rogun Hydropower" Project (P181029)**[3]** and "Technical Assistance for Financing Framework for Rogun Hydropower Project" (P178819**) and the lack of disclosure and meaningful public consultation, especially for the communities downstream of the Vakhsh Hydropower Cascade.**

During the planning and preparation of the ESIA for the Rogun HPP Construction Financing Project, the interests of people living downstream, particularly those living in the Aral disaster zone in the Amu Darya River basin, were completely ignored[4]. Damage may result from the World Bank's and the borrower's failure to comply with the Bank's Environmental and Social Framework (ESF) and the failure to develop a

[2] CSOLetter to the World Bank on improper consultations. 8 November 2024 on the Rogun Alert website https://rogun.exposed/letters
[3] Project P181029 https://projects.worldbank.org/en/projects-operations/project-detail/P181029
[4]Karakalpakstan, the Khorezm region of Uzbekistan and the Dashoguz (Tashauz) velayat of Turkmenistan are usually considered the "environmental disaster zone of the Aral Sea" , but negative socio-ecological consequences are also recorded beyond its borders in the territories of Uzbekistan, Turkmenistan and the Kyzyl-Orda region of Kazakhstan.

robust Environmental and Social Management Plan (ESMP) and Environmental and Social Commitment Plan (ESCP), which detail how the World Bank and the borrower, in consultation with the community, will address significant social and environmental issues arising from the project and prevent harm to the population and ecosystems of the Amu Darya river basin**.**

We expect that the inevitable reduction and seasonal redistribution of the Vakhsh River flow during the construction, filling of the reservoir and operation of the Rogun hydropower station will create a water shortage in the Lower Vakhsh and Amu Darya rivers, which will lead to irreversible consequences and disrupt the already fragile state of natural and anthropogenic ecosystems, which, mainly, was not taken into account or was directly ignored in the ESIA of the Rogun HPP.

Moreover, even the change in the flow regime, which is mentioned only in passing in the ESIA of the Rogun hydroelectric station, will lead to the aggravation of key environmental problems, as well as the need for a high-cost transformation of agriculture and municipal water supply in the middle and lower reaches of the Amu Darya. In the worst-case scenario, the redistribution of runoff will lead to the complete degradation of the local socio-economic structure with enormous social consequences.

The Complainants, who live on the lands washed by the waters of the Amu Darya River, have felt throughout all their lives the consequences of the Aral Sea disaster, triggered by the thoughtless construction of dams, canals and other hydraulic infrastructure, which caused the redistribution of the Amu Darya flow and the destruction of the Aral Sea. Current baseline conditions in the region shared by this crisis have been completely omitted when planning Rogun HPP Project and drafting the ESIA report.

The population of most regions of the lower reaches of the Amu Darya and its delta have been on the brink of extreme physical survival for many years due to salinization and desertification of soil, resulting harm to agricultural productivity and deteriorating human health due to toxic dust storms and low-quality water supplies, with often health threatening concentrations of salts. Most migrants from the Aral Sea region indicated environmental degradation as the leading reason for migration. Two family members of one of the two complainants also migrated out of the region due to deteriorating environment. (See Annex I for details and references).

Deterioration of health, loss of livelihood due to lack of water or its poor quality, uncertainty of survival prospects in an area where the habitat is degraded **-** this is what has been a heavy moral, psychological and physical oppression for many years that influenced the complainants, their families, and communities.

The additional reservoir of the Rogun hydroelectric power station with a live volume of 10 cubic kilometers, at the operational stage, in dry years can have a decisive influence on the reshaping of the flow of the Amu Darya River and the state of the ecosystems and population dependent on it up to the river delta. These scenarios are not considered in ESIA. During the construction and filling of the reservoir of the Rogun hydropower station, even according to preliminary estimates of the World Bank, within 13–16 years the Amu Darya flow into the Aral Sea will be reduced by 0.8 - 1.2 cubic kilometers annually (this will amount to at least 25% of the current flow into the Amu Darya Delta[5]), which will inevitably lead to a

[5] Nazariy A.M. Changes in Amu Darya river annual and seasonal flows. September 2023. Presentation (in Russian) https://rivers.help/pdf/2023_Nazariy.pdf

progressive catastrophe in the already existing zone of environmental disaster and its spreading to new areas.

To date, we note the failure to take into account full consideration the cumulative impacts of the Rogun hydropower station during different project lifecycle stages (construction, filling of the reservoir, operation), in conjunction with other functioning and planned water infrastructure projects downstream along the Amu Darya. As we understand it, based on the World Bank's own data, during 15-year long reservoir filling phase, there will be over 20% reduction in water flowing into Aral Sea and no identified coordination with other new large projects along the Amu Darya, for example the Qosh-Tepa canal in Afghanistan. Combined with an evidence-based data about the impacts of climate change in the region (including desertification, salinization, and overall lowered water flow), the operations of the Rogun Dam would be expected to severely exacerbate a range of ecological, social and economic problems – including among others:

a) devastating impacts on critically endangered species of fish and other riparian species as well as currently intact tracts of floodplain tugai forests which are dependent on the flow regime of the rivers of the Amu Darya basin – one of which was designated as a UNESCO World Natural Heritage Site in 2023,

b) declines in living standards and health condition of those of local residents who live downstream and around the site (most particularly for those from local communities that rely on the watershed for irrigating farmland), given the loss of land and water availability as well as higher release of salts into the air, and

c) social dislocation caused by loss of connection to the land and to surrounding communities, and corresponding out-migration, raising the specter of increased cross-border economic and socio-political tensions.

(See Appendix I for detail on cumulative effects)

As a result of these changes, downstream regions are threatened with salinization of land\waters and loss of fertility of large irrigated areas, degradation and desertification of lands due to lack of fresh water, which will necessitate a change in the way of farming due to changes in the flow regime of the Amu Darya[6].

Reduced flows will also cause environmental degradation in our areas. In particular, due to an increase in mineralization (salt content) in water and the release of salts into the air from dried-out areas, the number of associated diseases will sharply increase.

As a result of the implementation of the Rogun HPP project, the risk of degradation of the aquatic and coastal ecosystems of the Amu Darya basin will increase, with the loss of their recreational properties, biological resources important for local communities and the destruction of unique biological diversity. In particular, the most important tracts of floodplain tugai ecosystems, which have already been significantly reduced due to changes in the flow induced by previously built reservoirs, will be under the threat of degradation, including the World Heritage Site Tugay Forests of the Tigrovaya Balka Nature Reserve and the Amudarya Nature Reserve, a transboundary reserve between Uzbekistan and Turkmenistan. Among the endemic fish species, the two species of Amudarya shovelnose sturgeons, both recognized by the IUCN as critically endangered status - CR*)* may go extinct due to increasing changes in the flow regime of the water

[6] Uzbekistan - Country Climate and Development Report. World Bank .2023

and sediments in the river. In our nature conservation programs the complainants used those sturgeons as flagship species representing the biodiversity of the Amu Darya River basin, while historically they were also used by rural healers as traditional medicine (before their numbers were reduced by impacts from upstream water infrastructure). Unless their habitat is protected from further negative dam impacts, our children and grandchildren will only ever know these species in books or local museums, and cultural ties with riverine life will be severed.

The decades-long threat of the implementation of plans for the construction of the Rogun hydropower plant against the backdrop of a progressive decrease in the volume of water entering the region has already become a source of major stress for complainants, [redacted] and local communities. This threat created a feeling and state of alarming uncertainty about their fate among members of local communities and all residents of the Amu Darya valley. This is especially painful for the complainants as [redacted]. In addition, for the residents of the Amu Darya Valley, the risks of collapse of the overlying dams pose a great threat, but the population is not even informed about the likely consequences and emergency action plans in the event of different scenarios of such accidents.

Complainants' communities have not received any information about the expected socio-environmental impacts of the project, the ESIA materials are not available in Uzbek, Karakalpak and Turkmen languages, complainants are not aware of any consultations or surveys conducted in their potentially affected regions in the process of preparing the ESIA. A failure to provide such information is a violation of national legislation and requirements of international law, e.g. the Aarhus Convention. The lack of reliable information in the ESIA about the consequences for the lower reaches of the river in different scenarios for the use of the Rogun HPP deprives members of the complainants' communities (and local authorities alike) of an opportunity to plan for the future, to make informed choices between attempts to adapt to environmental deterioration or migration from their homes.

For the Complainants and other residents of our countries, the project documents do not provide for compensation measures and damage compensation mechanisms for cases where negative impacts below the cascade cannot be avoided. The project documentation neither provides a venue for filing compensation claims for losses in case of a dam burst or malfunctioning.

We expect that the project could create a migration/displacement crisis in the already disadvantaged Amu Darya basin from the upper reaches of the Vakhsh to the very lower reaches of the Amu Darya. More than 50 thousand people will be forcibly resettled from the Rogun reservoir bottom in Tajikistan and more will migrate from downstream areas (e.g. in Turkmenistan and Uzbekistan) experiencing the loss of livelihoods due to redistribution of water flows caused by the creation of the Rogun HPP reservoir upstream, with many of those searching for places to live, new jobs, in surrounding countries (e.g. Uzbekistan, Kazakhstan and Turkmenistan) and potentially creating socio-economic pressures and igniting civil unrest. In the lower reaches of the Amu Darya, the number of potential migrants and economically deprived people will depend on the modes of operation of the Rogun hydropower reservoir as the regulator of the whole Vakhsh Cascade in different periods of water availability.

The impending changes in the Vakhsh River flow and its impact on the lower reaches of the Amu Darya, as well as the contribution of these changes to the cumulative impacts and their effects associated with other projects in the Amu Darya basin are of major concern. Lack of information on potential impacts does not allow both the authorities of the riparian countries and local communities to develop adequate countermeasures and adaptation to the potential negative consequences of the construction of the Rogun hydropower station. However, it is projected by the World Bank's "Uzbekistan - Country Climate and Development Report." that just in the agricultural sector of Uzbekistan adaptation of the irrigation system to water scarcity through 2030 will cost additional US$8.7 billion (mostly in Amu-Darya basin. Stating that the World Bank clearly points to a direct causal link with development of upstream reservoirs: "*transboundary allocation issues and poor regional cooperation have made it challenging to coordinate the planning and operations of such (water) infrastructure, while the unplanned and regionally uncoordinated development of infrastructure in upstream regions amplifies the risks of water shortages for downstream regions*[7]". Other dependent sectors like municipal water supply, health system, etc. will also confront water scarcity and resulting decrease in its quality, which in turn will decrease the overall living standards and increase climate adaptation costs in our communities.

The Complainants state that the upcoming threats of water shortages, a decrease in water quality, changes in the mode of water supply will irreversibly change their environment, cause irreparable damage to the biological diversity of the region, the culture of local communities and can lead to the collapse of the region's economy, which is based on irrigated agriculture, giving rise to unemployment, poverty, as a consequence of environmental and economic migration from the region. Impacts of Rogun HPP coupled with other water infrastructure planned in the basin may eventually make anthropogenic agricultural ecosystems reach a threshold in resilience capacity, after which the current socio-economic system will collapse and migration flows will become massive and irreversible. (For a more detailed explanation of the expected changes, see the Appendix I)

At the same time, the Rogun hydroelectric power station is presented by proponents as a reliable cost-effective optimal way to put an end to power shortages in winter and reduce greenhouse emissions in the region, while, when analyzed objectively, it looks like one of the most expensive and time-consuming "false solutions" which contradicts basic principles of climate justice. In September 2024 the ADB project paper clearly confirms that costs of Rogun electricity far exceed present values[8]. Expensive energy produced at Rogun HPP and exported to the region will increase electricity bills for the vulnerable population of the countries, such as Uzbekistan and Kazakhstan. Officials of those countries are being lured into signing long-term power purchase agreements for energy, most of which will be available only in a decade or two after the Rogun HPP completion. The Complainants see that inflation has increased in

[7] **Uzbekistan - Country Climate and Development Report.** November 2023 https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099111423124532881/p1790680f452f10ba0a34c06922a1df0003

[8] "The sustainability risk for Barqi Tojik is considered substantial due to the higher cost of energy purchases from independent power producers and the **Rogun HPP**. These costs exceed the tariffs Barqi Tojik receives for domestic sales and, in some cases, even surpass the revenue obtained from export sales".Reconnection to the Central Asian Power System Project - Additional Financing: Report and Recommendation of the President https://www.adb.org/projects/documents/taj-52122-002-rrp

Tajikistan, where electricity tariffs are soaring in order to achieve "production cost recovery"[9] and citizens there are encouraged by authorities to switch back to coal and other dirty energy sources for heating purposes. The Complainants believe that the bet on completing the Rogun hydroelectric power station with the "world's tallest dam" (335 meters) will push the development of Central Asian power systems onto a high-emissions path by promoting the most expensive and time-consuming decarbonization methods, thus closing opportunities to pursue much cheaper alternatives which could be built much faster (e.g. wind and sun). The exports of expensive energy produced at Rogun HPP could significantly increase electricity bills for the population of the countries purchasing power from Rogun HPP compared to other possible decarbonization scenarios. Besides electricity systems of Central Asia are prone to catastrophic blackouts, often caused by malfunctioning of large generation units[10]. Adding giant Rogun Hydro as a large single source of maneuvering capacity may increase a risk for all countries involved in case of its malfunctioning. This will negatively affect the livelihoods of communities in Uzbekistan, where one of the complainants resides.

In the view of the history of environmental degradation in the Aral Sea region and risks/harms described above, the complainant expect serious negative environmental consequences from the Rogun HPP Project to affect them personally, their communities and wider downstream environment in Uzbekistan and Turkmenistan where 8 to 10 million people living in the zone of influence of the Amu Darya River, including dependent canal systems (Karakum, Karshi, Amu -Bukhara).

Failures to Comply with World Bank Policy Requirements and Procedures

The project is subject to the World Bank's 2018 ESF, including its Environmental and Social Standards (ESSs). Neither the World Bank nor the borrower has met the requirements of ESS1, ESS3, ESS4, ESS5, ESS6, and ESS 10. The World Bank also violated requirements of the ESP and failed to adhere to the ESF "Vision". The borrower's environmental and social management plan (ESMP) does not contain practical mitigation measures, even for the items marked in the ESIA TOR as requiring mitigation[11]. It also does not follow the logic and present full contents prescribed by the ESS1. Major deviations from the requirements of the ESS1 are also found in the draft Environmental and Social Commitment Plan (ESCP), which does not contain key obligations necessary to mitigate potential impacts and is largely devoid of clear substantive requirements beyond promises to compile in future action plans prescribed by policies. From our perspective, we cannot understand how the World Bank could ever use it to keep the Borrower accountable, which is the prime purpose of ESCP. Since the completion of the previous ESIA in 2014 the Borrower has not effectively implemented mitigation and monitoring measures to meet the requirements set forth in the

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[9] On the role of rising electricity tariffs in inflation see: **World Bank. July 2024. Tajikistan Economic Update: https://thedocs.worldbank.org/en/doc/32cdc98fe3e6e0120eb15b05aa2b9faa-0080062024/original/Tajikistan-Economic-Update-Summer-2024-en.pdf**

[10] https://caneecca.org/en/the-winterstans/

[11] For example the ToR for ESIA states that Biodiversity Management Plan " *will include working with Rogun and Tigrovaya Balka experts to assess the feasibility of having Rogun release water in a pattern and amount that at least partially mimics previously naturally occurring floods, which ended with the construction of Nurek HPP*".The ESIA does not include results of the feasibility study. The ESMP states that the biodiversity management plan, Fisheries plan, Cultural heritage plan, etc. should be disclosed prior to the WB Board review. None of those documents has been disclosed\consulted as of October 20 2024.

World Bank approved E&S documents and no solid plans are presented now for the finalization of the current ESIA and ESMP.

Stakeholder Engagement Plan (SEP) has no specific timetable and clear procedures for consultations on the key E&S documents, which are listed as disclosable in the ESIA documentation. As a result no meaningful consultation took place up to date. Some key documents such as Volume 2 of the ESIA (actual full environmental assessment report) and Biodiversity Action Plan and Resettlement Action Plan (RAP#2) have not been disclosed as of 1 February 2024. Stakeholder engagement Plan SEP and associated procedures do not comply with ESS10. Riparian consultations organized in 2023 in secrecy and in absence of valid draft ESIA, have not met basic standards of being accessible and meaningful. Thus, the communities where the complainants live were deprived of the only opportunity to hear about the project and raise questions. The SEP also has no integration of a contextual reprisal risk assessment, meaning there is a complete lack of recognition of the repercussions facing those who may raise questions. In effect the SEP does not acknowledge, let alone mitigate, the potential risk for anyone to raise their voice about the project, and the associated potential for harm in this context that is well documented to be one of the most repressive on the planet today.

Given factors above we believe that the current project documentation does not comply with the World Bank's policy requirements, while the World Bank management does not undertake sufficient efforts to make it happen. Annex I on Correspondence with the World Bank Management contains the detailed analysis of non-compliance undertaken by the CSOs and sent to the leadership of the World Bank in October 2024. The same analysis also available at a special website dedicated to the Rogun HPP Project: ***https://rogun.exposed/non-compliance***

Contacts with the World Bank Management

We have opened conversations with World Bank management on multiple occasions, including:

- In January-October 2024 complainants and supporting CSOs wrote many letters to the World Bank Management and got unsatisfactory formal answers to some questions, with partly inaccurate information. In particular those were:
  1. **Request for wider riparian consultations after full ESIA disclosure. January 18, 2024**
  2. **World Heritage and Biodiversity issues 27 February 2024**
  3. **ESIA critique, request to bring up to standard multiple parts of it March 3, 2024**
  4. **New request for improved public participation and full disclosure March 28**
  5. **Rogun HPP ESIA violates Environmental and Social Standard 1 April 2, 2024**
  6. **Resettlement Framework Consultations Critique 4 July 2024**
  7. **On lack of civic space and human rights risks. 17 July 2024**

8. **Request for Meetings Prior to Consideration of the Project by the Board. 26 July 2024**
9. **Rogun HPP Project fails to Comply with the Environmental and Social Policy Requirements. 10 October 2024.**
10. **Rogun HPP Project: Analysis of non-compliance with the World Bank Standards (sent to President and the Board, October 2024. Also available in PDF format in English and in Russian) – *World Bank response October 28, 2024***
11. **Letter on the World Bank's involvement in large hydropower projects (23 October 2024) – *World Bank Response,* November 19,2024**
12. **Letter to the World Bank on improper consultations. 8 November 2024 –**
13. **Letter to the WB on November 14 "consultations". November 26 –**
14. **Report on Analysis of Alternatives: What is more efficient than "the tallest dam in the world"? sent to all WB Executive Directors on 6 December 2024 –**

Most responses we got did not contain answers to most of our questions and included some highly misleading arguments. None of substantive requests that we put forward has been followed in substance and most promises made by the Management remain unfulfilled.

See **Appendix II** on the CSO Correspondence with World Bank Management.

HOW THE HARM COULD BE AVOIDED:

1. To be useful for identifying and preventing harms, it is critical that the ESIA and all E&S tools should be extended to assess thoroughly downstream impacts all the way to the Amu Darya Delta - including its confluence with the Aral Sea and its rural periphery with oases vulnerable to droughts – in terms of forecasting the flow regime at each downstream river stretch as well as its dependent components: freshwater biodiversity, ecosystem processes (services) of the river, local communities and their river-related socio-economic activities (e.g. irrigation). All probable scenarios of water regulation by Rogun HPP and the cascade on downstream areas in Amu Darya Basin should be considered in the impact assessment. Cumulative Impact Assessment should not substitute for the specific assessment of Rogun HPP impacts on riparian countries and downstream ecosystems, but seriously consider and model how Rogun impacts may amplify those of new large water infrastructure projects in downstream areas, where we are already witnessing severe water stress. All this should be done in the context of a full spectrum of plausible climate change scenarios. The E&S instruments should include the study of the very feasibility\ probability of future fulfillment of the old, largely outdated, water-management agreements signed in the 1990s between post-Soviet riparian countries (excluding Afghanistan) and identify adjustments and improvements in those agreements necessary to de-risk basin-wide water management under alternative development scenarios in the completely new climatic, economic and geopolitical situation of mid-21 century.

2. As the affected community members, the complainants would have expected that international financial institutions would have supported robust analysis of alternatives based on the most up to date, scientifically, environmentally, socially and economically sound data, including a no project option in accordance with ESS1. This not a formality, but a necessity, since expected socio-ecological impacts downstream and those from resettlement are directly associated with the size of the reservoir, while potential decarbonization efforts may be uneconomical and counterproductive due to high cost of the electricity produced by the Rogun HPP project. First of all, it should consider

options for the Rogun Project completion which downsize the dam height and allow to use saved resources to diversify Tajik energy system over-reliant on hydropower (for example see the CSOs' study[12]). Analysis of alternatives should also include comparison of different operation regimes possible at Rogun HPP to be able to assess the full range of negative impacts and benefits it can bring to downstream communities and the ecosystems of the Aral Sea basin. Another aspect that requires attention is additional financial and energy allocations that will be needed for mitigation measures in irrigation, municipal supply, healthcare, other sectors. Decisions on the plan for Rogun HPP Project completion should be based on the outcomes of the analysis of alternatives.

3. Public participation should be fully implemented in all riparian countries in a manner that protects members of civil society from retaliation. After analysis of alternatives and additional assessments of downstream impacts omitted in current ESIA, the project proponents must conduct broad consultations with downstream communities in all riparian countries, especially in potentially affected areas, including appropriate presentation of findings in national languages, languages of minorities (e.g. Karakalpak) and Russian, as common language for transboundary communication in the region.

4. In the Complainants' opinion, from many possible alternative scenarios of the Rogun HPP Project completion, the priority should be given to those which:

a. Guarantee that the Rogun HPP reservoir filling and operation does not exacerbate social, environmental and economic consequences of the Aral Sea Crisis - the largest human-induced ecological disaster in Asia.

b. ESIA and Resettlement Framework should address impacts on and needs of both upstream and downstream communities and minimize numbers of resettled and economically displaced by the project. Most negative impacts (displacement, flow disruption, economic hardships) could be minimized by decreasing the dam height and reservoir volume.

c. Develop, prior to financing decision, enforceable equitable agreements between all riparian countries to guarantee that Rogun HPP and other new water infrastructure will not worsen downstream flow conditions for natural ecosystems and local population dependent on irrigation. Fully implement precautions required by the World Bank's operational policy 7-50 "Projects on International Waterways" to allow all riparian countries to make informed decisions in the inclusive and equitable decision-making process. .

d. Safeguard floodplain tugay ecosystems (including the Tigrovaya Balka World Heritage) and other critically important biodiversity in the areas downstream from the Vakhsh Hydropower cascade by providing artificial floods: special environmental flow regime with binding agreement to ensure its implementation.[13] Reassess impact of reduced inflow into Amu-Darya Delta during reservoir filling period and its consequences for flora and fauna and make sure the damage is prevented..

e. Diversify and make climate-proof the development of the renewable energy system of Central Asia to guarantee stable production of affordable electricity based on climate-justice principles.

[12] Report on Analysis of Alternatives: What is more efficient than "the tallest dam in the world"? sent to all WB Executive Directors in December 2024 https://rivers.help/pdf/2024_En_The_tallest_dam_in_the_world.pdf

[13] For specific requirements see https://www.researchgate.net/publication/378267865).

AUTHORIZATION, CONTACT INFO AND SIGNATURES:

Do you expect any form of retaliation or threats for filing this complaint? YES

Given a very problematic record on suppression of civil society activists in all countries of Amu-Darya Basin, the complainants expect that retaliation in some form is highly possible and therefore request strict confidentiality.

Contact Information

(9)Are you complainants or a representative of complainants*?
V Representing two complainants or community:

Complainants requested [redacted] and the Rivers without Boundaries NGO to represent them.

(10). Would you like your name and contact details to be kept confidential? (We will not disclose your identities to anyone without your prior consent.)

Yes! Names and contacts details of complainants should be held confidential

Complaint Item 11). Complainants' or representatives' names

Complainant 1(CONFIDENTIAL)

Name: [redacted]
Address: [redacted]
Phone: [redacted]
Email: [redacted]

Complainant 2 (CONFIDENTIAL)

Name: [redacted]
Address: [redacted]
Phone: [redacted]
Email: [redacted]

Complainants' Representative 1

Name: [redacted]

Organization: **Rivers without Boundaries** Public Fund, Almaty, Kazakhstan.

Personal Address: [redacted]

Phone: [redacted]

Email: [redacted] (with a copy to [redacted]

Or [redacted]

(12). By completing and submitting this form, we authorize the **Inspection Panel** to investigate the issues as described in this form.

Signature of the Complainant 1 [redacted]

Signature of the Complainant 2 [redacted]

We authorize the **Bank Information Center** to receive information about this complaint.

NGOs: **International Rivers** (San Francisco, USA) and **CEE Bankwatch** (Prague, Czechia) are providing guidance and advice during the complaint process.

APPENDICES:

APPENDIX I: **MECHANISMS OF THE SOCIO-ECOLOGICAL IMPACTS OF THE ROGUN HPP PROJECT ON THE POPULATION AND ECOSYSTEMS OF THE LOWER AMU DARYA (DEVELOPED BY THE COMPLAINANTS)**

APPENDIX II. CORRESPONDENCE WITH THE WORLD BANK
(attached in separate file)

APPENDIX I (provided by the local complainants-environmental experts)

MECHANISMS OF THE SOCIO-ECOLOGICAL IMPACTS OF THE ROGUN HPP PROJECT ON THE POPULATION AND ECOSYSTEMS OF THE LOWER AMU DARYA.

Problem Statement

The Rogun hydroelectric power station with a reservoir volume of 13 cubic kilometers is a key factor determining the flow regime in the Amu Darya basin in the future. At one time, the expectation that further redistribution of flow from summer to winter would create a threat of environmental and socio-economic degradation in downstream countries led to significant international tensions between upstream and downstream countries.

Today in the Amu Darya basin there are basic legal agreements establishing general principles of water allocation, but there are no agreements that would determine the solution to the entire range of issues related to the coordinated management of water flow at present and in the future after the completion of the Rogun hydroelectric complex. In addition, the current system of agreements does not include the most important prospective water user – Afghanistan. In the context of increasing climate change, all this creates enormous risks of using a new facility with significant damage downstream.

The World Bank in the document " **Key Issues for Further Consideration of the Proposed Rogun Hydropower Project** " back in 2014, it highlighted the shortcomings of the current water flow regulation regime and recommended the development of alternative "cooperative" regimes (paragraphs 63-70)[14].

This document, based on the results of the ESIA and feasibility study of the Rogun HPP 2014 (paragraph 71), emphasizes that "*Under any mode of operation of the Rogun HPP dam, there will be benefits for the riparian countries in terms of the development of additional institutional mechanisms - be it international legal obligations, financial guarantees, or both to ensure that the reservoir will be built, filled, and operated as agreed.*"

This statement shows that proper international mechanisms did not exist in 2014 (and new ones have not been created until 2024). In the submitted materials of the 2023 ESIA there are no specific recommendations on the above issues, there are no draft additional water management agreements, there are no prescribed and binding mechanisms guaranteeing the safe and mutually beneficial use of the Rogun HPP in the context of all hydraulic structures of the transboundary basin, and there is no description of actions and mechanisms for eliminating the consequences of damage in case of natural and man-made accidents or disasters, mechanisms for joint coordination of actions in eliminating damage.

[14] https :// www . worldbank . org / content / dam / Worldbank / document / eca / central - asia / World %20 Bank %20 Note %20-%20 Key %20 Issues %20 for %20 Consideration %20 on %20 Proposed %20 Rogun %20 Hydropower %20 Project _ eng . pdf

Meanwhile, the creation of the Rogun hydroelectric power station will create significant social and environmental problems long before the facility is put into operation. So in the same World Bank document, in paragraph 47, in the context of the impact on the Aral Sea, it is recognized that at the filling stage "*in the case of creating the largest reservoir (option 1290 m), this will lead to an average annual reduction in downstream flow by 0.83 billion cubic meters annually for 16 years." Moreover, in 2013–2022, the annual inflow into the Amu Darya delta and the Aral Sea averaged 4.1 billion cubic meters* [15].

Meanwhile, the 2023 EIA declared an almost complete refusal to consider and mitigate the socio-ecological consequences downstream of the Vakhsh cascade of hydroelectric power stations under various possible scenarios for regulating runoff and changes in water availability, including under the influence of climatic factors.

Given already unacceptably high degree of environmental and social harms caused by human-induced water infrastructure impacts, the denial to assess and prevent possible harms of the Rogun HPP in the areas downstream of the Vakhsh Hydropower Cascade is likely to lead to multidimensional harms to local communities and nature, which should be assessed in the context of the Aral Sea crisis.

Aral Sea Catastrophe and Its Legacy (also see Appendix XX)

We, who live on the lands washed by the waters of the Amu Darya River, have felt the consequences of the Aral Sea disaster all our lives, triggered by the thoughtless construction of dams, canals and other hydraulic infrastructure, which caused the redistribution of the Amu Darya flow and the destruction of the Aral Sea. Current baseline conditions in our region shaped by this crisis have been completely omitted when planning Rogun HPP Project and drafting the ESIA report.

Research results show that due to a reduction in the flow of the Amu Darya, by 2017 in the Muynak district the percentage of saline lands reached 96%, in Karakalpakstan as a whole it exceeded 80% of the area of all irrigated land[16], and yields fell by half, which led to severe economic consequences for the population of the region[17].

The population of most regions of the lower reaches of the Amu Darya and its delta have been on the brink of extreme physical survival for many years. Among residents of the Aral Sea region (delta of the Amudarya River), the prevalence of eye and respiratory diseases[18], anemia[19], diabetes mellitus[20],

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[15] Nazariy A. Changes in annual and seasonal runoff in the Amudarya river basin (report at a seminar in Almaty 04-05.09.2023): https :// rivers . help / pdf / 2023_Nazariy . pdf

[16] http://www.cawater-info.net/library/rus/aral_and_prearalie_2017.pdf

[17] https://aral.mptf.uz/site/aralsea.html

[18] https://cyberleninka.ru/article/n/geograficheskie-ekologicheskie-strukturnye-osobennosti-regionov-i-svyazannye-s-nimi-bolezni-naseleniya-yuzhnogo-priaralya

[19] https :// cyberleninka . ru / article / n / vliyanie - klimata - na - sostoyanie - zdorovya - naseleniya - priaralya

[20] https :// cyberleninka . ru / article / n / vliyanie - klimata - na - sostoyanie - zdorovya - naseleniya - priaralya

respiratory and oncological diseases is increasing[21 22]. Since the 1960s, the incidence of coronary heart disease has increased 18 times[23], pneumonia - 19 times, chronic bronchitis - 30 times[24]. The decline in the quality of drinking water has led to an increase in kidney stone diseases: among the rural population of Karakalpakstan, the incidence of cases has increased by 4.2 times[25]. Extremely high rates of child mortality and morbidity are recorded in the Aral Sea region[26 27]. According to scientists, at least 46.4% of respiratory diseases in children are caused by air pollution with sulfates due to dust storms caused by desertification of areas of the bottom of the dried-up Aral Sea [28]. Research by Doctors Without Borders (2001–2002) revealed a high prevalence of multidrug-resistant tuberculosis in the Republic of Karakalpakstan (13% of new and 40% of recurrent cases)[29].

Environmental threats and the loss of the economic basis of existence simulated population migration from an environmental disaster zone. In 2000, UNHCR reported that, including the Aral Sea regions of Uzbekistan, Turkmenistan, and Kazakhstan, the number of environmental migrants exceeds 50,000 people, but indicated that this is incomplete data. The report provides data from sociological surveys of 1995-1998, according to which 250,000 migrants from the Aral Sea region indicated environmental degradation as the leading reason for migration. The UNHCR rapporteur believes that in dry years, "economic competition for water resources in the Aral Sea zone could lead to the migration of about 300,000 refugees from the Uzbek part of the Aral Sea zone to other regions of Uzbekistan, Turkmenistan, Russia and Kazakhstan." [30]

Meanwhile the 2023 UN Country Assessment for Uzbekistan shows grim prospects: "Water availability is expected to decrease by 29.4% by 2030 in the Amudarya basin due to the construction of the Qosh-Tepa canal in Afghanistan, and climate change. As a result, the land area under cultivation in the Amudarya basin may decrease by 18.9%. The estimated impact would be equal to

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21 https :// cyberleninka . ru / article / n / ekologo - geograficheskiy - aspekt - aralskogo - krizisa - chast -1- razvitie - aralskoy - problemy - ee - izuchenie - otsenka - i - razrabotka - meropriyatiy

22 https :// cyberleninka . ru / article / n / chislennoe - modelirovanie - rasprostraneniya - pyli - s - vysohshey - akvatorii - aralskogo - morya

23 https :// cyberleninka . ru / article / n / geograficheskie - ekologicheskie - strukturnye - osobennosti - regionov - i - svyazannye - s - nimi - bolezni - naseleniya - yuzhnogo - priaralya

24 https :// cyberleninka . ru / article / n / geograficheskie - ekologicheskie - strukturnye - osobennosti - regionov - i - svyazannye - s - nimi - bolezni - naseleniya - yuzhnogo - priaralya

25 https :// cyberleninka . ru / article / n / otsenka - sostoyaniya - zdorovya - naseleniya - priaralya

26 https :// www . dw . com / ru /the-Aral-Sea-problem-will-never-be-solved/ a -832279

27 https :// cyberleninka . ru / article / n / problemy - ekologicheskogo - krizisa - aralskogo - morya - i - ego - vliyanie - na - zdorovie - naseleniya

28 https :// cyberleninka . ru / article / n / ekologo - gigienicheskaya - otsenka - okruzhayuschey - sredy - territoriy - prilegayuschih - k - zonam - anthropogennogo - vozdeystviya - v - regione

29 https :// ru . msf . org / article / kazhdyy - den - prinyav - lekarstva - ya - chuvstvuyu - sebya - kak - budto - ya - uzhe - umerla - bolnaya - mlu - tb

30 Most probably, the number of migrants from the Uzbekistan portion of the Aral Sea area exceeds 50,000 people. Data obtained in the course of the social surveys performed in 1995-1998 showed that for the quarter of a million migrants from the Aral Sea area, the primary reason for migration was their concern about the quality of the environment. In the years of scant precipitation, economic competition for water resources in the Aral Sea area could potentially cause migration of about 300,000 refugees from the Uzbek part of the Aral Sea area to other regions of Uzbekistan, Turkmenistan, Russia, and Kazakhstan. UN High Commissioner for Refugees, 2000, Aman A. Population Migration in Uzbekistan... P. 20. https :// digitallibrary . un . org / record /539486? ln = es & v = pdf

0.7% of GDP and about 250,000 jobs could be lost in crop production. The Kashkadarya, Bukhara, Khorerzm regions and **Karakalpakstan** will face the biggest impacts from the construction of the Qosh-Tepa canal and, to mitigate these impacts, the adoption of water saving technologies, water tariffs that reflect the scarcity 39, and regional development plans that mitigate disparities in the economic impact have been suggested[31].”[32]

Mechanisms underlying the Environmental Disaster

Our education, knowledge, work experience (30 years or more), sense of responsibility to our communities and nature, allow us to assess the wide range of real and potential threats posed by the Rogun hydroelectric power station project for the middle and lower reaches of the Amu Darya basin.

In this regard, we attach a brief description of the possible mechanisms of change predicted for the worst-case climatic and socio-political scenarios, which must be considered in any ESIA.

We believe that in the Amu Darya basin, <u>the processes of natural and anthropogenic desertification and ecosystem degradation will significantly accelerate</u> due to the combination (synergy) of several cumulative effects caused primarily by the construction of the Rogun hydroelectric station:

(I) combinations of planetary processes of climate change, including an anomalously large warming gradient in the Central Asian region [3]and a decrease in the Amu Darya flow due to the second cumulative effect:

(II) reduction of the Amu Darya flow due to the filling of the reservoir of the Rogun hydroelectric station and the sub-synchronous development of the new irrigation area by the Kosh-tepa canal (see below/separately),

(III) pollution of the Amu Darya waters with salts washed out (from the Kosh-Tepa massif) and agricultural waste (residues of fertilizers and pesticides) which cannot be diluted to safe concentrations due to lack of water.

In this regard, the predictable/stable in volume and regime/schedule flow of the Vakhsh River below the dams of the entire Vakhsh cascade acquires a very high importance in terms of its contribution to the preservation of natural ecosystems and any deviation of these two parameters from historically

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[31] https://uzbekistan.un.org/sites/default/files/2024-02/2023%20Uzbekistan%20CCA%20Update_Final.pdf

[32] For comparison, the World Bank’s recent report predicts:”*Already limited water resources are projected to decline in Uzbekistan. By 2050, water resources are projected to decline in Syr Darya (by 5 percent) and Amu Darya (by 15 percent) as the glaciers feeding the two rivers recede, even in the 2°C warming scenario. Forecasts project that a 2°C increase would shrink glacier cover by half and a 4°C increase would shrink it by more than three-quarters. For some catchments, estimates project an even steeper decline of 30–40 percent in water availability by 2050*”.**Uzbekistan - Country Climate and Development Report.** November 2023 https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099111423124532881/p1790680f452f10ba0a34c06922a1df0003

established ones threatens with fatal, scientifically predictable consequences for the entire Lower Amudarya basin, including all its ecosystems.

Degradation of anthropogenic agro-ecosystems

Anthropogenic ecosystems—the agricultural lands and unique agglomerations that have developed in the region over many thousands of years—will suffer even more severely and irreversibly. Due to the shift and unpredictability of the distribution of the Amu Darya flow - across construction stages, during the filling of the reservoir and throughout the entire period of operation of the Rogun hydroelectric power station, the flow regimes and volumes will change.

The most important activities carried out in the region's agriculture and which will predictably be disrupted are timed to coincide with the existing flow schedule of the Vakhsh and Amu Darya as a whole, which has been established over the years:

· Massive irrigation , strictly timed to the various phases of development of the most important agricultural crops, primarily cotton, the basis of the economy of the entire region.

· Massive leaching of soils and soils from salts accumulated due to evaporation in the previous season, the most important reclamation measures, is also timed to coincide with this schedule. (or from salts accumulated due to evaporation of irrigation water during the previous seasonal cycle).

· Filling reservoirs in the Amu Darya basin, including the zones of the Karakum, Karshi and Amu -Bukhara canals, the most important event ensuring the sustainability of agriculture and anthropogenic ecosystems in general, is also strictly confined to this schedule/regime.

Due to the above changes in the flow regime of the rivers, as well as due to at least three cumulative effects indicated above, mass phenomena will occur in the middle and lower reaches, such as:

· Land salinization and loss of fertility of large areas, especially on the periphery of oases, which will affect increasingly larger areas due to lack of water for irrigation and reclamation, which will lead to general degradation of agriculture in the region,

· Desertification of abandoned lands due to lack of water will lead to their withdrawal from agricultural use and the beginning of their involvement in desertification processes, with the final loss of fertility and agricultural value.

· Social, as a consequence of the first two - the forced need to change the way of farming due to changes in the flow regime of the Amu Darya and water intake regimes for irrigation and reclamation leaching, as well as their (irrigation regimes) discrepancy with the biological cycles/growth phases of cultivated agricultural plants.

Exacerbation of economic and social problems of the region

The degradation of anthropogenic ecosystems due to the impact of three cumulative effects will lead to the formation of the next, fourth cumulative effect (IV) - the socio-economic situation in the region will sharply worsen, which will cause a drop in the standard of living and a decrease in the quality of life, which will begin to cause an outflow of population from the region, in essence, mass environmental migration:

- Decline in living standards (economic parameter). Due to land salinization and loss of soil fertility, there will be a sharp reduction in the agricultural production base, which will lead to massive competition for the land fund that has retained its quality/fertility and is provided with irrigation water. People who lose in this competition will be doomed to a sharp decline in income, a drop in living standards, and marginalization due to the inability to find alternative work. Will decrease productivity in rural farms, including a fall production food

- Decrease in quality of life (physiological parameter). Due to the increase in mineralization (salt content) in the water, the release of salts into the air from dried-out massifs will sharply increase the number of associated diseases, previously described for Karakalpakstan and other regions of the Aral ecological disaster zone, only these phenomena will become much wider.

- Environmental and economic migration as a consequence of the imposition of cumulative effects. A sharp deterioration in the standard of living and quality of life will force people to environmental and economic migration from the affected area to other, less affected regions of their countries and outside their countries, thereby formalizing the category of “ecological refugees from the region.

- Loss of cultural diversity and cultural identity . Massive impoverishment of the population, loss of connection with the host environment, participation in migration flows, often uncontrollable and unpredictable, will lead to a sharp decline in the cultural diversity of the region and the loss of cultural identity, cultural ties between communities and within the communities themselves due to their physical destruction.

Degradation of natural ecosystems

The implementation of all planned activities for the construction of the Rogun hydroelectric power station, as well as the combination of the cumulative effects indicated above, will predictably lead to shock and stress conditions in the animal and plant world. In turn, this will certainly lead to a depletion of biological diversity and general degradation of the ecosystems of the Amu Darya basin.

In particular, the ecosystems of the tugai forests of the Amu Darya floodplain, as particularly valuable ecosystems that are already experiencing colossal anthropogenic pressure, will be threatened with severe degradation and extinction.

The unique components of biological diversity in the Lower Vakhsh and Amu Darya basins are not identified as valuable components, described or considered in the presented ESIA materials. First of all, these are tracts of floodplain tugai forests, entirely dependent on the flow regime of the rivers of the Amu Darya basin. In 2023, one of them, the Tigrovaya Balka Nature Reserve, was deservedly recognized as a UNESCO World Natural Heritage Site, however, other massifs preserved in specially protected natural areas of the coastal countries downstream are of no less value. In addition, the Vakhsh-Panj-Amu Darya floodplain complex has enormous transboundary value and is an important migration corridor, for example for Bukhara deer, which became the subject of a special protocol under the Bonn Convention on Migratory Animals. In the lower reaches of the Amu Darya there are several tugai massifs, the impact on which also requires an environmental assessment, including the Amu Darya Nature Reserve, which is cross-border with Uzbekistan.

Endangered species - the Amudarya shovelnose sturgeon (endemic to this basin), Aral salmon, pike asp, as well as wetland and aquatic species of amphibians, reptiles, mammals and birds - will be put under the threat of complete extinction.

First of all, these are two species of sturgeon endemic to the Amu Darya basin: the small and large Amu Darya false sturgeon (*Pseudoscaphirhynchus hermanni*[33] and *Pseudoscaphirhynchus kaufmanni*[34]*)*. Both are recognized by the International Union for Conservation of Nature (IUCN) as critically endangered species (status - CR) and are included in the Red Book of Turkmenistan and Appendix 2 of the Bonn Convention. Along the Amu Darya and Vakhsh also migrates the Pike Asp (*Aspiolucius esocinus*[35]), assessed by the IUCN as a threatened species (EN) and listed in the Red Book of Turkmenistan.

The impact of the Rogun HPP project on these fish and ways to increase their chances of survival under appropriate environmental flow design and control should be an integral part of the ESIA and environmental and social management plans.

The impoverishment of the population due to the loss of agricultural resources will also lead to an increase in the illegal harvesting and consumption of wild flora and fauna. These and other important indirect and secondary mechanisms of impacts on ecosystems, biological resources and endangered species of biota are not considered in the EIA of the Rogun HPP.

Conclusion

The serious concerns of the applicants and organizations supporting our call for inspection, as well as the rapid analysis of the threats listed above, indicate a large public demand for a serious study on the impact of the construction and operation of the Rogun HPP downstream of the Vakhsh cascade and its impact on the ecosystems of the Amu Darya basin.

To our great regret, such public demand and consultations to explore public opinion (in the downstream parts) were not even planned for in the ESIA procedures of the Rogun HPP, although its construction and operation - is guaranteed to have a dramatic impact on all ecosystems of the Amu Darya and on the fate of 8 to 10 million people living in this region.

[33] https :// www . iucnredlist . org / species /18600/156719289
[34] https :// www . iucnredlist . org / species /18601/120872031
[35] https://www.iucnredlist.org/species/39462/156728608

Deliberately ignoring the above problems threatens the ecological and economic collapse of this region of Central Asia, due to the exacerbation of problems that already have their own sad history, including in the form of the world-famous environmental disaster of the Aral Sea.

APPENDIX II

CSOs' correspondence with the World Bank and co-financier of Rogun HPP Project

Throughout 2024 the CSOs concerned with risks posed by the Rogun HPP Project sent many letters to the World Bank Management and other potentially involved international finance institutions:

List of letters

1. **Request for wider international\riparian consultations after full ESIA disclosure January 18, 2024 *(World Bank response March 6, 2024)***
2. **World Heritage and Biodiversity issues 27 February 2024 (*World Bank response May 3, 2024)***
3. **ESIA critique, request to bring up to standard multiple parts of it March 3, 2024 *(World Bank response April 16, 2024)***
4. **New request for improved public participation and full disclosure March 28 *(World Bank response May 14, 2024)***
5. **Rogun HPP ESIA violates Environmental and Social Standard 1 April 2, 2024 – *in its empty response on December 6(!!), 2024 the World Bank recommended CSOs to look into "F&Q section" of its website***
6. **Letter on the Resettlement and Livelihood Restoration Policy (*World Bank response August 30, 2024)***
7. **Resettlement Framework Consultations Critique 4 July 2024 (*World Bank response October 22, 2024)***
8. **On lack of civic space and human rights risks. 17 July 2024 (*World Bank response October 22, 2024)***
9. **Request for Meetings Prior to Consideration of the Rogun HPP Project by the Board. 26 July 2024**
10. **Rogun HPP Project: Analysis of non-compliance with the World Bank Standards (sent to President and the Board, October 2024. Also available in PDF format in English and in Russian) – *World Bank response October 28, 2024***
11. **Letter on the World Bank's involvement in large hydropower projects (23 October 2024) – *World Bank Response,* November 19,2024**
12. **Letter to the World Bank on improper consultations. 8 November 2024 – no response yet**
13. **Letter to the WB on November 14 "consultations". November 26 – no response yet**
14. **Report on Analysis of Alternatives: What is more efficient than "the tallest dam in the world"? sent to all WB Executive Directors on 6 December 2024**

THE MOST IMPORTANT LETTERS CONCERNING QUESTIONS LISTED IN THE COMPLAINT

ШЕКАРАСЫЗ ӨЗЕНДЕР

«Шекарасыз өзендер» Қогамдық қоры

Rivers without Boundaries Public Fund

RIVERS WITHOUT BOUNDARIES

БИН 230440031982

ҚР, 050060, Алматы, Әбіш Кекілбайұлы атындағы көше, 34, бөлме 28

Abish Kekilbayuly Street, 34, office 28, Almaty, Kazakhstan

Ref. № RwBK-240118-1

Date: January 18, 2024

TO:

Ajay Banga

World Bank President

Antonella Bassani

World Bank Vice President, Europe and Central Asia

Tatiana Proskuryakova

World Bank Regional Director for Central Asia

CC:

World Bank Civil Society Unit

World Bank Tajikistan Country Office

Civil society groups and international agencies interested in regional consultations **Re: Rogun HPP Project deserves a large-scale public discussion**

We are writing on behalf of the Rivers without Boundaries International Coalition, NGO Forum on ADB, CEE Bankwatch Network to bring to your attention specific concerns about the World Bank's[1 2 3] and AIIB's[4 5 6] recent support for the Rogun Hydropower Project and projects enabling its construction and viability. We request that wide regional public consultations be held for the Rogun Project ESIA and the World Bank and other members of the Rogun Coordination Group[7] show greater openness and stand up to their ESG standards and public participation policies.

We are aware that to date, the World Bank and the AIIB have disbursed at least USD 15 million in grants enabling the Government of Tajikistan to undertake project preparation for the Rogun Hydropower Project (Rogun HPP), including for example, proposing measures to supposedly ensure it will come into compliance with required environmental and social safeguards. Recently from the Concept Project Information Document[8] we

[1] P178819 Technical Assistance for Financing Framework for Rogun Hydropower Project (2023)

https://projects.worldbank.org/en/projects-operations/project-detail/P178819 ;

[2] P181029 Sustainable Financing for Rogun Hydropower Project (2024) https://projects.worldbank.org/en/projects operations/project-detail/P181029

[3] P145054, P181219, P167898 Central Asia South Asia Electricity Transmission and Trade (CASA-1000) (2014-2023) [4] Rogun Hydropower Development Project (project preparation grant 2023) https://www.aiib.org/en/projects/details/2023/special fund/Tajikistan-Rogun-Hydropower-Development-Project.html

[5] Obigarm-Nurobod road (project preparation 2019) https://www.aiib.org/en/projects/details/2019/special-fund/Tajikistan Obigarm-Nurobod-Road-Project.html

[6] https://www.aiib.org/en/projects/details/2024/proposed/Tajikistan-Rogun-Hydropower-Development-Project-Phase-1.html [7] The Rogun Coordination Group is led by the World Bank and includes European Union (EU), European Investment Bank (EIB), Asian Infrastructure Investment Bank (AIIB), Asian Development Bank (ADB), United States Agency for International Development (USAID) and the US Embassy in Tajikistan, Islamic Development Bank (IsDB), Eurasian Development Bank (EaDB), Kuwait Fund for Arab Economic Development, Saudi Fund for Development, UK Foreign, Commonwealth and Development Office, European Bank for Reconstruction and Development (EBRD), Italian Cassa Depositi e Prestiti (CDP), and Kreditanstalt Für Wiederaufbau (KfW). [8] http://documents.worldbank.org/curated/en/099072123165041455/P1810290716f920e08543049a566c86b4c

learned that the World Bank, AIIB as well as EIB each intend to devote at least USD 200 million to support Rogun Hydro, which completion still requires more than 6 billion dollars.

The Rogun HPP Project on the Vakhsh River is of great concern in and of itself because of the enormous associated social and environmental risks, not only to Tajikistan but to the region as a whole. However, even more concerning is the fact that there have been unequivocal attempts to limit region-wide stakeholder engagement in the ESIA consultations taken by the Rogun Hydropower Project Management. Specifically, for instance, we have seen that stakeholder engagement appears to have been limited to local communities only. However, there does not appear to be publicly available ESIA documents in Tajik language, which makes us doubt that genuine, open informed public consultations actually have already taken place locally.

The recently disclosed draft ESIA for Rogun Hydro[9] mentions that between 2007 and 2014, the World Bank facilitated and hosted a structured consultation and information sharing program with all six riparian countries parallel to the 2014 ESIA. During this period (2007-14), the World Bank organized 5 (five) consultation meetings for riparian governments, civil society organizations, diplomats, and the development community. Sessions 1-3 and 5 were held in Almaty, while the 4th session was in Dushanbe. The purpose of the engagement program was to facilitate an opportunity for interested stakeholders to review the terms of reference for the ESIA alongside interim findings from the draft assessment studies.

That early consultation process was triggered by the need to discuss great concerns of the regional and international community related to water scarcity, rapid degradation of ecosystems in the Amu Darya River basin and growing competition for water resources. Over the 10 years that have passed since then, all of these objective factors have only intensified and become more complicated. As a result, we consider it absolutely critical to hold wide regional public consultations in all riparian countries with participation of representatives of relevant agencies, public organizations, and scientists and concerned citizens.

Results from public consultations that took place based on earlier versions of environmental and social impact assessments of the Rogun HPP project: prior to 2023 are now far too outdated to be considered valid. The reality is that since 2014, we have learned much more about the dynamics of climate change and efficient renewable energy sources, biodiversity crisis, impacts of resettlement and migration, consequences of growing sovereign debts for population, and other key issues. The ecological situation in

the basin has drastically deteriorated. And today we see new potential impacts on the hydrological regime of the Amu-Darya River (e.g. construction of Qosh Tepa Canal in Afghanistan), while internationally recognized conservation sites are potentially threatened by the Rogun HPP project (significantly, for instance, the Tigrovaya Balka nature reserve, which preserves Vakhsh floodplain ecosystems, has become a UNESCO Natural World Heritage Site).

The potentially vast scale of transboundary impacts resulting from the development of the Rogun HPP project deserves the same scale of public discussions that was held in

9 http://documents.worldbank.org/curated/en/099122223091529585/P1810291b43c970a71993e1a8e76ceb151c

2014, not only in Tajikistan, but across the whole Central Asian region, with sessions in different Central Asian countries and participation of the general public and scientific organizations.

Specifically, we would propose that given the current context, there should be — at a minimum — open public discussions not in Tajikistan only, but also in Uzbekistan, Turkmenistan, Kyrgyzstan and Kazakhstan with the involvement of public and scientific organizations as well as international NGOs and agencies to ensure that all proposals and comments are fully taken into account in the final version of the Rogun HPP ESIA.

Moving forward, as a first step – if necessary – the "Rivers without Boundaries" Public Fund is ready to help in organizing a public consultation in Almaty, Kazakhstan.

Please respond to us to the following email address:

coalition@riverswithoutboundaries.org, cc: alex.kolotov@gmail.com Sincerely

ҚОҒАМДЫҚ ҚОРЫ
«Реки без границ»
ОБЩЕСТВЕННЫЙ ФОНД

Alexander Kolotov,

Director of **Rivers without Boundaries Public Fund**

Endorsed by:

NGO Forum on Asian Development Bank

CEE Bankwatch Network

«Шекарасыз өзендер» Когамдык коры

ШЕКАРАСЫЗ ӨЗЕНДЕР

Rivers without Boundaries Public Fund

RIVERS WITHOUT BOUNDARIES

БИН 230440031982

ҚР, 050060, Алматы, Әбіш Кекілбайұлы атындағы көше, 34, бөлме 28

Abish Kekilbayuly Street, 34, office 28, Almaty, Kazakhstan

Ref. № RwBK-240227-1
Date: February 27, 2024

TO:
Guangzhe Chen
World Bank Vice President for Infrastructure

Antonella Bassani
World Bank Vice President, Europe and Central Asia

Christopher Philip Trimble
Senior Energy Specialist

Manuel Berlengiero
co-TTL for Rogun HPP

World Bank Civil Society Unit

CC:
Lazare Eloundou Assomo
Director, UNESCO World Heritage Centre

Re: Rogun Hydropower Project and Tigrovaya Balka UNESCO World Heritage property in Tajikistan

We are concerned with potential direct, indirect, and cumulative impacts on the **Tugay forests of the Tigrovaya Balka Nature Reserve UNESCO World Heritage**[1] property along the Vakhsh River and similar valuable riverine ecosystems, located downstream along Amu Darya River, which may result from the Rogun HPP Project in Tajikistan and reoperation of the whole Vaksh Hydropower Cascade due to addition of the largest dam. The project[2] is presently considered for financing by The World Bank, Asian Infrastructure Investment Bank, European Investment Bank, Asian Development Bank, Islamic Development Bank and other international finance institutions and the World Bank Environmental and Social Standards (ESS) and procedures are used in the ESIA process. Some institutions indicate intention to expedite project approval and make decisions this spring, while, in our understanding, the Rogun HPP Project's ESIA[3] is incomplete and invalid, because it fully ignores potential impacts on critical habitats such as the Lower Vakhsh River and Tugay forests of the

Tigrovaya Balka Nature Reserve.

We have reasonable hope to be heard as the highest degree of precautionary approach is prescribed for World Heritage and critical habitats by the World Bank (WB) ESS1 and ESS6, and the Asian Infrastructure Investment Bank (AIIB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB) have by-laws precluding them from financing projects that potentially may cause harm to the UNESCO World Heritage properties[4].

[1] https://whc.unesco.org/en/list/1685/
[2] https://projects.worldbank.org/en/projects-operations/project-detail/P181029
[3] https://documents.worldbank.org/en/publication/documents reports/documentdetail/099122223091529585/p1810291b43c970a71993e1a8e76ceb151c
[4] https://whc.unesco.org/en/no-go-commitment/

Critical Habitats and Endangered Species downstream of Vakhsh Hydropower Cascade

The Tigrovaya Balka Nature Reserve World Heritage property is located between the Vakhsh and Panj rivers in southwestern Tajikistan. The Reserve includes extensive riparian tugay ecosystems, which represent the largest and most intact tugay forest of this type in Central Asia, and this is the only place in the world where the Asiatic poplar tugay ecosystem has been preserved in its original state over an area of this size.

The ecosystems of the Tigrovaya Balka floodplain mainly depend on a meandering Vakhsh river and its fluvial dynamics. These dynamics are conditioned by the variation in river flow, by regular seasonal variations (low flows in winter, high flows in summer) as well as by rare and extraordinary flood events (extreme floods) and corresponding sediment flow. Water and sedimentation regime further determines habitat formation, groundwater levels, chemistry of surface waters and aquifers, composition and genesis of soils, changes in vegetation cover and well-being of endangered fauna from many aquatic organisms to Bactrian Deer.

Lower Vakhsh River within the UNESCO World Heritage property and beyond is one of the key critical habitats for several endangered species of fish[5]: Large Amu-Darya shovelnose sturgeon - Pseudoscaphirhynchus kaufmanni (listed as Critically Endangered[6]) , Small Amu-Darya shovelnose sturgeon - Pseudoscaphirhynchus hermanni (listed as Critically Endangered[7]), Pike asp -Aspiolucius esocinus (listed as Endangered[8]), Aral barbel - Luciobarbus brachycephalus (listed as Vulnerable[9]) , Chu Sharpray -Capoetobrama kuschakewitschi (listed as Endangered[10]), which are also listed as rare and endangered in the Red Book of the Republic of Tajikistan (2015). Status of populations and possible impacts on those species have not been assessed in the ESIA.

Historic impacts threatening Tigrovaya Balka and attempts to mitigate those.

For the last several decades the World Heritage property has faced the following many challenges:

- River flow changed by dams of the Vakhsh Cascade (Nurek Hydro built in the 1960s being the most impactful factor) reducing floods that sustain floodplain ecosystems. Floods shaped morphology, water regime, vegetation density and chemistry of floodplain habitats. • Agricultural encroachment and pollution (now the floodplain lakes are partly fed by waters from irrigation systems rich in salts, pesticides, etc.). Competition for water with irrigated agriculture located upstream of the reserve[11].

• Poaching and illegal logging and grazing (as floodplains become dryer, they are also become more accessible for humans and cattle).

• Decrease in groundwater levels due to change of river morphology because of the reservoirs upstream blocking sediment flow (deepening of channels in absence of sediment load), absence of replenishment from flood water inflows and decrease in silt deposition shaping relief and delivering nutrients in tugay forests.

• Vakhsh hydropower cascade decreased turbidity/sediment transport by 7-11 times, which radically altered riverbed and conditions for spawning and migration of shovelnose sturgeons.[12]

Since the Nurek Reservoir altered the flow and sediment regime, various measures have been proposed to save the tugay ecosystem and some of those were implemented. In 1976 the Government of Tajik Soviet Republic prescribed measures to safeguard the Tigrovaya Balka, which included implementation

[5] https://www.uzdaily.com/en/post/86942

[6] https://www.iucnredlist.org/species/18601/120872031

[7] https://www.iucnredlist.org/species/18600/156719289

[8] https://www.iucnredlist.org/species/39462/156728608

[9] https://www.iucnredlist.org/species/135684/4180293

[10] https://www.iucnredlist.org/species/169620/156732450

[11] https://www.mdpi.com/2225-1154/10/2/13

[12] https://www.cms.int/en/document/shovelfish-or-large-amu-dar-shovelnose-pseudoscaphirhynchus-kaufmanni

of "artificial floods". In 2009 Dr. Petr Gunin reviewing necessary measures insisted on releasing "one large flood in 10-15 years, when hydrological situation is favorable. In 2020 the GIZ Project formulated the key conditions of ecosystem preservation: "By 2035, within the reserve at least 76% of the area within 500 m of the river is forested, with at least one sapling of Populus pruinosa per one m^2, and the forest experiences 25 or more days of flooding per year"[13]

In 2005-2009, as part of the UNEP and WWF's project, a large-scale work was carried out to restore degraded tugay forest and wetland ecosystems in the Tigrovaya Balka, including clearing (dredging) natural stream connecting lakes, building channels for supplying fresh water bypassing the dams, constructing pumping stations to fill key floodplain lakes[14].Program resulted in certain improvements of tugay's health. WWF also extended work to surrounding lands by implementing water-saving technologies in agriculture.

Meanwhile in 2023 Tajik and international experts again emphasize that sustaining favorable flooding regime in Vakhsh River is the most critical condition for preserving the Tigrovaya Balka[15].

World Heritage Committee Position

In 2023 World Heritage Committee issued the Decision 45 COM 8B.30[16] which inscribed the Tigrovaya Balka on the UNESCO World Heritage List and provided important guidance for its management and preservation:

"The integrity of the property depends on the riparian dynamics of the Vakhsh and Panj rivers, with the Vakhsh being the most important but also the most modified by dams. These dams change inter

seasonal and inter-annual flow dynamics reducing the flooding on which riparian tugay ecosystems depend. The water balance is now partly supported by secondary water sources from irrigation systems. The water regime within the property has been restored to the extent that the property's integrity is ensured, but the matter requires constant attention and action…. Maintenance of the Outstanding Universal Value is contingent on regular supply of water from upstream sources….
The World Heritage Committee Requests the State Party to:

1. Secure and maintain a natural hydrological regime for the property with sufficient provision of water to the property to maintain its Outstanding Universal Value, 2. Assess regularly the management effectiveness of the property, including research on the hydrological regime of the Vakhsh River in relation to the property,…"

There is clear understanding that semi-natural dynamics or upstream flows coming from the Vakhsh River is most critical for sustaining the ecosystem health, and that the current water regime is heavily altered, and further efforts are needed to improve and sustain it.

The Rogun HPP Project promise and failure to fulfill it.

The Rogun HPP, which construction started 48 years ago upstream from Nurek dam, if built, will have a reservoir with an active capacity of 10 cubic kilometers or much more than 50% of Vakhsh River annual discharge. The rest of Vakhsh cascade already has a total live volume of 4-6 cub.km. During the filling of the enormous reservoir, which will take at least 15 years, it will compete for water with growing Tajik irrigated agriculture, taking annually one cubic kilometer of water from the Vakhsh River. The whole cascade will be reoperated to incorporate the new dam, so that the Rogun Reservoir will from the day of completion redistribute summer flows to winter months cutting peaks of large floods, while the Nurek reservoir will be managed as run-of-river dam.

[13] https://conservationstandards.org/wp-content/uploads/sites/3/2021/01/210119_CSCP_Publication_Web.pdf [14] https://www.ramsar.org/sites/default/files/documents/library/cop13nr_tajikistan_e.pdf
[15] https://cabar.asia/en/tigrovaya-balka-nature-reserve-in-tajikistan-how-can-we-save-the-last-stronghold-of-tugay-forests-2 [16] https://whc.unesco.org/en/decisions/8411

The way the Rogun HPP operates will either further degrade downstream floodplain forests and wetlands or by setting special environmental flow regime and other measures this damage may be partially mitigated.

This need was mentioned in the 2014 Rogun HPP ESIA[17], which suggested that the project "could …provide support to one or more programs of maintenance and improvements of Tigrovaya Balka, a detailed plan developed and included in the project ESMP is recommended". The 2014 ESMP attached to the ESIA suggested designing "Release of occasional "artificial floods"; this would have to be done in close coordination with all concerned stakeholders, mainly also to prevent damage to inhabited and cultivated areas. First step: initial study in Tigrovaya Balka study would include assessment of feasibility of staged floods to mimic previous natural flows. If not practical, identify alternative measures to improve situation". We are not aware of any such study being carried out under the World Bank supervision after 2014 ESIA was shelved.

Nevertheless, the 2022 Terms of Reference for the "Update Environmental and Social Instruments for the Rogun HPP Project" point (i) states that the preparation of the Biodiversity Management Plan " will include working with Rogun and Tigrovaya Balka experts to assess the feasibility of having Rogun release water in a pattern and amount that at least partially mimics previously naturally occurring floods, which ended with the construction of Nurek HPP[18] ". So, there was a reasonable hope that such feasibility study envisioned by the World Bank since 2014 and by Tajik authorities since 1976 will be finally carried out and may define the way forward to safeguard the World Heritage in the contexts of Rogun HPP development and Vakhsh Hydropower Cascade reoperation. However, even this promise for a feasibility study, which only partially covers objectives of the ESIA, has not been fulfilled, as the ESIA materials do not contain the results of such an assessment on the feasibility of environmental flow releases. The Biodiversity Management Plan, that could incorporate implementation of “artificial floods” and other specific measures has not been released.

Unfortunately, the draft ESIA, released on December 22, 2023, on the World Bank website, does not include any other assessment of project impacts on the Tigrovaya Balka floodplain ecosystems. At the same time, the ESIA text on page 106 of Volume I recognises the potential (and even desirability) of the Rogun HPP's decisive impact on flood regulation downstream of the Vakhsh HPP Cascade: "4.11.8. The construction of the Project will improve flood routing capacity for the area downstream of the Vakhsh cascade. This positive effect could be increased by appropriate flood management. The inclusion of Rogun HPP in the cascade would also reduce risks of floods of lower magnitude, but with a higher probability of occurrence.” It was flood control by the Nurek HPP that previously led to the deterioration of the Tigrovaya Balka ecosystems, and now it will be further exacerbated by the creation of the Rogun reservoir. There are multiple other points in the ESIA Volume I testifying that the flow regime downstream of the Vakhsh Hydropower cascade may be changed in near future. For the reservoir filling phase the impacts on Lower Vaksh and Amu Darya are characterized as “negative impacts of regional extent with large magnitude and major significance” large (Table 8-10 – Water Summary of Impacts. Page 260. Volume 1)[19].

It is very clear that even continuation of the "current operation pattern of flow regulation by hydropower cascade" proposed in the ESIA as the only possible option will have a negative impact on the World Heritage Site. In order to justify this regime, the ESIA must include a study of these impacts on the outstanding universal values of the UNESCO World Natural Heritage property, as well as a study of impacts under other alternative operation pattern regimes. The ESIA openly talks about three different possible regimes but does not assess and compare their impacts. In 2014 the World Bank in 2014

[17] https://www.worldbank.org/content/dam/Worldbank/Event/ECA/central asia/11_ESIA_Environmental%20and%20Social%20Impacts_Version_ENG.pdf
[18] https://documents.worldbank.org/en/publication/documents reports/documentdetail/099335005162258056/p17881905baf660009df70fe368c67810c
[19] Important to note, that there is no analysis or meaningful data presented in volume 1 of the ESIA to support its qualitative assessment of “impacts on water”, while Volume II, which contains annexes with detailed assessment results has not been disclosed by the World Bank.

clearly characterized the current operation regime as non-optimal and called on riparian countries agree on a different operational regime, but it never considered the potential consequences for biodiversity[20].

An environmental flow regime sufficient for safeguarding and recovery of the Tigrovaya Balka ecosystems should be designed as a part of those assessment studies for incorporation into any operational regime proposed. Potential impacts on other remaining tugay (floodplain forest) ecosystems in the nature reserves of Turkmenistan and Uzbekistan should also be assessed within the revised ESIA.

Cumulative impact assessment (CIA) has been done improperly and does not consider potential impact on biodiversity and ecosystem services. The World Bank has already proposed to "upgrade the CIA"[21]. We would suggest that cumulative impacts resulting from reoperation of the Vakhsh Hydropower Cascade, which modernization and extension is supported by several MDB projects (e.g. Nurek Rehabilitation[22]) should be explored in conjunction with development of irrigation agriculture in the same basin[23], as both may have profound impacts on Lower Vakhsh ecosystems and the World Heritage Site. Unfortunately, the currently proposed "CIA upgrade" does not explicitly include impacts on biodiversity and ecosystem services in lower Vakhsh River valley.

The impact assessment should have been carried in line with the 2022 Guidance and Toolkit on Impact Assessments in a World Heritage Context[24] – "to ensure that direct, indirect and cumulative impacts on OUV have been properly reviewed and considered in consultation with relevant stakeholders and rights holders, to inform decision-making. The loss or damage to OUV cannot be compensated for, as OUV is irreplaceable, and thus all damage must be avoided. The concept of 'offset' therefore is not applicable in the context of World Heritage". Assessment result, according to the rules of the World Heritage Convention, must be submitted by Tajikistan for review by the International Union for Conservation of Nature (IUCN) and the UNESCO World Heritage Centre.

Conclusions

We believe that the following steps must be urgently taken within a framework of the Rogun HPP Project and its ESIA process before any multilateral finance institutions make decision to proceed with the project support:

1. The Rogun HPP project's area of impact (AOI) considered in the ESIA is too narrow and should be extended to Tigrovaya Balka Nature Reserve and further to the Amu Darya Delta in order to assess multiple flow regimes resulting from various possible modes of Rogun reservoir operation in the context of the whole Vakhsh Hydropower Cascade management as well as full spectrum of impacts on the freshwater biodiversity, wildlife populations, ecosystem processes (services) of the river, river-related socio-economic activities (e.g. irrigation) and others.
2. Comprehensive assessment of the baseline situation, as well as direct and indirect potential impacts of Rogun HPP project and its cumulative impacts on the World Heritage property (as required by the World Heritage Convention rules) must be carried out for those areas and issues and presented to IUCN/UNESCO for review.
3. Environmental flow regime with flood releases sufficient for safeguarding and recovery of the Tigrovaya Balka ecosystems should be designed as a part of those assessment studies. Climate change projections should be taken into account. Endangered fish species needs should be studied and considered. Potential impacts on other remaining tugay (floodplain forest)

[20] Para 64-74
https://www.worldbank.org/content/dam/Worldbank/document/eca/central-asia/World%20Bank%20Note%20-

%20Key%20Issues%20for%20Consideration%20on%20Proposed%20Rogun%20Hydropower%20Project_eng.pdf [21]
https://documents.worldbank.org/en/publication/documents reports/documentdetail/099012524153061688/p17881918ee3270e1a837157b9b911b501
[22]
https://documents1.worldbank.org/curated/en/270681485857484036/pdf/SFG2940-V1-EA-P150816-Box402882B-PUBLIC Disclosed-1-29-2017.pdf
[23] https://www.adb.org/sites/default/files/linked-documents/53109-001-ieeab.pdf
[24] https://whc.unesco.org/en/guidance-toolkit-impact-assessments/

ecosystems in the nature reserves of Turkmenistan and Uzbekistan should also be assessed within the revised ESIA.
4. Potential water allocation conflicts between hydropower and irrigated agriculture and their possible impacts on quantity and quality of water supply to Tigrovaya Balka should be studied in the same assessments in the context of climate change with special attention to reservoir filling period. Cumulative impact assessment with other hydropower projects in the Vakhsh and broader Amu Darya basin must be carried out. The upgrades in "cumulative impact assessment" should include these aspects with specific attention to impacts on globally important biodiversity. 5. Binding Biodiversity Management Plan with comprehensive measures must be designed and all key commitments reflected in the Environmental and Social Commitment Plan (ESCP) and other relevant legal agreements before any decision of funding. Those agreements, among other things, must guarantee that enforceable reservoir regulation rules for Rogun Reservoir and Vakhsh Cascade include appropriate environmental flow releases and take into account all other necessary safeguards identified through heritage impact assessments and the rest of the renewed ESIA.

Without these actions completed satisfactorily before project approval, neither the World Bank nor any other responsible international financial institution should consider financing completion of the Rogun reservoir project.

In case if no credible and comprehensive independent assessment of impacts and a feasibility study for "artificial floods" and other mitigation measures is performed and mitigation measures designed and their implementation guaranteed by international agreements, **the creation of Rogun reservoir will inevitably lead to full deterioration of Tigrovaya Balka floodplain and aquatic ecosystems**. The last chance to secure the necessary water regime will be foregone.

This will also create a very dangerous precedent, when multilateral banks support a project without performing heritage impact assessment and ensuring minimization of harm to the World Heritage properties. It is especially dangerous as up to 15 major international banks/funds are involved in the "Rogun Coordination Group" summoned by the World Bank to support the Rogun HPP project.

Please respond to us to the following email address:

coalition@riverswithoutboundaries.org, cc:
alex.kolotov@gmail.com

Sincerely

Alexander Kolotov,
Director of **Rivers without Boundaries**

Stephan Doempke,
Chair of **World Heritage Watch**

Andrey Ralev,
President of **Perangua Network**

Svyatoslav Zabelin,
Coordinator of **International Socio-Ecological Union**

Early Warning Alert: Rogun HPP Project ESIA March 2024

We are writing on behalf of Rivers without Boundaries, NGO Forum on ADB, CEE Bankwatch Network, Ecomaktab, Khorezm KIVA Center, UDASA, Nash Vek, Nukus Human Rights Initiative Group, International Socio-Ecological Union, International Rivers, Counter Current, Urgewald, Bank Information Center, Recourse, UWEC, Pakistan Fisherfolk Forum and Indus Consortium to follow up on earlier correspondence[1] expressing deep concern about approved and proposed financing for the Rogun Hydropower Project and associated facilities enabling its construction and viability. Although this letter explicitly pertains to the World Bank[2] [3] [4] and AIIB[5] [6] given the project information disclosed publicly by both institutions, we address this letter to all 15 development finance institutions identified in project documents as the “Rogun Coordination Group”, as we understand all are potentially considering contributing loans, grants, or technical assistance to the Rogun HPP and/or its associated facilities.

Recently, from the World Bank’s Concept Project Information Document[7] and AIIB’s Project Summary Information, we learned that the World Bank, AIIB as well as EIB each may commit at least USD 200 million to support the Rogun Hydropower Project. Yet this proposed allotment of public financial resources of USD 600 million is a mere fraction of the over USD 6 billion estimated as required to complete the project – not considering further cost overruns in the years ahead.

The development of the Rogun HPP Project on the Vakhsh River is of great concern due to its enormous associated social and environmental risks, not only to Tajikistan but to the region as a whole. It has been the trigger of major geopolitical tensions and has potential to harm transboundary water management in Afghanistan, Turkmenistan, and Uzbekistan, since its enormous active storage capacity has the potential to bring dramatic change to the downstream flow regime, not to mention potential damage in case of structural problems or operational failures.

[1] On 18 January 2024, an initial letter was sent calling for region-scale open public discussion from RwB, CEE Bankwatch and NGO Forum on ADB. As we received no substantive response from the lead institutions supporting project preparation (“The Project Management Group”), now a wider group of concerned NGOs is taking this opportunity to once again write to your offices in order to bring your attention to our key concerns related to the project.

[2] P178819 - Technical Assistance for Financing Framework for Rogun Hydropower Project (2023) https://projects.worldbank.org/en/projects-operations/project-detail/P178819 ;

[3] P181029 - Sustainable Financing for Rogun Hydropower Project (2024) https://projects.worldbank.org/en/projects-operations/project-detail/P181029

[4] P145054, P181219, P167898 Central Asia South Asia Electricity Transmission and Trade (CASA-1000) (2014-2023)

[5] Rogun Hydropower Development Project (project preparation grant 2023) https://www.aiib.org/en/projects/details/2023/special-fund/Tajikistan-Rogun-Hydropower-Development Project.html

[6] Obigarm-Nurobod road (project preparation 2019) https://www.aiib.org/en/projects/details/2019/special fund/Tajikistan-Obigarm-Nurobod-Road-Project.html

[7] http://documents.worldbank.org/curated/en/099072123165041455/P1810290716f920e08543049a566c86b4c

It is in this context that we urge you as responsible senior management staff of your respective institutions to reconsider any support your institution may be considering – at the very least, until full, comprehensive, participatory consultations in each riparian state are conducted (as per respective safeguard standards and the Aarhus Convention commitments), a robust ESIA is undertaken with a comprehensive updated evidence-based options assessment, and up-to-date, verifiable data, as well as a thorough assessment of the range of the economic, social, environmental, climate, seismic, and geopolitical risks associated with the project. Below we outline some of these key risks and concerns.

1. **Stakeholder Engagement:** For a project affecting the ecosystems and populations across at least four countries and leading to resettlement of 46,000 people, facing physical and economic displacement, with at least 10 million river-dependent people living downstream, robust and safe stakeholder engagement in the ESIA consultations is a key requirement. This is greatly complicated by strong pressure on civil society in Tajikistan and adjacent countries, making voicing any criticism a great personal risk for civil society members[8]. In this situation, we are greatly worried that no mandatory "Stakeholder Engagement Plan" (for consultations on disclosable environmental and social documents before the ESIA is finalized) has been disclosed. We would like to know how plans for stakeholder engagement will incorporate appropriate measures to ensure the safety of civil society members[9] who participate in ESIA consultations and/or take action via grievance procedures, as to date, there is no such plan disclosed online or available in hardcopy of which we are aware. We are cognizant of the fact that on February 28, 2024 (two months after the initial ESIA disclosure by the World Bank) the Project Management Group posted a document in English titled "Stakeholder Engagement Plan (SEP)".[10] However, this plan fails to adhere to required safeguard requirements of the World Bank Group and other potential financiers, instead suggesting that all public consultation events related to the ESIA have already taken place. Notably, it also contains incorrect information on mandatory disclosure.

2. **Incomplete ESIA:** The current draft ESIA documentation is neither complete nor satisfies the World Bank's policy requirements. The Bank has already openly stated that it is unsatisfactory when on January 18 it published a terms of reference for the upgrade of the cumulative impact assessment[11]. The disclosed part of the ESIA is extremely fragmented, full of unverifiable qualitative assessment judgements and not supported by sufficient and up to date environmental and social data. Many key assessments and surveys on climate, hydrology, sedimentation, and biodiversity have not been completed yet at the time of the ESIA disclosure.

[8] https://www.amnesty.org/en/location/europe-and-central-asia/tajikistan/report-tajikistan/ [9] https://www.hrw.org/europe/central-asia/tajikistan

[10] http://energyprojects.tj/index.php/en/rogun-hpp/eko-sots-instrument/1224-stakeholder-engagement-plan1 [11] The original terms of reference for upgrade of the CIA, was available at the following link and date January 18 https://documents.worldbank.org/en/publication/documents reports/documentdetail/099011824110541451/p1788191255c9f0d1a0471ef61753408b6 On January 25th the WB supplemented it with another "revised version" where pitfalls of the existing ESIA were no longer mentioned.
https://documents.worldbank.org/en/publication/documents reports/documentdetail/099012524153061688/p17881918ee3270e1a837157b9b911b501 By

February 18 the original January 18 TOR document, containing ESIA critique was removed. But still the Bank recognizes that cumulative assessment has to be redone.

Despite the Bank's requirements, most of the environmental and social-related documents have not been disclosed yet, including Volume 2 of the ESIA (annexes with detailed assessments), the resettlement policy framework and resettlement action plan (RAP), biodiversity management plan, among others. All necessary documentation should be disclosed well in advance of the informed consultations in the respective languages of the affected riparian populations.

3. **Area of Impact:** The scope of the ESIA assessment is overly limited by merely considering the area of impacts (AOI) of the project as the territory of the Rogun reservoir and the downstream area from the Rogun HPP to the Nurek HPP dam. In effect, the entire downstream section of the Vakhsh River and the Amu Darya River is excluded from detailed consideration in the ESIA. However, it is the impacts on the water regime of the transboundary Amu Darya that have been causing significant international friction over the Rogun HPP project. The justification for such limited consideration is that "The flow regime of the Vakhsh River will be significantly altered only between the Rogun and Nurek HPPs". Yet, numerous paragraphs of the ESIA and previous reports from the World Bank show that the Lower Vakhsh's and Amu Darya's flows may alter significantly, leading to a heavy ecological and social toll.

To be credible, it is critical that the ESIA be extended to consider downstream impacts all the way to the Amu Darya Delta - its confluence with the Aral Sea – in terms of forecasting the flow regime at each downstream river stretch as well as its dependent components: freshwater biodiversity, ecosystem processes (services) of the river, river-related socio economic activities (e.g. irrigation) and others.

4. **Inadequate Assessment of Flows:** We also insist that an accurate and trustworthy assessment of the possible impacts of the Rogun HPP requires an analysis of at least three main possible flow regulation regimes (operation patterns) mentioned in the ESIA: 1) contemporary, 2) maximizing energy and 3) "maximum water allocation for all users".[12]

[12] ESIA Volume I 4.11.24 in English version.

Impacts should be studied for years with low, average and high flow and for different climate change scenarios possible in Central Asia in the next 100 years – the lifetime of the Rogun dam. Without such analyses, it is not possible to correctly assess all impacts of the Rogun reservoir on ecosystems and local communities located downstream from the Vakhsh hydropower cascade in Uzbekistan, Turkmenistan, Afghanistan and Tajikistan.

We are also convinced that the ESIA should consider the environmental and social impacts of all possible scenarios for filling the Rogun reservoir, including severe climate change scenarios, as there is reasonable doubt that sufficient water resources are available in the basin to fill the Rogun reservoir without undue harm to other countries, ecosystems and sectors of the economy. The assessment studies also must analyse the feasibility of implementation and necessity to improve the existing water-management agreements between the basin states in the light of those scenarios.

5. **Biodiversity Impacts:** The ESIA fully disregards potential impacts on the most important biodiversity features of the Amu Darya River basin, such as the Tugay Forests of the Tigrovaya Balka Nature Reserve World Heritage Site in the Vakhsh River floodplain, as well as two critically endangered species of shovelnose sturgeon inhabiting the Vakhsh and Amu Darya River (*Pseudoscaphirhynchus hermanni*[13] and *Pseudoscaphirhynchus kaufmanni*[14]). It was flood control by the Nurek HPP that previously led to the deterioration of the Tigrovaya Balka ecosystems, and now it may be further exacerbated by the creation of the Rogun reservoir.

[13] https://www.iucnredlist.org/species/18600/156719289
[14] https://www.iucnredlist.org/species/18601/120872031

The Terms of Reference for the current World Bank project "Update Environmental and Social Instruments for the Rogun HPP Project" point (i) prescribes that the preparation of the Biodiversity Management Plan "*will include working with Rogun and Tigrovaya Balka experts to assess the feasibility of having Rogun release water in a pattern and amount that at least partially mimics previously naturally occurring floods, which ended with the construction of Nurek HPP*". However, the Draft ESIA materials do not contain the results of such an assessment on the feasibility of environmental flow releases. It is clear that the ESIA's proposed "current operation pattern of flow regulation by hydropower cascade" will continue to have a negative impact on the World Heritage Site.

In order to justify maintaining this regime, the ESIA must include a study of these impacts on the outstanding universal value of the UNESCO World Natural Heritage property, as well as a study of impacts under other alternative operation pattern regimes. An environmental flow regime sufficient for safeguarding and recovery of the Tigrovaya Balka ecosystems should be designed as a part of those assessment studies. Climate change projections should also be taken into account. Endangered fish species' needs should be studied and safeguarded as well. Potential impacts on other remaining tugay (floodplain forest) ecosystems in the nature reserves of Turkmenistan and Uzbekistan should also be assessed within the revised ESIA.

6. **Decarbonization Alternatives:** We consider the statement that "the Rogun HPP Project will significantly contribute to regional decarbonization in Central Asia" as inappropriate with no factual basis. The assumption appears to be that countries of the region will have to sign PPAs with Rogun Hydro and then wait for 10-15 years until Rogun HPP reservoir will be filled, satisfies domestic demand and starts delivering sizeable volume of "green energy". This is a very bad postponed scenario of decarbonization lagging with a very questionable economics as development of Rogun will cost far beyond USD 3000/kw installed capacity – several times more than other imaginable alternatives. Alternative decarbonization scenarios based on the current situation must be assessed as a part of this ESIA completion. So far, the ESIA relies on 2014 studies, which are by now completely irrelevant.

7. **Cumulative Impacts Assessment:** We agree with the recent World Bank requirement to upgrade the substandard cumulative impacts assessment. We insist that the ESIA should include a comprehensive assessment of the cumulative impacts of all existing and planned water and energy projects in the Amu Darya basin on its ecosystem processes, biodiversity, habitat quality and socio-economic well-being. It is likely that some variant of a strategic environmental assessment, such as a regional environmental assessment, rather than a "rapid cumulative assessment" would be most suitable for this purpose. We strongly doubt that any new consultant (yet to be hired) can perform a valid assessment before the end of April 2024 and ask the World Bank not to force undue haste when it comes to most important questions that should be assessed.

8. **Resettlement and Grievance Plans:** We are shocked that no resettlement policy framework and RAP has been presented so far. We also do not see any assessment of environmental and social impacts resulting from massive resettlement since 2015 till now. We do not understand how any valid local ESIA consultations in Tajikistan could be held in the absence of those documents and the ESIA document being translated into the Tajik language. We assume that resettlement of 46,000 people presents the highest risk as it is happening in a country with a clear track record of corruption[15], with a very problematic human rights record[16] and on-going cases of repression against local protesters, media[17] and human-rights activists[18]. We request disclosure of detailed resettlement documents and proof that there is a functional grievance mechanism in place which takes into account how to intake and address local grievances without putting requesters' safety and security at risk.

[15] https://www.transparency.org/en/cpi/2023/index/tjk
[16] https://www.hrw.org/world-report/2024/country-chapters/tajikistan
[17] https://rsf.org/en/country/tajikistan
[18] https://www.hrw.org/world-report/2024/country-chapters/tajikistan#c3ba16

9. **Poverty/socio-economic development:** The project may further reduce the well being of the relatively poor population. Stubborn overreliance on hydropower perpetuates winter blackouts due to water shortages and has been negatively affecting people of Tajikistan for decades. According to IMF, World Bank and OECD reports, so far, the Rogun HPP project has been the main impediment to the country's socio-economic development consuming 80% of state spending on infrastructure. Under pressure from international development finance institutions to institute fiscal austerity measures, the government is raising electricity tariffs. The ESIA fully omits those huge social impacts on poor and vulnerable populations that have been occurring in Tajikistan over the years while the initial stages of construction of the Rogun Hydropower Project have gotten underway. The proposed financing scheme will perpetuate this till 2028 and beyond. The project completion price tag, which is well over USD 6 billion and can only be expected to further grow in the future, is much larger than anything Tajikistan can borrow sustainably. We can only conclude that the development finance consortium appears to have created the label of "Phase 1" for the current proposed loan disbursement period (despite the project being under construction since 1976) without being able to design any sustainable finance scheme to complete this HPP. We protest this highly risky unsustainable approach and request all development finance institutions involved to demonstrate a credible project completion scenario and assess its social impacts as a part of the ESIA.

Conclusion:

The ESIA is completely inappropriate in its limited scope, low quality and omission of the key potential impacts. The ESIA consultation process, and riparian consultations in particular[19], cannot be considered meaningful as they were not based on appropriate stakeholder engagement plans and information disclosure so far has been insufficient to inform the stakeholders for proper participation in consultations.

We request that the ESIA be redone and in doing so, any new ToR for the new ESIA should be made subject to consultation with interested stakeholders and riparian countries. We trust you will consider these concerns with urgency given the pending decisions on financing for the Rogun Hydropower Project at your respective institutions, and look forward accordingly to a prompt response.

[19] http://www.energyprojects.tj/index.php/en/rogun-hpp/eko-sots-instrument/1215-esia-riparian consultation-summary

Please, respond to us with information how you will address each of issues listed above to the following addresses: coalition@riverswithoutboundaries.org and dustin@urgewald.org

Sincerely, 1. Rivers without Boundaries, Kazakhstan

2. EKOMAKTAB Eco-Resource Center, Uzbekistan

3. Union for the Defense of the Aral Sea and Amu Darya UDASA, Nukus, Uzbekistan 4. Human Rights Initiative Group, Nukus, Uzbekistan

5. Khorezm KIVA Center for Agroinnovations, science, education and business, Uzbekistan 6. Nash Vek Public Foundation, Kyrgyzstan

7. NGO Forum on ADB, Regional

8. CEE Bankwatch Network, Regional

9. International Socio-Ecological Union

10. International Rivers

11.CounterCurrent,Germany

12. Urgewald, Germany

13. Bank Information Center, USA

14. Recourse, the Netherlands 15. UWEC Work Group, Regional 16. Pakistan Fisherfolk Forum 17. Indus Consortium, Pakistan

ШЕКАРАСЫЗ ӨЗЕНДЕР

RIVERS WITHOUT BOUNDARIES

«Шекарасыз өзендер» Қоғамдық қоры

Rivers without Boundaries Public Fund

БИН 230440031982

ҚР, 050060, Алматы, Әбіш Кекілбайұлы атындағы көше, 34, бөлме 28

Abish Kekilbayuly Street, 34, office 28, Almaty, Kazakhstan

Ref. № RwBK-240704-1
Date: July 04, 2024

<u>TO:</u>
Tatiana Proskuryakova
World Bank Regional Director for Central Asia

<u>CC:</u>
Rogun HPP ESIA <esia.rogun.hpp@gmail.com>
Asian Infrastructure Investment Bank (AIIB)
Civil society groups and international agencies interested in regional consultations

Re: Rogun HPP Project consultations and the new version of the RLRF

Dear Ms. Tatiana Proskuryakova

Dear TTLs of the Rogun HPP Project

In the response to the RwB and sent on May 14, you kindly informed us that the World Bank "is working with Rogun PMG to organize more consultations on the environmental and social aspects of the dam, including potential riparian impacts. International CSOs, including those your represent, will be invited to participate in the additional consultations."

Consultation Management Problems

On May 30-several international NGOs received invitations to participate in "consultations on resettlement policy" on June 6 in Dushanbe and urged to request a link for the zoom meeting. While we were truly excited to be invited to such a meeting, we must share with you our observations and remaining questions.

A consultation session scheduled at 9 a.m. Tajikistan time effectively cut off any participants based in Europe, so only ones based in Asia could participate. Only two from among 10+ invited international organizations could attend the consultations meeting.

As we zoomed-in we were shown a room with 20 people seated, who were listening to a presentation in Tajik language delivered, presumably, by Directorate of Flooding Zone (DFZ). Presentation was not shown in ZOOM.

Several participants requested translation and demonstration of the presentation in ZOOM. On the 28th minute the organizers tried to show presentation in English, but failed as they could show only a title page. We requested repeatedly by writing in the chat, by email and orally in Zoom to send us the English language presentation by email, so we can refine our questions. Organizers promised to do so but presentation has never reached our mailboxes.

No translation was provided for a whole hour up to the Q&A session. During the Q&A session sound was intermittent and the translation (at least the part done from English into Russian) was grossly inaccurate. We had to clarify each of three questions asked 2-3 times and still got only partial inadequate answers. Therefore, we deprived of opportunity to get answers to all

important questions that we prepared. We also opted not to make statements regarding our main concerns related to the Resettlement and Livelihood Restoration Framework (RLRF), as their meaning would be inevitably corrupted given quality of translation and problems with sound. We also could not f understand comments made by other consultation participants present in-person.

We must note that such a form of conducting consultation with invited international participants is not only insulting, but also grossly unprofessional. It does not allow interested stakeholders to express their position and get adequate answers to their questions. It shows, that the staff of the Rogun TA project, that has been running for two years and, allegedly, conducted dozens of consultations, has no skills, technical capacity and even actual intention to organize consultations in professional and equitable manner.

We hope that problems described above could be resolved and the future consultations will be organized properly, in equitable manner and with good forewarning period.

We would like to take part in consultation organized for other recently disclosed documents such as

- The Environmental and Social Commitment Plan (ESCP)
- The Biodiversity Management Plan
- The Cumulative Impact Assessment
- The Stakeholder Engagement Plan, etc.
- The Riparian Consultations on Updated ESIA and ESMP

RLRF-unanswered questions

Due to the problems described above we did not get answers to several key questions on resettlement. After consulting the new version of the Resettlement and

Livelihood Restoration Framework (RLRF) document posted on June 23, we refined them and would like to get answers in writing.

Question 1. RLRF document refers to Resettlement Action Plan (RAP2) and Guide to Land Acquisition and Compensation (GLAC) to be released soon. Given that the RAP2 started in 2017 and will end in 2025, should we assume it is being implemented without a formal plan and Guidelines accessible to stakeholders?
When the RAP2 document is going to be released and undergo consultations?

Question 2. The DFZ staff confirmed that currently issued compensation to resettled people is "too small", but failed to quote indicative figures.
How much is an average compensation for a person who lost a house and land? In our reading of the Table 11-2, USD 26 million is available to compensate 17 000 people (1605 households) which comes to USD 1530 per person or 15000 per household. What is the evidence that it is sufficient to rebuild a house and related assets and restore livelihoods in a new place?

Question 3. The reservoir when filled will create great numbers of economically displaced people, who will still live around it. Where in RLRF can we find any estimates of numbers and distribution of economically displaced people, who do not lose houses, but are deprived of agricultural land, transportation, pastures, other amenities to to reservoir filling. Who and how compensates their losses based on what procedures and regulations?

Question 4. What compensation procedure is available to people downstream of Vakhsh Casacade in Turkmenistan, Afghanistan and Uzbekistan in case they will be negatively affected by water shortages or other impacts of Rogun HPP Project?

Question 5. The RAP, which started in 2017 and continues till 2025, will address the relocation of around 1,710 households (16,919 PAPs). As of January 2024, about 455 households (4,682 PAPs) have been relocated in RAP2. We failed to find in the RLRF and elsewhere any explanation how remaining 70% of people could be safely resettled within remaining year, while in previous 7 years only 25% have been resettled. We suspect it is highly unsustainable plan with extreme risks of human rights violation (e.g. forced eviction).

Question 6. The number of people to be resettled in recent project documents increased from 42 thousand to more than 50 thousand. The DFZ staff told us, that reason for that is high birth rate of 2-3%. Given that resettlement will continue for next 10-15 years, why have not those figures been adjusted to incorporate children to be born over that period?

We also want to remind you that in Your letter sent April 16, 2024 You kindly informed us that the "Volume II of the Environmental and Social Impact Assessment (ESIA) is being finalized and will be disclosed shortly" on the World Bank website. Please, clarify, when this disclosure is planned.

Without actual detailed assessment materials it is very difficult to determine the basis for many qualitative judgements and conclusions presented in ESIA Volume, which is a technical summary devoid of key information.

Please respond to us to the following email address:
coalition@riverswithoutboundaries.org, cc: alex.kolotov@gmail.com

Sincerely

Alexander Kolotov,

Director of **Rivers without Boundaries Public Fund**

Stakeholder engagement (ESS10) concerns around *SUSTAINABLE FINANCING FOR ROGUN HYDROPOWER PROJECT (P181029)*

To: World Bank Executive Directors
Cc: World Bank President and Environment and Social Framework Global Director

16 July 2024

Dear Executive Directors,

We are writing to express our serious concerns around the Rogun Hydropower Project and for which the estimated board date according to the Project Information Document is July 31. With this letter we are calling on the World Bank to either cancel the project or at the very least postpone the vote until all concerns raised below are addressed and related risks are effectively mitigated.

As illustrated below, in the project under consideration - given its scale and nature and the current context in Tajikistan - the risk of harm and violations to basic human rights remains exceedingly high. Other civil society groups have repeatedly raised concerns about the project's environmental, social and economic impacts in Tajikistan and in the countries downstream, but in this letter we will focus in particular on civic space. The severe restrictions to civic space in Tajikistan pose operational risks for the project and create serious obstacles for the Bank to fulfill its ESS10 commitment for meaningful stakeholder engagement. The Stakeholder Engagement Plan fails to address these obstacles.

Tajikistan context

First and foremost, civic engagement can only take place in an environment in which any impacted person has the ability to voice their concerns and to do so without fear of retribution. Tajikistan is known to rank extremely low according to all known measures for freedom of expression:

- Article19's 2024 Global Expression Report, gave the country 3 points out of 100, ranking 151 out of 161 countries it looked at. The country's freedom of expression situation has been consistently getting worse every year.
- The latest Civicus Monitor classified Tajikistan civic space as closed, giving it 12 points out of 100 and putting it among the 10 lowest scoring countries on the planet in the area. Here too, year-on-year, Civicus has been observing a deterioration in the civic space situation.
- The Reporters Without Borders Press Freedom Index ranked Tajikistan 155 out of 180 countries and again observed a deterioration in the situation compared to previous years.
- In the analysis conducted by Freedom House, Tajikistan scores 7 out of 100 in terms of political rights and civil liberties with its score consistently decreasing from year to year.

The risks associated with and controversies around hydropower projects financed by development banks are exceedingly well-documented and resettlement in particular is known to carry significant risks of human rights violations. Indeed in the first phase of the Rogun Dam development, in 2014,

Human Rights Watch (HRW) documented a number of rights violations related to the project. One of the key recommendations of their report was that the World Bank and other potential investors should
"*urge the government to allow civil society free access to areas from which residents are being relocated as well as to resettlement sites to enable them to independently monitor and report on the resettlement process and assist people in filing complaints".* The situation, however, as explained earlier, has only further deteriorated, making the risks for human rights violations even greater and the scale of the project is also much greater, set to affect over 50000 individuals this time around. This amounts to a recipe for a human rights disaster.

Of particular concern with this project, given the civic space context outlined above, is the involvement of the military (see 4.4 on page 10 of the Environmental and Social Commitment Plan or ESCP). While the ESCP does clearly acknowledge that the military is a risk factor, there is no mention of the particular challenges the Tajikistan context poses. On the contrary, the suggestion is that the project's grievance mechanism handle grievances related to the military: a suggestion that seems to be completely oblivious to the prevailing power dynamics in the country and the risks associated with raising concerns about the behaviour of armed forces.

The Stakeholder Engagement Plan (SEP)

A revised Stakeholder Engagement Plan (SEP) was published on the World Bank project page in June. Prepared by the borrower, it acknowledges some of the HRW civic space and process concerns, referring in particular to HRW recommendations as follows: *"It is necessary to recommend transparency in the resettlement process and that the government provides NGOs, witnesses, civil society, and journalists with unhindered access to the areas from which persons will be resettled, as well as to the places of resettlement. Further, the ESIAs should include a recommendation that the Government of the Republic of Tajikistan publicly express its commitment to protect NGO members and journalists from reprisals by monitoring the resettlement process and acting on behalf of displaced persons."*

The response in the SEP was that *"All resettlement documents will be published and made available to interested persons. The PMP and PUU include an independent witness NGO as one of the measures to ensure transparency. It is the responsibility of the Government of the Republic of Tajikistan to ensure open, safe consultations, and it is the responsibility of the NGO Witness described in ECIA, Section 19.8.5 and included in the PMP and SPP, to monitor this process."*

This response is quite problematic from an accessibility point of view because of the use of obscure acronyms[1]. Moreover, it suggests a solution (namely to appoint a single NGO or "NGO Witness" to monitor the process) that was already used during phase 1 (see 3.18.2 in the Resettlement Policy

[1] Three of the four acronyms, namely PMP, SPP and ECIA, could not be found in any other documents online related to the Rogun Hydropower project and there was no explanation for any of these acronyms in this document. Although we assumed the ECIA to be referring to the ESIA, there is no Section 19.8.5. in the current ESIA.

Framework for phase 1). As illustrated by the HRW report, this approach clearly failed for the much smaller phase 1 of this project. For a project of this nature, where the risk for human rights violations is so great, and in a context of worsening civic freedoms, the minimum standard should be to allow free and unhindered access of independent monitors, including independent journalists, to all affected persons.

On page 9 of the SEP, the document points to relevant legislation in Tajikistan pertaining to relevant rights and freedoms. By doing so, the SEP implicitly acknowledges the need for individuals to enjoy these rights in order for stakeholder engagement standards to be met. The SEP does not however make any mention of how abysmal Tajikistan's track record is with all these relevant rights, let alone how the situation has been continually getting worse since phase 1 of the Rogun HPP.

The document further makes no mention either of how much of an obstacle the prevailing climate of fear in Tajikistan is to proper stakeholder engagement. Indeed any contact we had in Tajikistan on the issue was only willing to speak on condition of anonymity and using encrypted means. Unfortunately they, too, tell us that it is impossible to independently look into the project for fear of retribution: we have therefore been *unable to find any independent civil society* contact willing to reach out to project affected persons in order to independently monitor the human rights impacts.

In addtion, international civil society members were invited to participate online in a June 6 "Information-sharing and Consultation Meeting on the Resettlement and Livelihood Restoration Framework" (see page 149). The SEP fails however to mention that the presentation during the session was in Tajik only and interpretation from Tajik was only provided during the questions and answers. This very last comment from the consultation meeting from a member of the Association of Power Engineers of the Republic of Tajikistan is illustrative of the approach of "independence" of civil society and the power dynamics in the country (see page 142):

"At the end of this meeting, I would like to express the gratitude of the civil society to the Government of the Republic of Tajikistan and the Administration of the DFZ of Rogun HPP, which are carrying out significant work, both in construction and in the direction of population migration, in compliance with the requirements of the World Bank and respect for human rights at the highest level. Our mission in civil society is to create a healthy environment around the creation of the institution of the century."

Finally, with respect to involvement of the military, while the ESCP sets out on page 10 to *"Continue to ensure that the stakeholder engagement activities under the Stakeholder Engagement Plan (SEP) include communication on the involvement of the Tajikistan army in the Project."* The SEP fails to make any mention of the military in this context. In fact the only mention of the military is related to it as a "stakeholder" that it characterises as a *Project Affected Party*, looking at how to engage with them, but not actually committing to discuss in any other stakeholder engagement what the involvement of the army means for the impacted civilian population.

Transboundary civic space issues

The Vakhsh river on which the Rogun Dam is to be built provides 25% of the water of the Amu Darya river, a significant water flow that livelihoods depend on downstream of the project in Afghanistan, Turkmenistan and Uzbekistan. A project of this scale poses a number of risks, including in terms of water shortage during the filling of the dam or risks associated with dam rupture. The SEP fails to cover transboundary consultations with potentially impacted communities. All three countries rank among lowest in the world using the four civic space ranking methodologies listed above (ie. Global Expression Report, Press Freedom Index, Civicus Monitor and Freedom House rankings). Indeed, alongside Tajikistan, Turkmenistan and Afghanistan also rank among the most restrictive countries on the planet in terms of civic freedoms. It is difficult to imagine that any stakeholder engagement for downstream project affected persons in any of these countries would be able to live up to World Bank ESS10 requirements.

Recommendations

Under the circumstances described above, the World Bank cannot live up to its requirements under ESS10 on Stakeholder Engagement. We therefore urge the Bank to:

1. Not engage in a project of this scale where the Bank or any independent civil society monitors cannot reach out directly and safely to every single affected individual, and without increasing the reprisal risk for the individuals concerned.
2. Ensure the civic space issue is surfaced and fully addressed in stakeholder engagement plans for all projects in Tajikistan, and other countries with similarly restrictive civic space (see 5), and mitigation measures are in place to effectively counter these restrictions.
3. Call on the Tajikistan authorities to allow for free and unhindered access for all relevant independent NGOs to all affected individuals of any World Bank project in the country.
4. Call on the Tajikistan authorities to take concrete and decisive measures in line with recommendations from independent NGOs (such as HRW or Civicus) to ensure that people are able to voice their concerns about any World Bank project without fear of reprisals.
5. In the case that the World Bank continues to pursue financing, prior to project approval, the SEP needs to be overhauled in line with current scientifically sound information, acknowledging there will inevitably be changes in water flow and quality downstream, which will accordingly affect populations in neighbouring riparian states (Afghanistan, Turkmenistan and Uzbekistan). Therefore, it is critical that these communities are considered as affected stakeholders who must not only be integrated into the SEP, but also have a safe and direct way to raise their concerns and potential grievances and access to compensatory measures.

We would very much welcome an opportunity to discuss the civic space aspects of this project and associated risks in the very near future. We are at your disposal for a discussion at your earliest convenience.

Signatory organizations:

Bank Information Center
CounterCurrent
Defenders in Development campaign
International Rivers
Recourse
Urgewald e.V.

Ref. № RwBK-240306-1
Date: October 10, 2024

TO: **Ajay Banga, President, World Bank Group**

CC: Anna Bjerde, Managing Director of Operations

Axel van Trotsenburg, Senior Managing Director

Wencai Zhang, Managing Director and WBG Chief Administrative Office

Mamta Murthi, Vice President, People

Juergen Voegele, Vice President, Planet

Pablo Saavedra, Vice President, Prosperity

Guangzhe Chen, Vice President, Infrastructure

Indermit Gill, Chief Economist

Mouhamadou Diagne, Vice President, Integrity

Mercy Tembon, Corporate Secretary

CC:
Mr. Bakhrom Sirojev, Rogun HPP PMG

Re: Rogun HPP Project fails to Comply with the Environmental and Social Policy Requirements

Dear President Banga:

We are deeply concerned that the **World Bank is neglecting its own Environmental and Social Framework (ESF) while** financing preparation and planning to make investments in the **Rogun HPP Project** within a framework of the "Sustainable Financing for Rogun Hydropower Project" (P181029) and "Technical Assistance for Financing Framework for Rogun Hydropower Project" – (P178819).

The Rogun HPP project envisions construction of the largest hydropower reservoir in the Aral Sea Basin – water catchment known to be devastated by a large-scale human-induced environmental disaster, caused largely by excessive development of water infrastructure and irrigated agriculture. The borrower and the World Bank management refuse to thoroughly assess how development of the largest reservoir may influence fragile and already daring environmental situation downstream of the Vakhsh hydropower cascade, thus putting in danger downstream riparian communities in four countries. Given the Tajikistan government's track record with human rights and severely restricted civic space in the whole region, the risk of harm and violations to basic human rights in the course of the Rogun HPP Project implementation becomes exceedingly high as there is no civil society in the region capable of confronting the potential threats without high risks of retaliation.

Currently developed Environmental and Social documentation cannot be the basis for the project financing as it does not meet the requirements of the World Bank's ESF and many specific environmental and social standards, namely: the ESS1, ESS3, ESS4, ESS5, ESS6, and ESS 10, as explained in the attached analytical paper.

Lack of compliance with mitigation hierarchy results in project design with many inefficient and risk-prone elements, which should have been eliminated at planning and appraisal stages. This creates multiple risks and inefficiencies leading to major environmental and social damage not mitigated during the project implementation. This is mainly due to many violations of the basic requirements of the ESS 1 and failure to comply with several other specific standards.

For example, even a small reduction in dam height and electricity generation could reduce involuntary resettlement by 60% from 60 000 to less than 20 000 people, which should have been done according to the key objectives of the ESS 5. Degradation of the Tigrovaya Balka Nature reserve - a World Heritage property and possible extinction of two critically endangered species of sturgeon remain unaddressed, despite being mandatory aspects to consider under the ESS 6. Water resource efficiency is not considered as per ESS 3, despite being the key issue during the reservoir filling period. Potentially affected population in downstream areas of Tajikistan and riparian countries has not been involved in any meaningful consultations and lacks access to any mitigation mechanisms, while half of necessary elements of the ESIA have not been published for consultation at all, both being acute violations of the ESS 10.

We call on you as the **manager** of the lead institution considering financing the Rogun HPP Project and request **You** to ensure, that all presently observed flaws in project preparation are fixed, controversies resolved and full compliance with the World Bank ESF is achieved, before this project documentation becomes subject to project financing approval by the World Bank Board.

Please see attached detailed analysis of the specific problems of non-compliance of the Rogun HPP Project with the World Bank's environmental and social standards developed by the members of Rogun Alert Coalition of civil society organizations. For more information on the previous communication between CSO's and the World Bank management see https://rogun.exposed/letters.

Please send your response to us at coalition@riverswithoutboundaries.org and to the Rogun Alert Coalition email address: project@rogun.exposed

Sincerely,

Eugene Simonov

Coordinator

Rivers without Boundaries International Coalition

Rogun HPP Project in Tajikistan:
Analysis of non-compliance with the World Bank's Environmental and Social Standards.

Developed by the Rogun Alert Coalition (https://rogun.exposed/)

Rogun HPP Project consists of two projects managed by the World Bank : the "Technical Assistance for Financing Framework for Rogun Hydropower Project" (P178819 – approved finance 10 million from the WB and 5 million from the AIIB), and the "Sustainable Financing for Rogun Hydropower Project" (P181029) – 350 million of the World Bank finance now under appraisal with further contribution of 1.2 billion expected to come from other financiers: AIIB, ADB, EIB, IsDB,OPEC, bilateral aid, etc. The World Bank claims that it took responsibility for developing environmental and social safeguards for the project on behalf of all financing institutions. By relegating their responsibility for establishing the environment and social safeguards to the World Bank, other financial institutions have recognized the World Bank standards as equivalent to similar standards of their own. So if those are violated it is also leading to non-compliance with similar policies of other participating financiers.

Non-compliance overview

The project is subject to the World Bank's 2018 Environmental and Social Framework (ESF), including its Environmental and Social Standards (ESSs) and furthermore, project documentation suggests that all other potential financiers will accordingly rely on the proper implementation of the World Bank's standards as prerequisite to approval and financing of the Rogun HPP project. Yet, as evidenced below, neither the World Bank nor the borrower have met the requirements of the ESS1, ESS3, ESS4, ESS5, ESS6, and ESS 10. Indeed, it appears that the World Bank is also in violation of requirements of the Environmental and Social Policy for Investment Project Financing and has undermined the very 'Vision' of its ESF.

The borrower's environmental and social management plan (ESMP) fails to incorporate appropriate mitigation measures, even for the items marked in ESIA as requiring mitigation. For example, there is no sufficient set of mitigation measures outlined which would realistically prevent water shortage downstream in years of low flow in Vakhsh River. It also does not appear to be applied using a logical approach nor does it comply with the required frameworks as prescribed by the ESS1.

Major deviations from the requirements of the ESS1 can also be found in the draft Environmental and Social Commitment Plan (ESCP), which does not contain key obligations necessary to mitigate potential impacts and is largely devoid of clear substantive requirements beyond quoting general language of existing policies/standards. From our perspective, we cannot understand how the World Bank could ever use it to keep the Borrower accountable – which we understand to be the primary purpose of the ESCP.

In addition, the Stakeholder Engagement Plan (SEP) has no specific timetable or clear procedures outlined for consultations on the key E&S documents, which are listed as disclosable in the ESIA. Different documents have been disclosed on various dates from December 2023 to July 2024, while some key documents such as **Volume 2 of the ESIA** (the actual full assessment report) and **Biodiversity Action Plan** have not been disclosed at all as of mid-September 2024. Consultations organized so far have not met basic World Bank standards. Stakeholder Engagement Plan SEP and associated procedures do not comply with ESS10.

Since the previous ESIA was completed in 2014, the Borrower has not effectively implemented mitigation and monitoring measures to meet the requirements of the World Bank's ESSs and no solid plans are presented for the finalization of the current ESIA.

Given the factors above, there can be little doubt that the current draft project documentation does not comply with the World Bank's own policy requirements or that the World Bank management has to date failed to undertake sufficient efforts to ensure such compliance. Lack of compliance with mitigation hierarchy results in project design with many inefficient and risk-prone elements, which should have been eliminated at planning and appraisal stages. This creates multiple risks and inefficiencies which may lead to major environmental and social damage not mitigated during the project implementation.

In particular, we highlight the following most worrying instances of non-compliance with the World Bank's environmental and social standards:

ESS1. Assessment and Management of Environmental and Social Risks and Impacts

ESS1 covers the Assessment and Management of Environmental and Social Risks and Impacts, requiring borrowers to "*conduct environmental and social assessment of projects proposed for Bank financing to help ensure that projects are environmentally and socially sound and sustainable. The environmental and social assessment will be* ***proportionate to the risks and impacts of the project****. It will inform the design of the project and be used to identify mitigation measures and actions and to improve decision making*."

The Rogun HPP ESIA does not meet requirements of the ESS1 prescribing that "*The environmental and social assessment will be based on current information, including an accurate description and delineation of the project and any associated aspects, and environmental and social baseline data at an appropriate level of detail sufficient to inform characterization and identification of risks and impacts and mitigation measures.*"

The ESIA presented for public comment does not provide consistent measurements for an evidence-based impact assessment, but rather appears to be made up of a haphazard compilation of contradictory data with different basic parameters used as foundation for assessments (annual electricity production in different parts of the text varies from 14 to 17 billion kWt*h, reservoir area from 110 to 170 km^2, construction completion date from 2029 to 2036 and so on). There is no unified methodological guidance or mitigation hierarchy for the ESIA, nor any clarity on if and how information quality control was performed formally. The disclosed part of the ESIA documentation is extremely fragmented, full of unverifiable qualitative assessment judgements and not supported by sufficient and up to date environmental and social data. Much of the data on environmental conditions and expected changes was derived from the 2014 ESIA, which is by now outdated, as it does NOT take into account either changes in the environment or sector-relevant information that has advanced over the course of more than a decade. Many key assessments and surveys on climate, hydrology, sedimentation, and biodiversity, which are essential for project design and impact assessment, have not been completed yet at the time of the ESIA disclosure.

The scope of ESIA 2023 was less than that in the 2014 ESIA. Many of the impacts identified in the 2014 ESIA were ignored in the 2023 ESIA. In particular, unlike the ESIA version of 2014, the economically displaced residents of the communities in the valley of the proposed reservoir whose villages will not be flooded were left out of the scope of the ESIA 2023. Overall, the scope of hydrological studies appear completely insufficient to forecast the range of consequences that could arise over the years due to the development and operation of the Rogun HPP and Vakhsh cascade, in particular in relation to the water availability for agriculture in the four countries of Amu Darya basin.

All in all, the disclosed documentation does not constitute an evidence-based ESIA satisfying the ESF standards, and should accordingly be fully revised before actual consultations and appraisal.

The scope of the ESIA assessment is overly limited by merely considering the area of impacts (AOI) of the project as the territory of the Rogun reservoir and the downstream area from the Rogun HPP to the Nurek HPP dam. In effect, the entire downstream section of the Vakhsh River and the Amu Darya River are excluded from detailed consideration in the ESIA. However, those impacts on the water regime of the transboundary Amu Darya have been causing significant international friction and expert concern over the Rogun HPP project. The justification for such limited consideration is that "*The flow regime of the Vakhsh River will be significantly altered only between the Rogun and Nurek HPPs*". Yet, numerous paragraphs of the ESIA and previous reports from the World Bank clearly suggest that the Lower Vakhsh and Amu Darya's River flows may be significantly altered, potentially leading to a heavy ecological and social toll.

ESS1 requires that "*The assessment will evaluate the project's potential environmental and social risks and impacts; examine project alternatives; identify ways of improving project selection, siting, planning, design and implementation in order to apply the mitigation hierarchy for adverse environmental and social impacts and seek opportunities to enhance the positive impacts of the project.*" Simply put, this has not been done.

The **lack of an up-to-date Assessment of Alternatives** makes it impossible to effectively fulfill the key SEA/EIA objective of "prevention and avoidance of risks and impacts" and the World Bank's "Vision Sustainable Development" in terms of the need to give preference to project implementation options that provide for a lower level of carbon emissions. As the ESIA is based on pre-2014 data, most prominent alternative technologies, competitive types of renewable energy generation like solar or wind are not considered (with a false statement that those are more expensive than hydroelectric power plants, which contradicts the current international statistics, e.g. reports of the International Renewable Energy Agency-IRENA), and accordingly, their potential socio-environmental impacts are not considered in comparison. The latest World Bank documents propose that Rogun HPP is needed to balance increasing generation by "variable renewable energy" sources, however this statement is not supported by comparative analysis of alternative means to support accommodation of more wind and sun generation into regional energy system (e.g. already existing 15GW of hydro, better grid interconnection, BESS, pumped storage, demand management, etc.). Meanwhile, ESS-1 stipulates that, for each of the alternatives, a quantitative assessment of socio-environmental impacts should be provided where possible and, when feasible, an economic assessment is made. All these basic requirements have not been met. As a result, the project “selected” is the costliest, the slowest, the most carbon-intensive and risky option as compared to other alternative options, which by now, 10 years later, are indeed practical and feasible from an economic, geographical and technological perspective.

ESS-1 also requires a systematic comparison of possible alternatives for the methods and conditions of operation of the facilities to be created and their socio-environmental impacts, which is not done either. By applying artificial and baseless justifications, the ESIA fails to present and compare accurate and trustworthy quantitative assessment of the possible impacts of the Rogun HPP under at least three main possible flow regulation regimes (operation patterns) briefly mentioned in the ESIA: 1) contemporary, 2) maximizing energy and 3) "maximum water allocation for all users". It also does not differentiate possible impacts for years with low, average and high flow and for different climate change scenarios possible in Central Asia in the next 100 years – the lifetime of the Rogun dam. Without such analyses, it is not possible to assess all impacts of the Rogun reservoir on ecosystems and local communities located downstream from the Vakhsh hydropower cascade in Uzbekistan, Turkmenistan, Afghanistan and Tajikistan.

Despite the improvement of transboundary water resource management being one of the World Bank’s central requirements in 2014 set forth in the paper “Key Issues for Consideration on the Proposed Rogun Hydropower Project” concluding the 2014 ESIA, the 2023 assessment studies fail to analyse the feasibility of implementation and necessity to improve the existing water-management agreements between the basin states in the light of those scenarios. The need for additional specific agreements to complement the transboundary water management treaties signed has increased since 2014, while the Tajikistan Government shows increasing unwillingness to enter into new water-management agreements with four other riparian countries.

ESS 1 annexes suggest that “*for all aspects (mitigation, monitoring, and capacity development), the ESMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP*.” As outlined below, this has been largely unfulfilled.

The Project’s mitigation hierarchy has not been detailed in the ESMP, while listed mitigation measures and indicators are abstract prescribing to upgrade “unacceptable” conditions into “acceptable” without any meaningful indicators of acceptability and mechanisms to monitor them. The approach to the ESMP compilation is unproductive and the information on activities is insufficient and non-transparent. The document argues that " *'ESHS'* (environmental-social-health-safety) *performance during construction should be considered an integral part of the works, not as a separate component of the construction process.* ***This makes it inappropriate to estimate the costs of mitigating impacts*”** **(SIC!)** (ESMP para.11.1.11). Indeed, the estimate for specific environmental measures is very modest at only $13.5 million (or 8% of the ESMP budget and **0.21% of the estimated Rogun HPP Project completion cost**), in particular it includes $2 million for the preparation of a 170 km2 reservoir bed, which is probably insufficient (ESMP Table 11). At the same time, maintaining “ESHS staff” (35 international and 280 local supervisors) will take more than 90%

of ESMP budget or 141 million over the 5.5 years of the project (calculated only until 2029) and this amount could double if construction lasts till 2036. This approach makes the allocation of funds for environmental measures highly opaque and unguaranteed, while the hiring of many inspectors without clear mitigation budget and performance indicators may not significantly mitigate the environmental impacts of the project.

ESS 1. Annex 1 C. 12. reads as follows: "*Where relevant, the environmental and social assessment will take into account the requirements of OP 7.50 for projects on international waterways and OP 7.60 for projects in disputed areas*". This provision appears to have been violated as the ESIA documentation still does not have information that allows to make accurate judgements about possible project's transboundary impacts downstream of Vakhsh hydropower cascade where other riparian countries are located. Meanwhile, the defunct draft ESIA "placeholder document" was used to inform riparian countries and seek their consent to the project. There is potential violation of OP7.50 (international waterways) due to limited analysis of hydrological changes below Nurek Dam, including on transboundary watercourses shared with Afghanistan, Uzbekistan and Turkmenistan. At best, the project will ensure persistence of current quite substantial negative impacts of the Vakhsh Hydropower Cascade, but more likely it will exacerbate those for downstream watercourses (this also violates WB ESF Vision for Sustainable Development).

By January 2024 the World Bank recognized full inadequacy of the "cumulative impact assessment" section of the ESIA despite the last-minute attempt to improve it by including description of the Kosh-Tepa (Qosh-Tepa) Canal Project in Afghanistan, which was clearly a step forward. However, as the list of projects to be included into CIA analysis remains incomplete, the analysis of cumulative impacts is purely formalistic. In fact, despite the inclusion of the Kosh-Tepa Canal, documentation continues to misleadingly assume that "*the Rogun HPP Project does not affect the Vakhsh downstream of the Nurek HPP*", which, as we have shown above, is a false judgment in the ESIA context.

The ESIA should have included a comprehensive assessment of the cumulative impacts of all existing and planned water and energy projects in the Amu Darya basin on its ecosystem processes, biodiversity, habitat quality and socio-economic well-being. For instance a strategic environmental assessment incorporating a broader geographic zone, rather than a "rapid cumulative assessment" would be most suitable for this purpose.

Concerningly, the "cumulative impact assessment" section of the ESIA relies on the perspective of a single individual consultant – the same individual was responsible for managing the 2014 ESIA and correspondingly may fail to incorporate more up to date, broader perspectives. According to his ToR, the consultant should have contacted "concerned stakeholders," and the new CIA report should have been subject to public consultations. According to our knowledge neither has been implemented.

ESS3. Resource Efficiency and Pollution Prevention

ESS3 covers Resource Efficiency and Pollution Prevention, requiring borrowers and the World Bank to "*avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities*." The borrower's Rogun dam construction activities, resulting in air, water, and land pollution and erosion have already dramatically reduced biodiversity and human health in the region, which is clearly explained in the ESIA. This necessitates bringing it to acceptable levels, however the ESIA rather uses this as an excuse to lower requirements and applicable standards, as the area is already significantly degraded.

In particular the project fails on the ESS3 requirements for water use efficiency. ESS 3 states: "*7.When the project is a potentially significant user of water or will have potentially significant impacts on water quality, in addition to applying the resource efficiency requirements of this ESS, the Borrower will adopt measures, to the extent technically and financially feasible, that avoid or minimize water usage so that the project's water use does not have significant adverse impacts on communities, other users and the environment. These measures include, but are not limited to, the use of additional technically feasible water conservation measures within the Borrower's operations, the use of alternative water supplies, water consumption offsets to maintain total demand for water resources within the available supply, and evaluation of alternative project locations. 8.For projects with a high water demand that have potentially significant adverse impacts on communities, other users or the environment, … A detailed water balance will be developed*…"

The ESIA should have considered the environmental and social impacts of all possible scenarios for filling the Rogun reservoir, including severe climate change scenarios, as there is reasonable doubt that sufficient water resources are available in the basin to fill the Rogun reservoir without undue harm to other countries, ecosystems and sectors of the economy, especially in years with water-scarcity.

Instead of the actual quantitative assessment of multiple possible scenarios, the ESIA is relying solely on legally defined "water allocation quotas". It only states that, on average, Tajikistan in 2010-2014 did not use more than 1 km3 of quota annually, so the Rogun reservoir can be filled until 2038 without exceeding the quota and without conflict with irrigation water use. However, irrigation farming in Tajikistan is growing and, for example, in the last year (2023) the country had just under 0.3 cubic kilometres of unused quotas. In a succession of dry years, the amount of water within the quotas may not be sufficient to fill the Rogun reservoir according to the project schedule, which would not only affect the cost and timing of the project completion but also the water supply for ecosystem processes and agricultural enterprises downstream in 3 other riparian countries causing economic displacement and deterioration of environmental conditions.

Without considering water efficiency alternatives, significant environmental impacts are inevitable during the filling phase of the Rogun reservoir. For example, in the World Bank document "Key Issues for Further Consideration of the Proposed Rogun HPP Project" on the results of the ESIA and TEAS of the Rogun HPP released in 2014, in paragraph 47, referring to the impact on the Aral Sea, it is recognized that during the filling phase "*in case of creation of the largest reservoir (option 1290 m), it will lead to an average* ***annual reduction in downstream flow by 0.83 billion cubic meters annually for 16 years****"*. At the same time, in 2013-2022, the annual inflow to the Amu Darya delta and the Aral Sea averaged 4.1 billion cubic meters. Therefore, filling of the Rogun hydropower reservoir could lead to a 20% reduction in the current flow into the Southern Aral for 10-16 years.

ESS4. Community Health, Safety, and Security

ESS4 covers Community Health, Safety, and Security, requiring borrowers to "anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and nonroutine circumstances." Dam safety is emphasized by the ESS4.

The local communities may suffer from the World Bank and the borrower's failure to assess geological and seismic hazards and develop correspondingly sufficient mitigation hierarchy procedures around these harms.

The recommendations critical to the project safety made by ESIA 2014 developer Pöyry Energy Ltd. on need to practice specific methods of monitoring (e.g. to install the micro-seismic monitoring system five years before the reservoir impounding commencement) have not been implemented by the Tajikistan side, which the developers of the ESIA 2023 WSP UK Ltd turned a blind eye to. Between 2014 and 2023, a landslide hazard was identified for a large section of slope on the right bank downstream of the dam. A landslide in this area can block the Vakhsh River. The 2023 ESIA developer just recommended to arrange monitoring, being fully aware that previously such recommendations had been ignored. Given this, there are reasonable doubts that sufficient data to assess the safety of the project will be available within the next ten years.

The ESIA still fails to answer the following questions, important to downstream communities: What is the likelihood and consequences of failure of the Rogun dam during construction due to extreme flooding? What is the risk to the Nurek and downstream HPPs of the cascade, the Vakhsh and Amu Darya floodplains? How are these risks monitored and mitigated? What is the emergency response plan agreed with downstream countries?

ESS5. Resettlement\Displacement

The Resettlement Framework does not address potential impacts on downstream populations who depend on Amu-Darya River flow. The 2023 ESIA, without any credible assessment, denies the possibility of any environmental, socio-economic and health impacts on downstream populations in Turkmenistan and Uzbekistan. The ESMP does not include mitigation tools or budgets to address the deterioration of environmental health and socio-economic displacement in downstream communities in riparian countries. Meanwhile, economic displacement, health and environmental effects caused by decreased water flows in the Aral Sea which happened in the past are indisputable and the Rogun HPP Project with 10 cubic kilometres of active volume of its reservoir has clear potential to exacerbate those effects.

Besides that, in relation to the ESS5 the project, probably, demonstrates the most outrageous documented failure of the borrower and the World Bank to prioritize the prevention of harm. The objectives of ESS-5 are: "- ***Prevent involuntary resettlement or, if unavoidable, minimize it by considering project alternatives***."

In the 2023 ESIA, the selection of the largest reservoir with the largest (50,000 people) resettlement is justified by the economic effects of the project resulting from selling electricity for export, which directly contradicts the objectives of ESS-5. However, many other alternatives, where the main objective of the project to supply electricity to Tajikistan is fully realized, and which require less resettlement have been rejected or not considered by ESIA. For example, the next highest alternative with a reservoir level of 1255 meters above sea level would spare 32,000 people from resettlement (or more than 60% of all planned resettlement), while producing 18% less electricity.

ESS6 Biodiversity

The ESS 6 prescribes “Precautionary approach in the design and implementation of projects that could have an impact on biodiversity.”

First of all, these are two sturgeon species endemic to the Amu Darya basin: small and large Amu Darya false shovelnose sturgeon (*Pseudoscaphirhynchus hermanni* and *Pseudoscaphirhynchus kaufmanni*). Both are recognised as critically endangered species by the IUCN, and included in the national Red Data books of Turkmenistan, Uzbekistan and Tajikistan. Changes in flow and migration routes during dam construction are often the main cause of extinction of sturgeons, in particular for the extinction of closely related Syr Darya shovelnose sturgeon. The possible impacts of the Rogun reservoir project on these sturgeons and ways to improve their chances of survival under flow regulation have not been assessed in the ESIA.

Nor does the ESIA consider impacts on the Aral salmon (*Salmon trutta aralensis*) – important regional species once migrating through Turkmenistan, Uzbekistan, Afghanistan and Tajikistan, the last population of which was known from the Nurek Reservoir and therefore could only spawn in the rivers flowing into it, i.e. the section of the Vakhsh upstream of the Nurek Reservoir, which will be directly affected by the Rogun HPP Project, which may cause full extinction of this species.

The 2023 ESIA fully disregards potential impacts on the most important biodiversity features of the Amu Darya River basin, such as “tugays” – unique floodplain ecosystems characteristic of riparian areas which are preserved in several protected areas in Turkmenistan, Uzbekistan and Tajikistan. The “Tugay Forests of the Tigrovaya Balka Nature Reserve” World Heritage Site in the Vakhsh River floodplain is the closest to the Rogun HPP project. The flood control by the Nurek HPP has previously led to the deterioration of the Tigrovaya Balka and similar ecosystems downstream, and now it may be further exacerbated by the creation of the Rogun reservoir.

The Terms of Reference for the current World Bank project "*Update Environmental and Social Instruments for the Rogun HPP Project"* point (i) prescribes that the preparation of the Biodiversity Management Plan *"will include working with Rogun and Tigrovaya Balka experts to assess the feasibility of having Rogun release water in a pattern and amount that at least partially mimics previously naturally occurring floods, which ended with the construction of Nurek HPP*". However, the Draft ESIA materials do not contain the results of such an assessment on the feasibility of environmental flow releases. It is clear that the ESIA's proposed "*current operation pattern of flow regulation by hydropower cascade*" will continue to have a serious negative impact on the World Heritage Site. Meanwhile this flow regulation will be performed by the newly built Rogun Reservoir, while downstream reservoirs will, allegedly, work in run-of-river mode.

The ESIA text on page 106 recognises the potential (and even desirability) of the Rogun HPP's impact on flood regulation downstream of the Vakhsh HPP Cascade: "4.11.8. *The construction of the Project will improve flood routing capacity for the area downstream of the Vakhsh cascade. This positive effect could be increased by appropriate flood management. The inclusion of Rogun HPP in the cascade would also reduce risks of floods of lower magnitude, but with a higher probability of occurrence*." It was the flood management by the Nurek HPP that previously led to the deterioration of the tugay forest ecosystems, and now it will be exacerbated and perpetuated by the creation of the Rogun reservoir.

In order to justify maintaining the selected flow regime, the ESIA must have included a study of these impacts on the outstanding universal value of the UNESCO World Natural Heritage property, as well as a study of impacts under other alternative operation pattern regimes. An environmental flow regime sufficient for safeguarding and recovery of the tugay ecosystems downstream should have been designed as a part of those assessment studies with climate change projections taken into account.

As for the ESS 10, the CSOs comprising the Rogun Alert Coalition several times addressed financing institutions due to deficiencies and violations in the course of the stakeholder engagement process pursued by the Rogun HPP Project. However, the situation has not improved: many essential documents, including detailed ESIA itself have not been disclosed and consultations have been neither meaningful nor reached vulnerable groups in downstream riparian countries. No specific effort was made by the World Bank to ensure that people who want to comment on the project are protected from retaliation, and given the current human rights situation in the region, this makes the whole consultation process meaningless.

CONCLUSIONS:

The Rogun HPP Project cannot move into appraisal and financing phase without eliminating its glaring non-compliance with the World Bank's ESF and corresponding E&S policies of all participating finance institutions:

1. Currently developed Environmental and Social documentation of the Rogun HPP Project cannot be the basis for the project financing as it does not meet the requirements of the

World Bank's ESF and many specific environmental and social standards. It should be completely redeveloped to eliminate non-compliance with the ESF itself as well as the ESS1, ESS3, ESS4, ESS5, ESS6, and ESS10.

2. To be credible, the ESIA geographic scope must be extended to consider downstream impacts all the way to the Amu Darya Delta - Aral Sea to assess flow regime at each downstream river stretch as well as its dependent components: freshwater biodiversity, ecosystem processes (services) of the river, river-related socio-economic activities (e.g. irrigation) and others.

3. Robust analysis of alternatives should be performed from scratch based on contemporary data and in strict accordance with ESS1 requirements. First of all, it should consider options for Rogun Project completion which downsize dam height and allow the use of saved resources to diversify Tajik energy system over-reliant on hydropower. To be able to assess the full range of negative impacts and benefits it can bring to downstream communities and the ecosystems of the Aral Sea basin, the analysis of alternatives should also include different operation regimes possible at Rogun HPP. Analysis of legal issues should assess feasibility of future fulfillment of the old water-management agreements between riparian countries, both in the case of the Rogun HPP and under alternative development scenarios. It should identify how the legal water resource management framework should be improved prior to decisions on Rogun HPP project completion.

4. ESIA and Resettlement Framework should address impacts on and needs of upstream and downstream communities and prioritize minimizing numbers of people resettled and economically displaced by the project. The repressive authoritarian rule in Tajikistan and surrounding countries, does not leave people safe room for defending their rights and will make them silent victims in case of further resettlement. First of all it is necessary to assess alternative scenarios for Rogun HPP Project completion with a smaller reservoir, which eliminates a need for further resettlement.

5. Biodiversity conservation in downstream areas should be prioritized, impacts assessed and mitigation action planned in full accordance with the ESS6. Special environmental flow regime with binding agreement to ensure its implementation is needed to guarantee that the Project does not perpetuate degradation of the World Heritage property and contribute to extinction of critically endangered species. An environmental flow regime sufficient for safeguarding and recovery of the ecosystems and species downstream of the Vakhsh Cascade should be implemented as a part of any completion scenario selected for the Rogun HPP Project.

6. The ESMP and ESCP must be fully redesigned to incorporate clear, enforceable obligations and actionable steps to ensure thorough mitigation hierarchy processes are followed for

upstream and downstream areas and credible mechanisms for compensation of damages that may occur under different project completion scenarios.

7. Requirements of ESS 10 should be fully met. During the process of additional assessment of alternatives and impacts and bringing the project in compliance with the ESF, all E&S documentation should be fully disclosed in appropriate manner. The project proponents must conduct broad consultations with populations of all areas potentially affected by the project and interested international stakeholders taking all possible steps to be inclusive of systematically marginalized segments of communities, and making deliberate proactive measures to minimize the risk of reprisals and intimidation.

November 08, 2024

TO:Ajay Banga, President, World Bank Group

CC: Axel van Trotsenburg, Senior Managing Director
Anna Bjerde, Managing Director of Operations
Antonella Bassani, Vice President, Europe and Central Asia
Mamta Murthi, Vice President, People
Juergen Voegele, Vice President, Planet
Pablo Saavedra, Vice President, Prosperity
Guangzhe Chen, Vice President, Infrastructure
Akihiko Nishio, Vice President, Development Finance
Tatiana Proskuryakova Regional Director Central Asia
EDS01 Office
EDS24 Office

Re: Rogun HPP Project Consultations in Tashkent and future consultations in absence of valid Environmental and Social Instruments

Dear President Banga:

We are surprised that after 10 months of inaction, the World Bank and Rogun HPP PMG have all of a sudden announced a series of consultations with very little notice. We feel that those are not meaningful consultations conducted in a good faith, but rather a chaotic box-checking exercise designed to help pave the way for the imminent Board approval of the Rogun HPP in the absence of valid environmental and social instruments.

We were also informed by Mme Proskuryakova that the Rogun HPP ESIA has expanded the Area of Influence (AOI) to include the downstream sections of the Vakhsh and Amu Darya rivers and assessments have been already performed. However, no new assessments reports on downstream impacts have been disclosed for comment.

Several representatives of the Rogun Alert Coalition participated in the meeting organized by the World Bank and Rogun HPP Project on October 28 in Tashkent and concluded that those consultations fell short of any basic requirements for meaningful consultation, including those prescribed in the World Bank's ESS 10.

Consultations were announced only a week in advance without much effort to inform potentially affected communities in riparian countries.

No agenda was provided at the time of invitation, and when it arrived a day later the items it included were not accompanied by corresponding draft assessment studies, leaving participants without documents they could meaningfully comment on.

No comment period was indicated despite specific requests from CSOs to disclose for consultation key documents relevant to the topic of consultations. We were told that those reports are not ready yet and invited instead to comment on the “ESIA/ESMP which has been disclosed since last December” and the “updated Non-Technical Summary.

The meeting was not supported by any disclosed assessment of impacts on riparian countries, and no up to date assessment of downstream impacts in riparian countries were included in the 2023 ESIA materials. Meanwhile, the previous 2014 ESIA included an extensive chapter solely dedicated to impacts on riparian countries downstream of Vakhsh hydropower cascade.

We were also made to believe that an updated assessment cannot be commissioned any time soon as it should be based on updated current information on climate change, hydrology, sedimentation processes, socio-economic situation and water use in riparian countries as well as analysis of changing policies, legislation and treaties. Some of these baseline studies were only recently commissioned by the Rogun HPP project, while other studies were completely omitted. All in all, the current ESIA is not based on up-to-date information and therefore cannot be treated as a credible assessment from which to draw conclusions and plan mitigation measures.

The presentations shown on October 28 did not fully correspond with the announced agenda, were selective in covering only favorable aspects, and contained contradictory statements. Although the agenda featured “findings of the ESIA” and “biodiversity management”, the first presentation titled “Introduction the Rogun Hydropower Project” did not present ESIA findings on impacts in any credible form. The presentation included only one slide on negative impacts, while these would typically be the focus of any ESIA. Speaking of absence of any alternatives to Rogun HPP, the presenter lamented “*in future solar and wind could contribute, but now it is not advanced enough technology and too expensive*” when, in fact, in 2023 the cost of solar PV installation was on average 4 times less expensive than for hydro, while 50% of newly capacity installed globally in 2023 was for solar and wind versus only 2% for hydropower.

Dr. Zwahlen, who was supposed to present about cumulative impacts demonstrated deep disregard for on-going efforts and agreements presently implemented by governments and UN agencies to sustain what is left of the Southern Aral Sea– Amu Darya River delta, stating that measures implemented for saving Aral Sea “did not keep it from shrinking further” anyway. Based on that derogatory statement, he insisted that the fact that Rogun reservoir filling will decrease the volume of water delivered to the Aral by at least 25% is “insignificant” and does not require further impact assessment. He then suggested that a dedicated part of the 2014 ESIA on impacts on riparian countries was excluded from the 2023 ESIA documentation “because we already discussed that ten years ago”. It was extremely disturbing to learn that this person single-handedly prepared the cumulative impact assessment (CIA), which will be the only section of the ESIA dealing with the assessment of downstream impacts. We were also concerned to learn that two drafts of the CIA report prepared by July and October have not been disclosed for public consultation.

The ESIA team largely failed to answer any substantive questions from the audience, including those on the mandatory World Heritage impact assessment, cumulative assessment for extreme circumstances (such as dam malfunction or failure), climate risk assessment, etc. Finally, when a local participant asked to describe the main findings of the ESIA, there was no answer at all. The project representatives repeatedly minimized the impacts of Rogun, yet were forced to concede that assessments supporting that claim are not ready yet.

The experience of the consultations in Tashkent clearly showed that in the absence of good faith on the side of the World Bank and PMG and intentional non-disclosure of documents relevant to consultations, there is no room left for meaningful dialogue, nor for getting credible answers to questions asked by CSOs.

We were further informed by World Bank staff that the updated ESIA/ESMP and the other environmental and social instruments will not likely be disclosed for consultation prior to the World Bank's expected Board meeting, and would only be disclosed after Board approval.

We request that the ESIA Report (including Volume II which contains actual technical data on ESIA findings demonstrating its credibility), the Cumulative Impact Assessment, Biodiversity Management Plan, Resettlement Action Plan 2, and Emergency Response Plan for Vakhsh Cascade undergo consultations before the project financing decision, and that they be disclosed for comment at least 2-4 weeks prior to consultation.

We are also surprised that the Stakeholder Engagement Plan (SEP) mainly consists of reports on stakeholder engagement that happened 10-15 years ago and contains little information on ESIA consultation after official disclosure of the draft report in December 2023. The SEP must contain a coherent plan for the sequence of pre-appraisal public consultations on essential assessment studies listed above. Instead, we heard vague promises of "several meetings to be held in riparian countries" without dates, names of countries, or a clear agenda. We are also surprised that at least 9 letters with substantive questions sent by CSOs to the World Bank in 2024 are omitted in the SEP and request that those be included with a matrix of responses in standard table format.

On November 4, we received from the World Bank an invitation to new international consultations with CSOs, hastily scheduled for November 14. While we welcome the World Bank's willingness to consult with us, we would like to point to multiple discrepancies with good practice and the World Bank's ESS 10:

1. Announcement arrived only 10 days before the consultation date, which makes it difficult to fit in already busy schedules,
2. Invitation is addressed to a dozen of international groups, thus ignoring other potentially interested stakeholders,
3. As of November 5, there was no announcement even on the dedicated project website, which makes us doubt that any genuine effort is made to inform the public,
4. Topic and arrangements for the consultations are vague, e.g. to "Address concerns on E&S and technical issues in more detail", "Further explore stakeholder engagement", etc. If the plan was to give us oral answers to our previous letters, we insist on receiving these responses in writing,

5. No disclosed documents are listed as the subject of upcoming consultations. Again, as in the earlier meeting, the proposed consultation is not "*based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful, and easily accessible information in a time frame that enables meaningful consultations* " (ESS 10, para 22),
6. No commenting period was indicated nor any information given on the reporting process by which outcomes of the consultation meetings and subsequent commenting will be summarized and incorporated in the ESIA report.

We believe that further "in-depth exchange" that you asked for is impossible without the proper inclusion of interested stakeholders, advanced disclosure of essential assessment studies for comment, and setting a clear and equitable procedure that ensures that consultations are meaningful.

We kindly ask you to reschedule consultations from November 14 to a time by which you can provide us with a coherent set of disclosed reports, reflecting new ESIA assessments, and which would form the subject of the consultations.

Sincerely,

Rivers without Boundaries

CounterCurrent

International Rivers

Socio-ecological union international

World Heritage Watch

Biodiversity Conservation Center

RwB letter to WB on the November 14 Rogun Hydropower Project meeting

November 26, 2024

To: Zarina Nurmukhambetova <znurmukhambetova@worldbank.org>,
Tatiana Proskuryakova <tproskuryakova@worldbank.org>,
Chris Trimble <ctrimble@worldbank.org>,
"Maninder S. Gill" <mgill@worldbank.org>

Dear World Bank team:

It was sad imitation of consultations held on November 14, where we were lectured that new ESF does not have any clear thresholds and rules to prevent destructive hydropower projects from being financed, no matter how poorly those are documented and consulted.
This text largely reflects my short intervention at the meeting and I kindly ask You to include it in the meeting report unchanged.

For over 10 months, civil society groups have consistently and repeatedly communicated with World Bank management on the flaws of the Rogun HPP Project, but no thorough responses to the critical issues put forward have been forthcoming from the World Bank management. In fact, the points raised remain entirely absent from the updated project Stakeholder Engagement Plan reports. Responses we got are largely a mix of promises to produce missing assessments in future, and quotes from flawed ESIA and outdated feasibility studies.

As the year comes to a close, the World Bank and Rogun Hydropower Project Management Group was moving into a fast-tracked 'consultation' mode, announcing a series of meetings for civil society 'stakeholder' engagement.
This might have indicated a step in the right direction. However –
1. There is no clear indication of how outreach is being done to ensure invites are extended to groups in countries that stand to be affected by the development of the project
2. There is no clarity on why such short notification is being provided
3. There are no new release of substantive project documents or clear commenting periods for those which exist.

To give but one example, although it was announced that the Area of Project Influence has been extended and downstream impacts will be assessed in response to the urging of civil society groups, no new assessments reports on downstream impacts have been disclosed for comment. Then we were informed that this announcement was just a misleading public-relations move: to stand-alone assessment of downstream impacts was commissioned, but as promised 8 months ago some substitute will be included as a part of cumulative impact assessment done single-handedly by an arrogant gentleman with biased views on the project formed more than a decade ago.

So far observing the World Bank handling of consultations and its responses to letters written by CSOs, we have no option but to consider that these consultations as simply intended as a check-box exercise, with no serious attempt to address – concerns and questions being raised by civil society groups based both in region and beyond.

The ESIA is based on outdated information, does not analyze how to mitigate the key risks and cannot be the basis for any decisions to finance the project.

As a consequence, prior to further engagement, we request the disclosure at a minimum up to date project documents, free of redacted content, including:
a. the full ESIA Report (all volumes, inclusive of technical data), including dedicated chapter with in-depth assessment of downstream impacts on riparian countries and up-to-date chapter on analysis of alternatives,
b. Heritage impact assessment in line with UNESCO requirements for Tigrovaya Balka World Heritage property downstream of Vaksh Cascade.
c. the Cumulative Impact Assessment,
d. the Biodiversity Management Plan with feasibility study for environmental flows downstream of Vakhsh cascade,
e. the Resettlement Action Plan 2,
f. Emergency Response Plan for Vakhsh Cascade, including assessment of potential impacts in case of dam breach or malfunction, and
g. Environmental and Social Commitment Plan includes specific enforceable measures to avoid\mitigate potential impacts, including designing and sustaining environmental flows downstream of the Vakhsh hydropower cascade reoperated by Rogun Reservoir.

In our understanding those assessments MUST undergo consultations before the project financing decision.

And thank You, Mr. Cormier, for inviting us to submit comments on the empty and misguided Environmental and Social Commitments Plan. We are working on those and you will get them in a due course. If You have commenting deadline – please inform us.

Sincerely,

Eugene Simonov
Coordinator
Rivers without Boundaries International Coalition

To: Broad Members of the World Bank and other finance institutions considering investment into Rogun HPP Project.

Dear World Bank Board Members:

We were informed that the World Bank Board meeting to discuss the Rogun HPP Project is scheduled for December 17. One of the recurrent planning mistakes made each time this project has been revived is the lack of assessment of alternative solutions to the project's challenges.

To overcome this chronic problem the Rivers without Boundaries Coalition commissioned an analytical report that demonstrates some of the key factors, opportunities and risks that should now be considered during the Project finalization to ensure that better decisions are made.

THE REPORT available here: https://rivers.help/pdf/2024_En_The_tallest_dam_in_the_world.pdf

The draft Environmental and Social Impact Assessment (ESIA) of the Rogun HPP Project, disclosed in December 2023, completely lacks an analysis of alternatives based on up-to-date data. The ESIA merely cites an outdated analysis done more than 10 years ago, although significant changes have occurred since then in technology, nature, economics, and the body of scientific knowledge.

We are convinced that it is impossible to make a responsible decision without comparing still available development alternatives and their associated impacts on nature and society. Without this, it is not possible to choose the optimal option for project completion, which implies avoiding and mitigating of potential negative consequences and maximizing positive outcomes, as prescribed in all modern environmental and social policy frameworks of international development banks.

To illustrate this need, the Report presents a variety of alternatives for the completion of the Rogun HPP and the development of Tajikistan's energy system in light of the factors that need to be considered when choosing a development path. These factors include revolutionary changes in energy efficiency and economic feasibility of industrial use of renewable energy (solar and wind generation), growing economic risks of establishing the HPP, natural risks from accelerating climate change, humanitarian risks associated with human resettlement, socio-economic and environmental impacts downstream, including those on the World Heritage property.

This work is vividly demonstrating that neglecting the duty to conduct such analysis of alternatives may result in severe negative impacts, otherwise avoidable, and will, likely, preclude the project from achieving its original development goals in a safe, efficient and sustainable manner. This preliminary analysis shows that when compared with alternative development scenarios against six most critical criteria, the “highest dam in the world” appears to be among the least beneficial and most risky options for Rogun HPP project completion.

The Government of Tajikistan and international financial institutions considering financing the Rogun HPP project must conduct, as part of the finalization of the ESIA materials, a thorough analysis of possible alternative scenarios for project completion and their social, environmental and economic impacts, including an analysis of their economic viability in comparison with the "highest dam" option currently being pursued by project proponents. It is also a mandatory requirement of the social and environmental policies of most of the banks involved in the project appraisal.

We hope, that this report will help you to put forth requirements for analysis of alternatives and other improvements in Rogun HPP Project planning to fill all necessary gaps before the Board may proceed with making decisions in which way to finance the completion of Rogun HPP Project.

Sincerely,

Rogun Alert Coalition

2 December 2024

Attached: https://rivers.help/pdf/2024_En_The_tallest_dam_in_the_world.pdf

Annex 2

Management Response

MANAGEMENT RESPONSE TO REQUEST FOR INSPECTION PANEL REVIEW OF THE TAJIKISTAN: SUSTAINABLE FINANCING FOR ROGUN HYDROPOWER PROJECT (P181029) AND TECHNICAL ASSISTANCE FOR FINANCING FRAMEWORK FOR ROGUN HYDROPOWER PROJECT (P178819)

Management has reviewed the Request for Inspection of the Tajikistan: Sustainable Financing for Rogun Hydropower Project (P181029) and Technical Assistance for Financing Framework for Rogun Hydropower Project (P178819), received by the Inspection Panel on February 24, 2025, and registered on April 8, 2025. Management has prepared the following response.

May 23, 2025

CONTENTS

ABBREVIATIONS AND ACRONYMS iv

EXECUTIVE SUMMARY vi

I. INTRODUCTION 1

II. THE REQUEST 1

III. PROJECT BACKGROUND 2

IV. ELIGIBILITY ISSUES 9

V. MANAGEMENT'S RESPONSE 13

Map

Map 1. IBRD No. 46142

Annex

Annex 1. Claims and Responses

ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
ATPZ	Atypical Zone
bcm	billion cubic meters
BMP	Biodiversity Management Plan
BWO	Basic Water Organization (also abbreviated as BVO)
CAWEP	Central Asia Water and Energy Program
CHMP	Cultural Heritage Management Plan
CIA	Cumulative Impact Assessment
CSO	Civil Society Organization
DFZ	Directorate of the Flooding Zone
DSPOE	Dam Safety Panel of Experts
E&S	Environmental and Social
EBY	Argentina/Paraguay Bi-National Entity
EPP	Emergency Preparedness Plan
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESPOE	Environmental and Social Panel of Experts
ESSs	Environmental and Social Standards
FAQ	Frequently Asked Questions
fsl	full supply level
GRM	Grievance Redress Mechanism
GW	Gigawatt
HPP	Hydropower Plant
ICWC	Interstate Commission for Water Cooperation of Central Asia
IDA	International Bank for Reconstruction and Development
IPN	Inspection Panel
km	kilometer
km^3	cubic kilometer
LRP	Livelihood Restoration Plan
m	meter
m^3	cubic meter
masl	meters above sea level
MEWR	Ministry of Energy and Water Resources
MPA Program	Multiphase Programmatic Approach of the Rogun Hydropower Program
MW	Megawatt
NGO	Nongovernmental Organization
OP	Operational Policy
PMC	Project Management Consultant
RAP	Resettlement Action Plan
RLRF	Resettlement and Livelihood Restoration Framework
Rogun HPP	Tajikistan's overall Rogun Hydropower Plant Project
Rogun HPP Project	Sustainable Financing for Rogun Hydropower Project (P181029)
Rogun OJSC	Rogun Open Joint Stock Company
Rogun PMG	Rogun Project Management Group
Rogun Projects	Rogun HPP Project and Rogun TA Project

Rogun TA Project	Technical Assistance for Financing Framework for Rogun Hydropower Power Project (P178819)
RWB	Rivers without Boundaries Public Fund
SDRs	Special Drawing Rights
SEP	Stakeholder Engagement Plan
TEAS	Techno-Economic Assessment Study
TWh	Terawatt hour
US$	United States Dollar
VRE	Variable Renewable Energy
y	year

Executive Summary

The Projects

i. The Sustainable Financing for Rogun Hydropower Project ***("Rogun HPP Project," P181029)*** is supported by an IDA Grant to the Republic of Tajikistan in the amount of 258.1 million Special Drawing Rights (SDRs) (US$350 million equivalent). It constitutes Phase 1 of the Multiphase Programmatic Approach of the Rogun Hydropower Program ("MPA Program"). The objective of the Rogun HPP Project is to increase the supply of clean, affordable and climate-resilient hydroelectricity for consumers in the territory of Tajikistan and the Central Asia Region by 2 Terawatt hours (TWh). The Rogun HPP Project was preceded by the Bank-supported Technical Assistance for Financing Framework for Rogun Hydropower Project ***("Rogun TA Project," P178819, and together with the Rogun HPP Project, "the Rogun Projects")***, which was approved by the Board in January of 2023 and financed by an IDA Grant in the amount of 11.7 million SDRs (US$15 million equivalent) to the Republic of Tajikistan. The Rogun TA Project supported the preparation of the Rogun HPP Project and the MPA Program.

ii. ***The Rogun HPP (i.e., the Government's Rogun hydropower plant) will be the cornerstone of Tajikistan's electricity system, providing better access to reliable, affordable and clean energy to meet domestic demand and supporting a regional electricity market in Central Asia.*** About 70 percent of the energy generated would be exported, thus helping to replace fossil-fired generation in Kazakhstan and Uzbekistan at an affordable cost, while increasing the resilience of water resources regionally. The financing package also contributes to a sustainable macro-economic framework, helping free up space for expenditures in the social and other priority sectors.

iii. ***The Bank's first engagement with the Rogun HPP began in 2011 when the Bank financed key assessment studies.*** This included the preparation of a Techno-Economic Assessment Study (TEAS), development of core environmental and social (E&S) instruments, such as the 2014 Environmental and Social Impact Assessment (ESIA), and the establishment of two independent expert panels—one focused on dam safety and the other on E&S matters. These efforts have supported project planning and design and helped to incorporate good international practice and inform decision-making during the early stages of design and implementation. After the completion of the studies, Bank support was not continued, primarily due to concerns expressed by some neighboring riparian countries about the perceived impacts of the Rogun HPP on the availability of water for downstream countries.

iv. ***The Government began an active construction phase for the Rogun HPP in 2017, without support from the Bank or other development partners, due to significant concerns from some riparian countries.*** While the preparation phase of the Rogun HPP has had a long history, the Government of Tajikistan decided to proceed with construction through its own financing in 2017. The power plant's first unit was commissioned in November 2018 and the second in September 2019.

v. ***The Bank re-engaged on the Rogun HPP in 2021, supporting the Government of Tajikistan to evaluate options for financing the Rogun HPP through a Financing Options Study.*** The decision to re-engage on the Rogun HPP was based on indications from riparian countries that they were now open to considering whether the Rogun HPP should advance, contingent upon adequate safeguards being in place, with an understanding that this assumption needed to be confirmed. The Government, the Bank and other development partners discussed the findings of the study in late 2022, together with a list of issues that needed to be addressed to increase the likelihood of securing financing for the Rogun HPP.

vi. ***The Bank has followed a sequential approach to providing financing support since re-engaging on the Rogun HPP, beginning with the Rogun TA Project, which was followed by the Rogun HPP Project and the MPA.*** As part of the Rogun TA Project preparation, the Bank assessed the ongoing activities of the Rogun HPP against the requirements of the Environmental and Social Framework (ESF), and in the process identified several areas for improvement to align with the ESF, which had been amended in 2018. At this time, the Bank had also observed that riparian concerns had moderated. Moreover, any Bank financing will be subject to compliance with OP 7.50. The preparation of the Rogun HPP Project and MPA Program benefited from the progress achieved by the Rogun TA Project. Nevertheless, the Rogun HPP Project is not yet effective, pending Tajikistan's fulfillment of the conditions of effectiveness under the Financing Agreement, which include the finalization of key E&S assessments and plans. The Bank's support through the Rogun Projects will help the Rogun HPP to achieve consistency with international good practice, including the ESF.

vii. Although some areas for improvement to align with ESF and enhanced transparency were identified, Management notes that the various studies and assessments conducted as part of the Rogun Projects align with the key conclusions derived from the TEAS and the E&S studies from 2014 and 2023. These conclusions have been included in public documents, such as the Project Appraisal Documents for the Rogun Projects, and have been discussed during consultations with civil society organizations (CSOs).

Request for Inspection

viii. The Request for Inspection was submitted by two individuals (***"the Requesters"***) in Turkmenistan and Uzbekistan, who state that they represent their respective communities in the two countries. The Request alleges that the two Bank-financed projects are likely to cause adverse impacts to communities downstream of Tajikistan's Vakhsh Hydropower Cascade, because the Bank, in the Requesters' opinion, did not comply with the ESF and failed to develop appropriate E&S mitigation measures. The Request also alleges a lack of meaningful consultation and stakeholder engagement. Specifically, the Request claims that the Rogun Dam's ESIA is based on incomplete and outdated data and that cumulative impacts resulting from this dam and other water infrastructure projects downstream along the Amu Darya were not appropriately considered. As a consequence, they believe that the Rogun Dam would result in a water deficit and affect water quality, which would degrade downstream ecosystems. They further allege that water flow redistribution caused by the Rogun Dam could affect the livelihood of downstream communities in Turkmenistan and Uzbekistan.

Eligibility Issues

ix. The Request for Inspection is not eligible for investigation because it does not meet the eligibility requirements in the 2025 Accountability Mechanism Resolution. The Resolution requires the Requesters to be in the territory of the Borrower, yet none of the Requesters are from the Republic of Tajikistan. This requirement is grounded in sovereignty concerns, which are at the center of how the Bank operates as an international organization and which informed the Panel's mandate. The Board approves the financing of projects in a specific Member country, with the understanding that the Member country will comply with its obligations under the applicable financing agreement. The Inspection Panel may be authorized by the Board to investigate Bank policy non-compliance in that project and in that specific country. The Board deliberately foreclosed the possibility of foreign entities interfering in another country's affairs by calling for an investigation of the Bank's actions in that country. Notwithstanding Management's strong concerns regarding the eligibility of this Request for Inspection, Management welcomes the opportunity to clarify the nature and details of its involvement in the Rogun Projects and to address the issues and questions raised by the Requesters.

x. Management also notes that the Request for Inspection and the Notice of Registration indicate that at least one international CSO will act as a "representative" of the Requesters. The Accountability Mechanism Resolution allows for representation of Requesters by an international organization only under exceptional circumstances and subject to approval by the Board if "appropriate representation is not locally available." Management notes that four organizations based in Uzbekistan are listed in a letter received by Management. Moreover, Management also notes that a past Request for Inspection was submitted on behalf of an Uzbek nongovernmental organization, representing "more than 100 NGOs." This raises the question as to whether local representation is indeed unavailable such that exceptional approval by the Board for international representation can even be sought in the first instance.

Management's Response

xi. ***Management has carefully reviewed the concerns raised in the Request for Inspection regarding potential environmental and socio-economic impacts, as well as consultations. Management concludes that these concerns have been extensively studied and have already been appropriately addressed or will be addressed as part of the E&S assessments, plans and measures required of the Borrower before the Rogun HPP Project's Financing Agreement becomes effective (as per its conditions of effectiveness), and subsequently throughout its implementation.***

xii. ***Management notes that the potential impacts from the Rogun HPP have been subject to significant E&S reviews and scrutiny. Moreover, the Bank analyzed ongoing activities of the Rogun HPP and identified several areas for improvement to align with the ESF, which had been amended in 2018.*** The Rogun TA Project was designed to systematically focus on strengthening E&S performance, which later supported the preparation of the Rogun HPP Project and the MPA Program. Two independent panels of experts were re-established pursuant to the TA Project to help oversee the Rogun Projects throughout implementation, providing expert advice on geotechnical, geological, hydraulics, electro-mechanical and other construction matters, as well as on the process of updating the E&S assessments and plans to make them technically sound and able to meet the requirements of the development partners supporting the Rogun HPP, including the Bank.

xiii. ***The Rogun HPP is being built upstream of a cascade of seven existing HPPs on the Vakhsh River, which have been developed over the past 50 years.*** Based on studies conducted since 2014, some of the concerns raised in the Request result from these existing dams, especially regarding potential environmental and socio-economic impacts in riparian countries, as outlined below. Rather than adding to those pre-existing downstream impacts, the Rogun HPP will help provide enhanced flood protection for the entire cascade. The remaining concerns that relate specifically to the Rogun HPP are being addressed through the necessary E&S assessments, plans and mitigation measures under the Rogun Projects.

xiv. ***Management notes that the Request raises important regional E&S concerns about impacts from the existing HPP cascade in the Vaksh river and from investments in the region's river basins on water scarcity.*** However, there are no indications that these concerns are actually linked to the Project, as indicated in the ESIA and the Cumulative Impact Assessment (CIA). ***Management therefore does not agree that the alleged downstream harm is related to the Bank's compliance with its policies and procedures, as required by the Accountability Mechanism Resolution.*** The remaining concerns raised in the Request – that do relate to the Rogun Projects – have been thoroughly studied over the past decade and will be further reviewed and addressed in line with Bank policy. In this context, Management specifically notes that the Request does not acknowledge the flexibility that the ESF provides for the project approval process. As explained below, the ESF allows the Bank to consider and approve projects based on draft E&S assessments that are finalized during project implementation. The E&S instruments will be updated continually during project implementation to the satisfaction of the Bank and in line with the ESF provisions.

xv. ***The financing for the Rogun HPP Project was approved in December 2024 but is not yet effective because the conditions of effectiveness for Bank financing have not yet been met.*** These conditions of effectiveness for Bank financing include the disclosure, finalization and adoption of updated E&S instruments that are acceptable to the Bank, such as the ESIA, updated CIA, Environmental and Social Management Plan (ESMP), Resettlement Action Plan 2, Livelihood Restoration Plan 2, Security Management Plan, Traffic Management Plan, and guidelines to manage on-site occupational health and safety. In addition, they include emergency response procedures and waste management procedures – all in accordance with the Bank's ESF. Amendment of all existing contracts to incorporate the requirements of the ESF, regardless of the source of financing, is also a condition of effectiveness for the Bank financing. The adoption of a Biodiversity Management Plan and a Cultural Heritage Management Plan are conditions of disbursement for financing of the relevant project activities under the Financing Agreement. ***These comprehensive legal conditions are meant to ensure that no Bank financing is made available to the Rogun HPP Project until all the relevant assessment and plans are finalized in a manner acceptable to the Bank as per the provisions of the ESF***. Any outstanding concerns of the

Requesters that relate to the Rogun HPP Project will be addressed as part of the Bank's review and approval of these assessments and plans, and their subsequent implementation.

xvi. ***Given the nature and location of the Rogun HPP on the Vakhsh River, a tributary of the Amu Darya River (an international waterway), Bank Operational Policy regarding Projects on International Waterways (OP 7.50) was triggered for both Projects.*** The usual riparian notification procedure was followed and riparian notification letters with all relevant information about the Projects were sent to Kazakhstan, the Kyrgyz Republic and Turkmenistan in September 2023; Afghanistan in October 2023; and Uzbekistan in December 2024. The Government of Tajikistan has committed to adhering to existing water sharing arrangements, maintaining seasonal flow regimes, and ensuring that no appreciable harm[1] is caused to any of the downstream riparian countries, as well as providing data transparency. These commitments are legally binding and enforceable since they are reflected as covenants in the Financing Agreement. Based on this and its own assessments, the Bank concluded that the Projects would not result in appreciable harm to the other riparian countries.

xvii. ***Extensive consultations with project-affected people took place, including with riparian countries, and will continue.*** There have been over 90 consultations with project-affected people since work commenced on the Rogun HPP, many of them since the approval of the Rogun TA Project. Consultations took place during project preparation, including with riparian countries. There was a high-level regional riparian consultation in November 2023 in Kazakhstan and a follow-up consultation in Uzbekistan. Government and CSOs participated in both meetings. More riparian consultations are planned after the 2025 ESIA and 2025 ESMP are disclosed.

Conclusion

xviii. ***Management believes that the present Request is not eligible for inspection. Nevertheless, Management has reviewed the allegations in the Request and concluded that the Bank has correctly and thoroughly applied its policies and procedures applicable to the Project and to the matters raised by the Request. As a result, Management believes that the Requesters' rights or interests have not been, nor will they be, directly or adversely affected by the alleged failure of the Bank to implement its policies and procedures.***

[1] An assessment conducted by Bank experts in March-April 2024 concluded that filling the Rogun reservoir at an average of 1.2 km^3/year (Tajikistan's historically unused water share while keeping within regional water sharing agreements) will only impact water availability in the upper Amu Darya Basin (after the confluence of the Vakhsh, Panj, and Kofarnihon Rivers) that is directly available to downstream countries by 2.2 percent, causing no appreciable harm to these countries. See also para. 82.

I. INTRODUCTION

1. On April 8, 2025, the Inspection Panel registered a Request for Inspection, IPN Request RQ25/02 (hereafter referred to as "the Request"), concerning the Tajikistan: Sustainable Financing for Rogun Hydropower Project (P181029) ("Rogun HPP Project") and the Technical Assistance for Financing Framework for Rogun Hydropower Project (P178819) ("Rogun TA Project"), financed by the International Development Association ("IDA" or the "Bank" or the "World Bank"). The Rogun HPP Project and the Rogun TA Project are jointly referred to herein as the "Rogun Projects;" and the Government's overall Rogun hydropower plant project is herein referred to as the "Rogun HPP."

2. ***Structure of the Text.*** Section II of this Management Response presents the Request, Section III provides background on the Projects, Section IV discusses concerns about the ineligibility of the Request; and Section V contains Management's response to the allegations in the Request. Annex 1 presents the Requesters' claims, together with Management's detailed responses, in table format.

II. THE REQUEST

3. The Request for Inspection was signed by two individuals in Turkmenistan and Uzbekistan, who represent their respective communities in the two riparian countries ("Requesters"). The Requesters asked the Panel to keep their identities confidential for fear of retaliation. The Request was submitted by Rivers without Boundaries Public Fund, a civil society organization (CSO) which is based in Almaty, Kazakhstan and represents the two Requesters and their respective communities. The Requesters have authorized the Bank Information Center (Washington, DC, USA), to receive information about the complaint on their behalf, and they have appointed International Rivers (San Francisco, USA) and CEE Bankwatch (Prague, Czech Republic) to serve as their advisors in the Panel process.

4. Attached to the Request are two appendices:

- Appendix I: Mechanisms of the Socio-Ecological Impacts of the Rogun HPP Project on the Population and Ecosystems of the Lower Amu Darya (developed by the Requesters); and
- Appendix II: Correspondence with the World Bank.

5. No further materials were received by Management in support of the Request.

III. PROJECT BACKGROUND

6. ***The Projects.*** The Rogun HPP Project (P181029) constitutes Phase 1 of the Multiphase Programmatic Approach of the Rogun Hydropower Program ("MPA Program") and is supported by an IDA Grant to the Republic of Tajikistan in the amount of 258.1 million Special Drawing Rights (SDRs) (US$350 million equivalent). The Rogun HPP Project under the MPA Program was preceded by the Rogun TA Project (P178819), which was approved by the Board in January 2023 and financed by an IDA Grant in the amount of 11.7 million SDRs (US$15 million equivalent) to the Republic of Tajikistan. The Rogun TA Project supported the preparation of the Rogun HPP Project and the MPA Program.

7. The MPA Program has an overall financing envelope of US$650 million that supports the completion of the Rogun HPP, which has been under construction since 2017 using non-Bank resources, and that crowds-in US$2.9 billion in grants and concessional funds from ten development partners.[2] The MPA Program is structured in two phases: The Rogun HPP Project – Phase 1, to be completed by 2029, includes: (i) constructed dam height of 1,185 meters above sea level (masl);[3] and (ii) installed capacity of 1,660 MW (400 MW for generating units 5/6, 1,260 MW for generating units 3/4). Phase 2, to be completed by 2035, includes: (i) dam height of 1,300 masl; and (ii) installed capacity of 3,780 MW (630 MW in each of six generating units).

8. The Rogun HPP ***will be the cornerstone of Tajikistan's electricity system, providing better access to reliable, affordable and clean energy to meet domestic demand and supporting a regional electricity market in Central Asia.*** About 70 percent of the energy generated would be exported, thus helping to replace fossil-fired generation in Kazakhstan and Uzbekistan at an affordable cost, while increasing the resilience of water resources regionally. The financing package, which combined government resources and funding from multiple development partners (see paragraph 14), also contributes to a sustainable macro-economic framework, helping free up space for expenditures in the social, education and healthcare sectors, and is linked to the implementation of significant energy and structural reforms in the broader economy.

9. ***Objectives of the Projects.*** The objective of the Rogun HPP Project is to increase the supply of clean, affordable and climate-resilient hydroelectricity for consumers in the territory of Tajikistan and the Central Asia Region by 2 TWh.

10. The objectives of the Rogun TA Project are to strengthen the Rogun HPP Project's financial and commercial frameworks, enhance its environmental and social (E&S) sustainability, improve transparency and support establishment of the Rogun HPP Project's benefit sharing program.

11. ***Project Effectiveness and Disbursement.*** The Rogun HPP Project is not yet effective pending the fulfillment of the conditions of effectiveness according to the Financing Agreement signed between IDA and the Republic of Tajikistan (Grant No. E3800-TJ). No disbursements have

[2] The ten development partners include World Bank, European Investment Bank, Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB), Islamic Development Bank, Kuwait Fund, Saudi Fund for Development, OPEC Fund, Abu Dhabi Fund, and other financial institutions.

[3] masl = meters above sea level, is a unit of measurement used to indicate the elevation of a dam or its reservoir.

been made, or will be made, under the Financing Agreement for the Project until these conditions are met.

12. The Rogun TA Project was declared effective on May 11, 2023, and has disbursed US$6.53 million to date.[4]

13. ***Project Implementing Entities.*** The Rogun HPP Project will be implemented mainly by two entities. The Rogun Open Joint Stock Company (Rogun OJSC), through the Rogun Project Management Group (Rogun PMG), will act as the project implementation entity for most of the Project, except activities related to relocation compensation and apprenticeship stipends which will be implemented by the Directorate of the Flooding Zone (DFZ), assisted by the Rogun OJSC and the Rogun PMG. Component 4 (see below) will be implemented in close coordination with the Ministry of Energy and Water Resources (MEWR) and the Agency for Hydrometeorology of the Committee for Environmental Protection under the Government of Tajikistan (Hydromet). The Rogun TA Project is being implemented by the Rogun PMG.

14. ***Financing Package and Source of Financing.*** The financing package of the overall MPA Program includes US$2.14 billion from the state budget, US$1.25 billion in project revenues, US$2.9 billion equivalent in grants and loans from the development partners. To this date, IDA has approved US$350 million equivalent for the Rogun HPP project, while AIIB has approved US$270 million in December 19, 2024. The Islamic Development Bank, the OPEC Fund for International Development, the Kuwait Fund and the Saudi Fund for Development have also approved financing in support of the Rogun HPP in late 2023 in the amount of US$150 million, US$100 million, US$16.7 and US$100 million, respectively. AIIB also provided co-financing in the amount of US$5 million to the Rogun TA Project.

15. ***Project Components. The Rogun HPP Project has four components:***

- Component 1 covers all major construction activities for the Rogun HPP. It includes the procurement and installation of electromechanical equipment under Lots 1 and 1A, such as turbines, generators, and control systems for Generating Units 3 to 6, incorporating climate-resilient design features. Lot 2 involves the construction of the main dam at 1,185 masl, including foundational treatment. Right bank works under Lots 3 and 3A cover tunnels, outlet structures, spillways, grouting galleries, and slope stabilization. Left bank activities under Lot 4 include excavation, slope stabilization, tunnel construction, installation of hydromechanical equipment, and completion of civil works for the powerhouse and transformer hall. A centralized control room for all six generating units will also be established. Overall, this component enhances resilience to climate risks through flood protection, long-term water storage, and adaptation to changing hydrological conditions.

- Component 2 covers project implementation support. It includes three sub-components. Sub-component 2.1 funds the Project Management Consultant (PMC), which will support the Rogun OJSC and the Rogun PMG with construction supervision, contract and quality management, E&S monitoring, and institutional capacity building. Sub-component 2.2

[4] While disbursement sits at about 42 percent, all funds under the Rogun TA Project have been committed.

covers employer costs such as design engineering and operational expenses for Rogun-related entities. Sub-component 2.3 supports technical assistance for project implementation, including corporate governance, audits, gender and grievance mechanisms, third-party monitoring of resettlement, and technical studies.

- Component 3 supports the implementation of the Resettlement Action Plan (RAP) and Livelihood Restoration Plan (LRP). Sub-component 3.1 finances relocation compensation and apprenticeship stipends, while Sub-component 3.2 includes construction of roads and bridges on the left bank to maintain access for project-affected people after reservoir impoundment. AIIB is co-financing this infrastructure.

- Component 4 supports hydrometeorological activities critical to climate adaptation and water management. Sub-component 4.1 funds instrumentation and technical assistance to improve in-situ monitoring and integrate satellite data for operational forecasting. Sub-component 4.2 supports the development of reservoir management rules and capacity building for the Basin Water Organization (BWO) Amudarya Tajikistan Branch, which will help optimize water use and coordination in the Vakhsh River Basin. Sub-component 4.3 covers modernization of hydroposts for real-time data transmission, improving regional water resource management in response to climate variability.

16. ***The Rogun TA Project also has four components:***

- Component 1 supports the development of a macroeconomically sustainable financing plan and a commercial framework for the Rogun HPP, including, inter alia, updates to the construction schedule, financial modeling, and transaction advisory for power purchase agreements.

- Component 2 focuses on improving dam safety by financing expert due diligence, including the appointment and maintenance of a Dam Safety Panel of Experts (DSPOE), contract reviews, and preparation of procurement studies, as well as preparation of additional technical and engineering studies and consultancy services required for addressing technical issues in the Rogun HPP.

- Component 3 aims to strengthen the E&S framework and promote benefit sharing by, inter alia, updating E&S instruments, overseeing contractor compliance, re-establishing expert advisory mechanisms, including the appointment and maintenance of an Environmental and Social Panel of Experts (ESPOE), and designing a benefit sharing program to channel project revenues into local development. This component is also supporting the consultation process with riparian countries.

- Component 4 enhances the institutional capacity of the Rogun PMG and Rogun OJSC through corporate governance improvements, staff training, communication support, provision of essential equipment, and funding for audits and operational expenses.

17. ***History since World Bank involvement.*** The Bank's involvement in the Rogun HPP began in 2011. Between 2011 and 2014, in response to a request from the Government of Tajikistan, the Bank financed key studies for the Rogun HPP under the Energy Loss Reduction Project (Credit

Nos. 40930-TJ and H1780-TJ). This included the preparation of a Techno-Economic Assessment Study (TEAS), development of core E&S instruments, such as the Environmental and Social Impact Assessment (ESIA),[5] and the establishment of two independent expert panels—one focused on dam safety and the other on E&S matters. These efforts have supported project planning and design and helped to incorporate good international practices and inform decision-making during the early stages of design and implementation.

18. The TEAS evaluated different Project alternatives and studied different dam heights of 335 m, 300 m and 265 m, respectively. Three generation capacities were studied for each option (ranging from 2,000 MW to 3,600 MW), resulting in a total of nine Project alternatives. The technical analysis concluded that, subject to specified design modifications and the implementation of the identified mitigation and monitoring measures, any of the Project alternatives could be built and operated within international safety norms. The E&S analysis showed that the E&S impacts of all three height alternatives could be adequately mitigated. The economic analysis showed that all Project alternatives would have an overall beneficial impact on the Tajikistan electricity system across all sensitivities, with the highest dam alternative showing the greatest benefit.

19. Following completion of the TEAS, Bank support was not continued, primarily due to concerns expressed by some neighboring riparian countries about the perceived impacts of the Rogun HPP on the availability of water. The Government of Tajikistan proceeded with construction of the Rogun HPP in 2017 using its own resources, without the support of the Bank or other development partners, while relying on the main conclusions of the TEAS and the 2014 ESIA. The power plant's first unit was commissioned in November 2018 and the second in September 2019.

20. In April 2020, the Government of Tajikistan requested the Bank to evaluate the options for financing the completion of the Project in a sustainable manner. The Bank commissioned a Financing Options Study in response to this request. The Financing Options Study was prepared by Bank staff with input from external consultants and completed in 2021.

21. The Financing Options Study focused on various aspects of the Project, including an overview of the implementation progress. This included obtaining an update on the construction costs and status; carrying out an overview of the main contracts and of implementation, environmental and social issues, as well as making high-level recommendations to address them; and providing an update of the costs associated with environmental and social management plans. The Financing Options Study presented an outline of the typical requirements of international development partners that would need to be fulfilled by the Government and the Rogun OJSC to enable Bank consideration for financing the Project. This study was shared with the Government in November 2021 and subsequently with other development partners. The development partners expressed their interest in the Project during a high-level roundtable organized by the Government on December 7, 2022, where the Government and the Bank presented the findings from the study. The outcomes and conclusions were endorsed by the potential financiers including the list of issues

[5] The ESIA prepared as part of the TEAS will be referred to as 2014 ESIA.

that needed to be addressed to increase the likelihood of the Project securing financing. At this time, the Bank had also observed that riparian concerns had moderated.

22. The Bank has followed a sequential approach to providing financing support since re-engaging with the Rogun HPP, beginning with the Rogun TA Project, which is followed by the Rogun HPP Project and the MPA. The Bank's re-engagement in the Rogun HPP has systematically focused on strengthening E&S performance. Given that construction began in 2017 without the involvement of the Bank or other development partners, the Rogun TA identified several areas for improvement to align ongoing activities with the Environmental and Social Framework (ESF), reflecting the enhancement of E&S sustainability of the Rogun HPP in its development objectives.

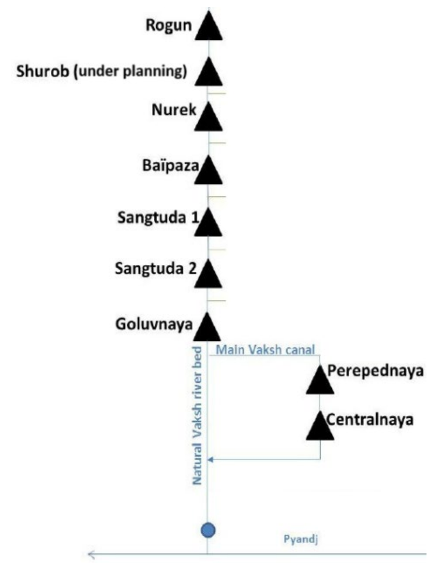
23. The preparation of the Rogun HPP Project (Phase 1) and the MPA Program benefited from the progress achieved by the Rogun TA Project. As explained in detail later in this Management Response (Section V), the Rogun HPP Project was approved by the Board on the basis of draft E&S assessments and plans that were prepared with support from the Rogun TA Project. The Financing Agreement for the Rogun HPP Project includes several conditions of effectiveness that require the update and publication of key E&S assessment and plans, and, importantly, that all the existing contracts entered into before the Bank's signature of the Financing Agreement for the Rogun HPP Project, regardless of the financing, and not terminated before its effectiveness, be amended to incorporate the requirements of the ESF.

24. The MPA Program that underpins the Rogun HPP Project was identified as best suited to support the Rogun HPP considering its scale, complexity and duration. It responds to the Government of Tajikistan's need for long-term support to build institutional knowledge and capacity. A key benefit of the MPA is that it provides for a risk-based mitigation approach to implementation, enabling adaptive management and flexibility both within and across phases. Phase 2 will provide an opportunity to take stock of lessons learned during Phase 1, and incorporate any corrective measures that may be needed, including through additional legal conditionality.

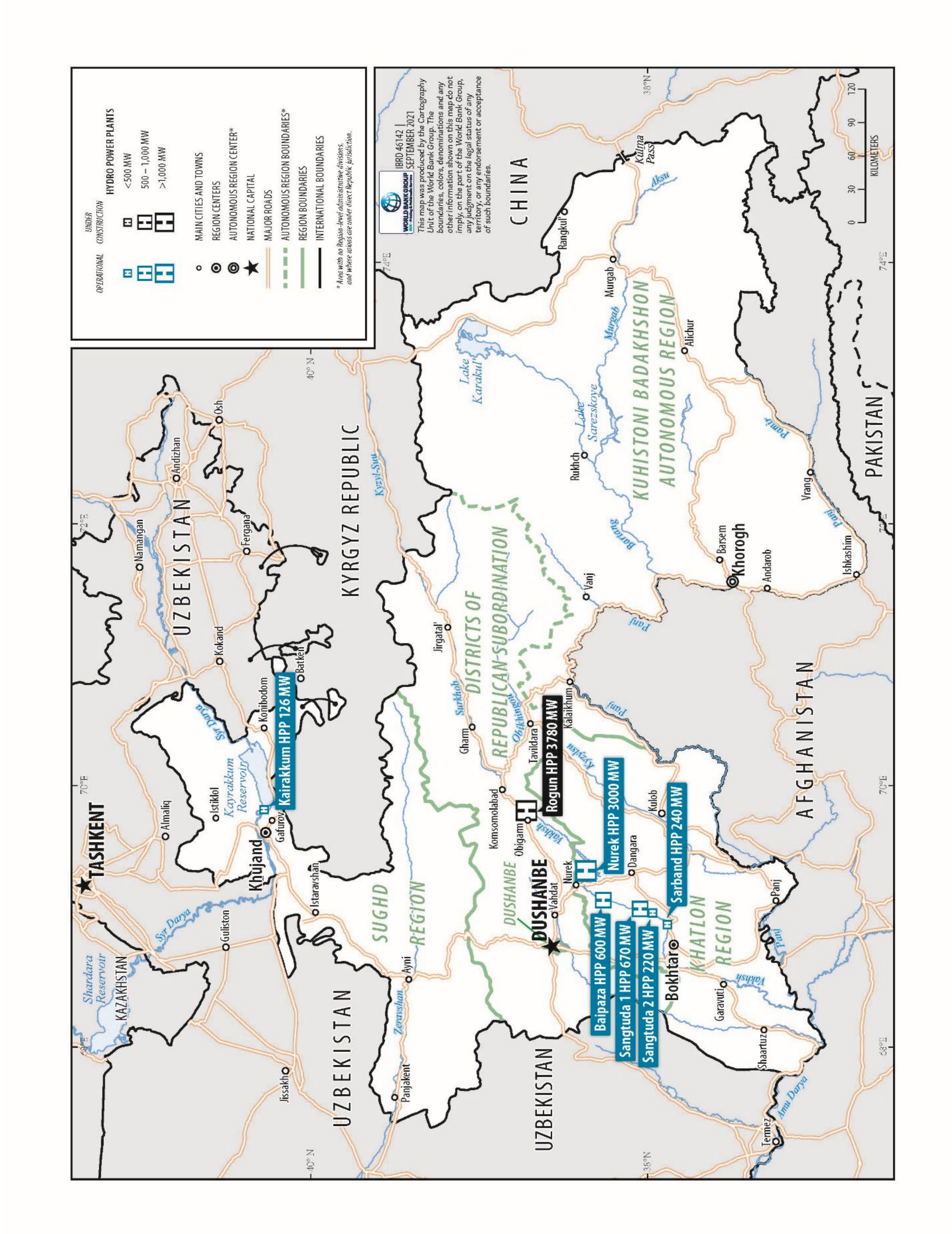
Geographical context

25. The Rogun HPP is being built upstream of the existing HPPs in the Vakhsh River cascade developed over the past 50 years. The Rogun HPP will provide enhanced flood protection for the whole cascade. Once fully constructed, the Rogun HPP will be the highest elevation HPP on the cascade.

Schematic illustration, basic information and map of the Vakhsh cascade dams



Dam	Stage	Installed capacity, MW
Rogun	Under construction	3,780
Nurek	In operation since 1979, now under rehabilitation	2600 (2019) 3,300 (by 2028)
Baipaza	In operation since 1986	600
Sangtuda-1	In operation since 2009	670
Sangtuda-2	In operation since 2011	220
Golovnaya	In operation since 1963, now under rehabilitation	240
Perepadnaya	In operation since 1958	29
Centralnaya	In operation since 1964	15



Map 1. IBRD 46142

IV. ELIGIBILITY ISSUES

Ineligibility of the Request

26. ***The Request is not eligible for investigation because it does not meet the eligibility requirements enshrined in the Accountability Mechanism Resolution. The plain text of the Resolution requires the Requesters to be in the territory of the Borrower, yet none of the Requesters here are in the Republic of Tajikistan.***

27. For a Request to be eligible, the Resolution requires Requesters to be in the Borrower's territory. Paragraph 13 of the Accountability Mechanism Resolution states that the Panel may receive requests for inspection only if they are presented by an affected party "in the territory of the borrower." And paragraph 29(a) spells out the conditions under which the Executive Directors may authorize an investigation; they include a requirement that the requesters be "in the borrower's territory." The Resolution does not make any exceptions. In this case, the Borrower[6] is the Republic of Tajikistan. None of the Requesters are based in Tajikistan: Rivers without Boundaries Public Fund (RWB) is based in Almaty, Kazakhstan, and the individual Requesters it represents are from Turkmenistan and Uzbekistan. For this reason, this Request is not eligible for an investigation.

28. ***The Requesters and the Panel all acknowledge that the Requesters have no presence in Tajikistan. Still, they seek to invoke the Panel process by virtue of the alleged impacts of the Projects outside Tajikistan. This approach is not consistent with the text of the Resolution or its intent.*** The unambiguous text of the Resolution resolves the matter, and the purpose of this requirement confirms that an investigation would not be appropriate in this case. The Board adopted this eligibility requirement in 1993, and it has remained unchanged in the Resolution in subsequent reviews of the Panel's mandate. This requirement is grounded in sovereignty concerns, which are at the center of how the Bank operates as an international organization and which informed the mandate of the Panel. The Board approves the financing of projects in a specific Member country, with the understanding that this country will comply with its obligations under the applicable financing agreement. The Board may authorize the Inspection Panel to investigate allegations of Bank policy non-compliance in that project and in that country. The Board deliberately foreclosed the possibility of foreign entities interfering in a country's affairs by calling for an investigation of the Bank's actions in that country. ***To the extent that the Panel believes complaints such as this one should be investigated, it can seek a waiver of the Resolution from the Board, or it can invite the Board to consider a revision of the Resolution as part of the ongoing Accountability Mechanism Review process.***

29. ***The transboundary impacts of projects on international waterways are addressed through a separate Bank policy and process***. In light of the above sovereignty concerns as well as the delicate nature of state-to-state relations over shared water resources, the Board decided to create a separate process to ensure that project design would take account of the views of riparian states who are not Borrowers under a Bank-financed project. The Operational Policy on International Waters (OP 7.50) requires any Borrower seeking Bank support for a project on an

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[6] Since the Rogun Projects are financed by Bank grants, the Republic of Tajikistan is referred to as the Recipient in project documentation.

international waterway to notify and seek the views of riparian states. That requirement is intended to address precisely the kinds of issues raised by the Requesters here, namely possible adverse impacts downstream of a dam. A potentially affected state, in consultation with interested parties within the state as it deems appropriate, has the opportunity to opine on the proposed project's approach through that OP 7.50 process as well as through its representatives on the Bank's Board of Executive Directors. Indeed, in a prior Panel case concerning the Rogun HPP, the Panel looked at similar allegations of transboundary impacts through the lens of OP 7.50 and concluded that the matter was not eligible for investigation because of adequate evidence of the Bank's intention to comply with that policy.[7] In this case, OP 7.50 was followed for both Rogun Projects, and neither Turkmenistan nor Uzbekistan expressed objections. Moreover, the Financing Agreement for the Rogun HPP Project requires Tajikistan to operate the Rogun reservoir impoundment and the Rogun HPP (once full supply level has been achieved) in accordance with existing Regional Water Sharing Agreements,[8] and without causing appreciable harm to any of the downstream riparian countries.

30. ***In the Notice of Registration, the Panel refers to unspecified "precedents" where requests for inspection were deemed eligible based on claims of project-induced harm outside the territory of the Borrower. However, no prior Panel case is analogous to this one and, in any event, past practice could not displace the clear text of the Resolution, which does not allow an investigation here.*** Because the Panel does not identify the "precedents" on which it relies, Management's ability to respond to the Panel's conclusion is constrained. Nevertheless, Management has conducted a review and identified past Panel cases that may have formed the basis of the Panel's statement. Each case was materially distinct from this one, and none can support a recommendation to investigate this complaint.

31. In the case of the *Second Yacyretá Hydroelectric Project*,[9] the Requesters were in the Republic of Paraguay and the Borrower was the Argentine Republic. But the project had a bi-national character. The project was to be implemented in the territories of Argentina and Paraguay. Argentina and the Argentina/Paraguay Bi-National Entity (EBY) entered into an agreement to transfer most of the loan proceeds to EBY. The Bank and EBY entered into a Project Agreement whereby EBY assumed responsibilities for project implementation. In addition, Paraguay, although not a recipient of the Bank loan, had also accepted some obligations under "owners' agreements" jointly concluded between Paraguay, Argentina and the Bank. Lastly, there was another Bank loan to the Republic of Paraguay, which financed a number of Yacyretá-related activities related directly to the claims of the Requesters and which played a central part in the Panel's eligibility determination. The Rogun HPP is not a binational endeavor, it is implemented solely within the territory of Tajikistan and no similar arrangements are in place for the Rogun Projects.

[7] Eligibility Report, paras. 38-39, Tajikistan Energy Loss Reduction Project, Case No. 70, 2010, https://www.inspectionpanel.org/panel-cases/energy-loss-reduction-project-request-uzbekistan

[8] "Water Sharing Arrangements" is defined in the Financing Agreement for the Rogun HPP Project as the Interstate Commission for Water Coordination in Central Asia (ICWC) Agreement, the decisions adopted by ICWC on the Annual Allocation for member states, including decisions adopted by ICWC on seasonal water allocation.

[9] Yacyretá Hydroelectric Project, Case No. 7, 1996, https://www.inspectionpanel.org/panel-cases/yacyreta-hydroelectric-project

32. In the case of the *Lesotho Highlands Water Project*,[10] the Borrower was the Lesotho Highlands Development Authority while the Requesters were from South Africa. Importantly, the loan was serviced by the Trans Caledon Tunnel Authority on behalf of the Republic of South Africa, and both the Republic of South Africa and the Kingdom of Lesotho acted as Guarantors. In addition, the project was located in both Lesotho and South Africa, as described in the project documents, and the Panel found that the project "would make no sense without the South African component."[11] In that case, the Panel read the "territory of the borrower" in the Resolution to refer to the territories of the Republic of South Africa and Lesotho as guarantors, "since the [Lesotho Highlands Development Authority], the Borrower of record, does not have a territory of its own."[12] By contrast, the Rogun Projects involve a well-defined and identifiable Borrowing country—the Republic of Tajikistan—and the Projects do not involve any Guarantee by Turkmenistan or Uzbekistan, the two countries in which the Requesters are reportedly based. Nor is any part of the Rogun RPP located in those two countries.

33. In the case of the *West African Gas Pipeline Project*,[13] the initial Requesters from Nigeria were subsequently joined by Requesters from Ghana. The project had a regional character with activities carried out in Nigeria, Benin, Togo and Ghana. It included an IDA guarantee with Ghana acting as a Borrower but also a MIGA guarantee to the West African Gas Pipeline Company Limited (WAPCo), a special purpose company that was in charge of implementing the project. WAPCo's shareholders included the Nigerian National Petroleum Corporation and the Volta River Authority of Ghana, among others. The project's development, financing, construction, ownership, operation and maintenance was agreed in an International Project Agreement between the Federal Republic of Nigeria, the Republic of Benin, the Republic of Togo, the Republic of Ghana, and WAPCo.[14] Conversely, the Rogun HPP is implemented solely within the territory of Tajikistan and no similar arrangements are in place for the Rogun Projects.

34. Finally, the Panel may be referring to the case of the *Tajikistan Energy Loss Reduction Project*.[15] There, Bank financing only supported studies, which had not even begun at the time of that Request for Inspection. Management therefore considered that the request was ineligible based on the absence of alleged "potential harm" from the project. The Panel in turn concluded that the Request was not eligible because there was adequate evidence of the Bank's intention to comply with Operational Policies. This reason was deemed sufficient to find the Request ineligible, even though there may have been others as well. This case therefore cannot stand for the proposition that the Resolution allows the *investigation* of claims brought by Requesters located in a country other than the Borrower's.

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[10] Proposed Phase 1B of Lesotho Highland Water Project (First Request, from South Africa), Case No. 12, 1998, https://www.inspectionpanel.org/panel-cases/proposed-phase-1b-lesotho-highland-water-project-first-request-south-africa, and Highlands Water Project, Phase 1B (Second Request, from Lesotho and South Africa), Case No. 15, 1999, https://www.inspectionpanel.org/panel-cases/highlands-water-project-phase-1b-second-request-lesotho-and-south-africa

[11] Lesotho Highlands Water Project, Eligibility Report, para. 34.2.

[12] Lesotho Highlands Water Project, Eligibility Report, para. 34.1.

[13] West African Gas Pipeline Project, Case No. 40, 2006, https://www.inspectionpanel.org/panel-cases/west-african-gas-pipeline-project

[14] West African Gas Pipeline Project, Eligibility Report, para. 9.

[15] Tajikistan Energy Loss Reduction Project, Request 10/08 (2010), https://www.inspectionpanel.org/panel-cases/energy-loss-reduction-project-request-uzbekistan

<u>*Representation by International CSOs*</u>

35. Management notes that the Request for Inspection and the Notice of Registration indicate that at least one international CSO will act as a "representative" of the Requesters. The Accountability Mechanism Resolution allows for representation of Requesters by an international organization only under exceptional circumstances and subject to approval by the Board "at the time they consider the request for inspection." The Request is being submitted by RWB, an organization based in Almaty, Kazakhstan while the individuals that it represents are from Turkmenistan and Uzbekistan. To Management's knowledge, RWB does not have a presence in Tajikistan, Turkmenistan or Uzbekistan. The Board would need to formally approve this form of exceptional international representation. Paragraph 13 of the Resolution requires any such representative to "present to the Panel written evidence that he is acting as the agent of the party on behalf of which the request is made."

36. Paragraph 13 of the Resolution further requires a finding that "appropriate representation is not locally available" before international representatives can be proposed to the Board. Management notes that four organizations based in Uzbekistan are listed in a letter received by Management, dated March 3, 2024 (listed in No. 3 of Annex II in the Request). Moreover, Management notes that the Request for Inspection for the *Tajikistan Energy Loss Reduction Project* (Credit Nos. 40930-TJ and H1780-TJ) was submitted by two individuals on their behalf and on behalf of an Uzbek nongovernmental organization (NGO) (Ecological Movement of Tajikistan), representing "*more than 100 NGOs.*" This raises the question as to whether local representation is indeed unavailable such that exceptional approval by the Board for international representation can even be sought in the first instance.

37. Finally, Management notes that Requesters have reportedly assigned three additional international CSOs some type of role in this case: Bank Information Center in Washington, DC, USA; International Rivers in San Francisco, USA; and CEE Bankwatch in Prague, Czechia. The latter two organizations are listed as advisors. While the Panel's Operating Procedures allow for the designation of "advisors," the parameters of what that role entails are not clear in the Procedures. The Notice of Registration and the Request, indicate that the Bank Information Center is authorized to "receive information" "on behalf of the Requesters," suggesting that it will be acting as a representative of the Requesters for the purposes of receiving information. As noted above, any representation role will need to follow the conditions and provisions of the Resolution, including Board approval. The lack of clarity around the role of advisors has proven a source of complication for an effective and transparent accountability process in other cases.

38. This Request is unusual because of the individuals and groups involved. The two individuals and four international CSOs are from a total of five countries — not one of which is the Borrower. This puts in sharp relief the lack of compliance with the Resolution's requirement that the Requesters be located in the territory of the Borrower.

39. Notwithstanding Management's strong concerns regarding the eligibility of this Request for Inspection, Management welcomes the opportunity to clarify the nature and details of its involvement in the Rogun Projects and to address the issues and questions raised by the Requesters.

V. MANAGEMENT'S RESPONSE

40. The Requesters' claims, accompanied by Management's detailed responses, are provided in Annex 1.

41. ***In Management's view the Request is ineligible for investigation as it fails to meet the requirements spelled out in the Board Resolution on the World Bank Accountability Mechanism.*** None of the Requesters are from the borrower's territory as required by the Resolution (See Section IV above for more details).

42. ***Management has carefully reviewed the concerns raised in the Request for Inspection regarding potential environmental and socio-economic impacts, as well as consultations. Management concludes that these concerns have been extensively studied and have already been appropriately addressed or will be addressed as part of the E&S assessments, plans and actions required of the Borrower before the Rogun HPP Project's Financing Agreement becomes effective, and subsequently throughout its implementation.***

43. ***The Rogun HPP will be the cornerstone of Tajikistan's electricity system, providing better access to reliable, affordable and clean energy to meet domestic demand and supporting a regional electricity market in Central Asia.*** About 70 percent of its energy will be exported pursuant to commercial contracts, displacing fossil-fired generation in Kazakhstan and Uzbekistan, promoting the region's scale-up of renewable energy, and generating export revenue.

44. ***The Rogun HPP is being built upstream of a cascade of seven existing HPPs on the Vakhsh River, which have been developed over the past 50 years.*** Some of the concerns raised in the Request result from the existing dams. Rather than adding to those pre-existing downstream impacts, the Rogun HPP will help provide enhanced flood protection for the entire cascade. The remaining concerns that relate to the Rogun HPP specifically are being addressed through the necessary E&S assessments, plans and measures under the Rogun Projects.

45. ***The Government began an active construction phase for the Rogun HPP in 2017, without support from the Bank or other development partners, due to significant concerns from riparian countries.*** While the preparation phase of the Rogun HPP has had a long history, the Government of Tajikistan decided to proceed with construction through its own financing in 2017, while relying on the TEAS, including the 2014 ESIA. The power plant's first unit was commissioned in November 2018 and the second in September 2019. The Bank did not continue support for the Rogun HPP after 2014, primarily due to concerns expressed by some neighboring riparian countries about the perceived impacts of the Rogun HPP on the availability of water for downstream countries. Over the subsequent years, the riparian concerns changed, which led to the Bank re-engaging with the Government of Tajikistan in 2021.

46. ***The Bank re-engaged with the Government of Tajikistan in 2021 to evaluate options for financing the Rogun HPP through a Financing Options Study.*** The decision to re-engage on the Rogun HPP was based on indications from riparian countries that they were now open to considering whether the Rogun HPP should advance, contingent upon adequate safeguards being in place, with an understanding that this assumption needed to be confirmed. The Government, the Bank and other development partners discussed the findings of the study in late 2022, together

with a list of issues that needed to be addressed to increase the likelihood of securing financing for the Rogun HPP.

47. ***Subsequently, the Bank has followed a sequential approach to providing financing support for the Rogun HPP, beginning with the Rogun TA Project, which was followed by the Rogun HPP Project and the MPA.***

48. ***Management notes that the potential impacts from the Rogun HPP Project have been subject to significant E&S reviews and scrutiny. Moreover, since re-engaging in the Rogun HPP, the Bank has systematically focused on strengthening E&S performance, beginning with the Rogun TA Project, which supported the preparation of the Rogun HPP Project and the MPA Program.*** Two independent panels of experts[16] were re-established pursuant to the TA Project to help oversee the Rogun Projects throughout implementation: A DSPOE is providing expert advice on geotechnical, geological, hydraulics, electro-mechanical and other construction matters during the implementation phase to ensure robust technical solutions until construction completion. An ESPOE has been advising on the process of updating the E&S assessments and plans to make them technically sound and able to meet the requirements of the development partners supporting the Rogun HPP, including the Bank. This Panel will also provide advice on various issues, including contractors' compliance with E&S requirements, consultation and stakeholder engagement and resettlement. Both independent panels of experts will stay engaged during the implementation of the MPA Program.

49. ***Management notes that the Request raises important regional E&S concerns about impacts from the existing HPP cascade in the Vakhsh River and from significant investments in the region's river basins on water scarcity.*** However, based on assessments and studies conducted since 2014 there are no indications that these concerns are actually linked to the Project. ***Management therefore does not agree that the alleged downstream harm is related to the Bank's compliance with its policies and procedures, as required by the Accountability Mechanism Resolution.*** The remaining concerns raised in the Request – that do relate to the Rogun Projects – have been thoroughly studied over the past decade and will be further reviewed and addressed in line with Bank policy. In this context, Management specifically notes that the E&S instruments prepared and disclosed in 2023 provided sufficient detail to inform stakeholder engagement and Bank decision-making. The Request does not acknowledge the flexibility that the ESF provides for the project approval process. As explained below, the ESF allows Management to consider and submit for Board approval financing for projects based on draft E&S assessments that are finalized during project implementation. The E&S instruments will be updated continually during project implementation to the satisfaction of the Bank and in line with the ESF provisions.

50. ***The financing for the Rogun HPP Project was approved in December 2024 based on the draft assessments and plans prepared and disclosed at appraisal with support from the Rogun TA Project, as set out under paragraph 51 of the ESF's Environmental and Social Policy for Investment Project Financing (E&S Policy).*** The Borrower prepared and disclosed the draft 2023 ESIA and ESMP in December 2023 as part of preparation of the Rogun HPP Project. The documents incorporated advice from the ESPOE and were reviewed by the Bank before disclosure.

[16] These panels were constituted as part of the Rogun TA Project, and follow on the earlier set of panels set up as part of the TEAS.

The Bank concluded that these draft documents adequately addressed the E&S risk and impacts of the Rogun HPP Project and were sufficient to inform stakeholder engagement and Bank decision-making as they covered the main E&S risks identified in the scoping exercise and provided for the main mitigation measures to address those risks and impacts. Additionally, all necessary internal reviews and clearances were obtained as part of the due diligence process to ensure that the preparation and disclosure of the documents fully comply with the ESF for projects classified as having "High" E&S risk, and specifically with paragraph 51.

51. ***The Rogun HPP Project is not yet effective. The Environmental and Social Commitment Plan (ESCP) sets out the detailed requirements to manage the E&S risks and impacts of the Rogun HPP Project in accordance with the ESF, including the updates of the relevant E&S instruments, consistent with paragraph 52 of the E&S Policy. Moreover, these updates are conditions of effectiveness under the Financing Agreement and thereby legally binding on the Borrower***. The conditions of effectiveness for Bank financing include the disclosure, finalization and adoption of updated E&S instruments that are acceptable to the Bank. These include, *inter alia*, the ESIA, including an updated Cumulative Impact Assessment (CIA), the Environmental and Social Management Plan (ESMP),[17] the Resettlement Action Plan 2 (RAP2), the Livelihood Restoration Plan 2 (LRP2),[18] the Security Management Plan, the Traffic Management Plan, and guidelines/templates to establish site-wide rules for occupational health and safety, emergency response procedures, and waste management for ongoing construction and operation, all in accordance with the requirements of the ESCP. The 2025 ESF studies will provide various updates, including a broader geographical scope for cumulative impacts compared to the rapid CIA, more details on the dam safety measures (including, for example, the Emergency Preparedness Plans (EPPs)), in-depth analysis on various environmental issues, including hydrology, climate change, and biodiversity, as well as updates on socio-economic risks and impacts. Amendment of all existing contracts to incorporate the requirements of the Environmental and Social Standards (ESSs) and ESCP is also a condition of effectiveness for the Bank financing. The RAP2 and LRP2 include an analysis of compensation and livelihood restoration measures taken to date to ensure adequate compensation and livelihood restoration support, and the hiring of a third-party organization or consultant with terms of reference acceptable to the Bank to conduct quarterly monitoring of RAP/LRP implementation. In addition, the adoption of a Biodiversity Management Plan (BMP) and a Cultural Heritage Management Plan (CHMP) are conditions of disbursement for financing of the relevant project activities under the Financing Agreement implemented by the Rogun PMG.

52. ***These comprehensive legal conditions are meant to ensure that no Bank financing will be disbursed for the Rogun HPP Project until all the relevant assessments and plans are finalized in a manner acceptable to the Bank as per the provisions of the ESF***. Although the documents mentioned above are still being finalized and are not yet available for consultation and disclosure, the issues they address were already included in the scope of the 2014 and 2023 E&S

[17] The ESIA and ESMP under finalization to meet the Rogun HPP effectiveness will be referred to as the 2025 ESIA and 2025 ESMP. The updated CIA will also be referred to as the updated CIA.

[18] Resettlement at the Rogun HPP site has been taking place since 2009. The RAP1/LRP1 covered resettlement activities from 2009-2017 and have been fully implemented. The second phase of resettlement (RAP2/LRP2) commenced in 2017, drawing on RAP1/LRP1 for guidance. As of July 2024, the Government has been implementing the resettlement in accordance with the Resettlement and Livelihood Restoration Framework until the RAP2/LRP2 are finalized.

studies. Preliminary conclusions were discussed, and feedback was gathered from stakeholders during various consultation meetings. This feedback is currently being used to inform the updates to the 2025 E&S studies. Any outstanding concerns of the Requesters that relate to the Rogun HPP Project will be addressed as part of the Bank's review and approval of these assessments and plans, and their subsequent implementation.

53. ***Given the nature and location of the Rogun HPP on the Vakhsh River, a tributary of the Amu Darya River (an international waterway), OP 7.50 was triggered for both Projects***. The usual riparian notification procedure was followed. In accordance with the policy, riparian notification letters and all relevant information about the Rogun HPP Project were sent. to the Kyrgyz Republic, Turkmenistan and Kazakhstan in September 2023, to Afghanistan in October 2023 and to Uzbekistan in December 2024.[19] Three of the countries confirmed that they had no objection to the Bank proceeding with processing the Projects further. Another country responded disagreeing with any existing, planned, ongoing or potential water uses that might impact its current, ongoing and future legitimate water uses in the shared basin. One other country emphasized the need to adhere to environmental and safety standards, and the rational use of the region's water resources. To address the riparians' concerns, the Government of Tajikistan has committed to adhering to existing water sharing arrangements, maintaining seasonal flow regimes, and ensuring that no appreciable harm is caused to any of the downstream riparian countries, as well as providing enhanced monitoring and strengthening data transparency and sharing. These commitments are legally binding and enforceable since they are reflected as covenants in the Financing Agreement. Based on this, as well as the reservoir simulations carried out under the TEAS and reports from the panels of experts, and following its own assessment, the Bank concluded that the Projects would not result in appreciable harm to the other riparian countries and would not be harmed by other riparians' potential water use. Accordingly, the Projects have been and will be processed under paragraph 8(c) of OP 7.50.

54. ***Extensive consultations with project-affected people took place, including with riparian countries, and will continue.*** There have been over 90 consultations with project-affected people since work commenced on the Rogun HPP, many of them since the approval of the Rogun TA Project. Consultations have taken place during project preparation, including with riparian countries. The riparian consultations are conducted at the Ministerial level and also involve CSOs from the riparian countries. During project preparation, the Government of Tajikistan organized a high-level regional riparian consultation in November 2023 in Kazakhstan, involving Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan. This was the sixth riparian consultation since 2011. The Bank helped facilitate a follow-up consultation in Uzbekistan in October 2024, which was attended by representatives from Tajikistan. Government and CSOs participated in both meetings and comments from these meetings have been taken into account, as the ESIA/ESMP are being finalized for disclosure. More riparian consultations are planned after the 2025 ESIA and 2025 ESMP are disclosed.

55. ***Management is committed to establishing structured and professional arrangements for continuous monitoring, evaluation, and reporting of the E&S aspects of the Project.*** The PMC contract to be procured under the Rogun HPP Project will play a pivotal role in supervising key

[19] Similar notification letters were sent regarding the Rogun TA Project, including to the Kyrgyz Republic, Turkmenistan and Uzbekistan in June 2022, and Afghanistan in July 2022.

project obligations. This includes providing regular updates to the Operational Implementation Plan (OIP), preparing and updating the construction supervision and quality assurance plan, instrumentation plan, operations and maintenance (O&M) plan, and an EPP. Additionally, the PMC will oversee contract management, review contractors' implementation programs, monitor compliance with E&S requirements, including Operational Health and Safety (OHS) aspects, conduct site supervision and quality control, and review and approve payment certificates.

56. A detailed implementation and project supervision plan has also been prepared and adequately resourced taking into account the project scale and complexity. The Bank and other development partners will conduct joint supervision missions to ensure comprehensive oversight of the Rogun HPP Project. The PMC will utilize standard reporting templates to regularly update the Bank and other development partners on various aspects of the project, including technical, procurement, contract management, financial management, and ESF aspects, with monthly and quarterly reports. Additionally, the Bank's E&S specialists will provide hands-on enhanced implementation support to the Rogun PMG and DFZ, assisting in the implementation of E&S instruments and offering guidance on resolving any emerging safeguards issues.

57. The Bank and other development partners will also be supported by an independent Technical Advisor, to maximize project supervision efficiency. The continued retention of the DSPOE and ESPOE will also ensure ongoing expert advice and oversight during implementation. The Bank's role will involve providing just-in-time support, regular site visits, and close collaboration with other development partners to ensure effective supervision and mitigation of risks related to E&S and dam safety. This collaborative approach aims to strengthen the overall project implementation framework, ensuring that all safety and ESF standards are met.

58. Management would like to respond below in more detail to the specific allegations.

Enhanced Due Diligence during Preparation of the Rogun Projects

59. Management wishes to reaffirm that adequate draft instruments required to assess E&S risks for the purpose of the preparation and approval of Rogun HPP Project, such as the ESIA[20] and ESMP, have been independently developed, consulted upon, and disclosed in December 2023 in compliance with the Bank's ESF. Management has thoroughly reviewed and evaluated the concerns raised in the Request regarding the compliance of the ESIA and ESMP with the ESF. The ***draft assessments and plans prepared and disclosed at appraisal*** (2023 ESIA and 2023 ESMP) meet the standards set by the ESF and also conform to the requirements of the other international financial institutions involved in the Rogun HPP Project, thereby ensuring a comprehensive and internationally recognized approach to E&S management.

60. ***While the Request criticizes the absence of final assessments at Project approval, Management wishes to clarify that the necessary draft assessments have been prepared in accordance with the ESF.*** Moreover, since its re-engagement in the Rogun HPP in 2021, the Bank systematically worked with the Borrower to further strengthen the E&S assessment and

[20] The ESIA and ESMP that were prepared and disclosed as part of the preparation of the Rogun HPP Project will be referred as the 2023 ESIA and 2023 ESMP.

management plans. The 2023 ESIA and 2023 ESMP received advice and incorporated the recommendations from the ESPOE, which attested to the quality of the draft documents. Updated assessments and plans are being finalized and will cover E&S impacts in a comprehensive manner, and will be publicly disclosed, consistent with the ESF. These are conditions of effectiveness for the Project.

61. This sequencing is specifically provided for by paragraph 51 of the E&S Policy, which states that *"51. The Bank will disclose documentation relating to the environmental and social risks and impacts of High Risk and Substantial Risk projects prior to project appraisal. This documentation will reflect the environmental and social assessment of the project and be provided in draft or final form (if available). The documentation will address, in an adequate manner, the key risks and impacts of the project, and will provide sufficient detail to inform stakeholder engagement and Bank decision-making. Final or updated documentation will be disclosed when available."* Moreover, paragraph 52 of the same Policy explicitly provides for a clear identification of project-related documents that will be finalized after Board approval, with the details and timing to be reflected in the ESCP, as is the case for the Rogun HPP Project.

62. ***Over more than a decade, the Bank has provided advice to the Government of Tajikistan to assess and mitigate the E&S risks of the Rogun HPP.*** The 2014 ESIA was completed as part of the TEAS to evaluate the viability of the proposed Rogun HPP in compliance with international standards. At that time, several consultations with riparians were organized and both the 2014 ESIA and TEAS were open to international scrutiny, informing the dialogue with neighboring countries. The Bank decided not to provide financing for the Rogun HPP at that time due to riparian concerns, and the Government of Tajikistan proceeded with construction in 2017 using its own resources and relying on the 2014 ESIA. As noted in paragraph 53 above, the riparian concerns have since been addressed through additional dialogue between countries, the Bank's assessment of no appreciable harm, as well as commitments from the Government of Tajikistan in the Bank's financing agreements.

63. ***As noted earlier, the Bank's re-engagement with the Rogun HPP has been sequential, beginning with the Rogun TA Project, which supported the preparation of the Rogun HPP Project and the MPA Program, systematically focusing on strengthening E&S performance.*** The Board approved the Rogun TA Project in January 2023 to support E&S performance and address the areas for improvement identified by the Bank to align the Rogun HPP with the ESF. Specifically, the Rogun TA Project provided support to update the 2014 ESIA and other E&S instruments to bring them into compliance with the ESF. As part of this work, the environmental impacts of the Rogun HPP were independently reassessed by a consulting firm on behalf of the Government, forming the basis of the 2023 ESIA and the accompanying 2023 ESMP. These were disclosed in December 2023, outlining key mitigation measures for stakeholder consultation.

64. ***In addition, the Rogun TA Project financed the re-establishment of the independent panels of experts on dam safety and E&S standards (DSPOE and ESPOE, respectively)***, which bring an added layer of independent analysis and oversight. The Bank's E&S specialists have been providing enhanced support to the implementing entities to help ensure that project activities and documentation align with the Bank's ESF.

65. ***Consistent with the ESF, the Financing Agreement for the Rogun HPP Project includes a number of conditions for effectiveness that relate to the finalization of the E&S instruments***. To date, the Financing Agreement for the Rogun HPP Project is not yet effective as the conditions of effectiveness have not been met. These include the finalization and adoption of the updated E&S instruments, as described above in paragraph 49 above, all in form and substance acceptable to the Bank and in accordance with the ESCP. The ESCP is part of the Financing Agreement and sets out the environmental, social and dam safety instruments that shall be adopted and implemented under the Rogun HPP Project, all of which shall be subject to prior consultation and disclosure, consistent with the ESF. ***As such, no Bank financing will be disbursed for the Rogun HPP Project until all the relevant assessment and plans are finalized in a manner acceptable to the Bank as per the provisions of the ESF.***

66. ***Furthermore, as a condition of effectiveness for financing of the Rogun HPP Project, all existing works contracts entered into before the signature of the Financing Agreement and not terminated before effectiveness will need to be amended to incorporate the requirements of the ESSs and ESCP***. This includes, inter alia, the ESIA/ESMP requirements (regardless of the source of financing). Three contracts under Lot 1 and Lot 4 Early Works have already been retrofitted while negotiations between the Rogun OJSC and contractors are ongoing for Lot 2 and Lot 3. Furthermore, all new contracts financed under the Rogun HPP Project will include E&S clauses to ensure compliance with the ESSs and the ESCP. This is consistent with the ESF's E&S Policy, which allows the Bank to set out requirements for existing facilities or activities to meet the requirements of the ESF within a timeframe acceptable to the Bank.

Broader CSOs and stakeholder consultation process

67. ***Extensive and adequate consultations were carried out during the preparation of the Rogun Projects with all involved parties and beneficiaries and will continue during implementation of the Rogun Projects.*** Since 2011, the Rogun PMG and DFZ have held more than 90 consultations on various aspects of the Rogun HPP, with the frequency and scope intensifying since the Bank's re-engagement with the project. Prior to disclosure of the 2023 ESIA in December 2023, the Rogun PMG held several consultations in 2022-2023 with national and international CSOs, where resettlement, livelihoods, cumulative impacts and labor conditions were among the issues discussed. Three large consultations were held in Dushanbe and the resettlement areas in June 2024 to discuss the Resettlement and Livelihood Restoration Framework (RLRF). Comments were considered in finalizing the RLRF for disclosure. Additional consultations on the 2023 ESIA and the 2023 ESMP were conducted in January 2024 in Dushanbe and affected communities.

68. ***The Bank has assisted and will continue to assist the Government of Tajikistan with riparian consultations with governments and CSO representatives.*** Five consultations with government and CSO representatives in riparian countries took place as part of the preparation for the 2014 ESIA and the TEAS, which included government representatives, a range of NGOs from riparian countries (Afghanistan, Kazakhstan, Kyrgyz Republic, Uzbekistan), national organizations from Tajikistan, and international CSOs. Riparian consultations were resumed in

Almaty, Kazakhstan in November 2023,[21] and Tashkent, Uzbekistan in October 2024. For the Almaty consultation, advance drafts of the 2023 ESIA/ESMP and the non-technical summary were shared with the meeting participants; for the Tashkent consultation, participants received copies of the non-technical summary and were also directed to the PMG's website, which included the 2023 ESIA/ESMP, as well as other E&S instruments. There are additional riparian consultations planned with government and CSO representatives in Ashgabat, Turkmenistan (planned for mid-2025) and in Bishkek, Kyrgyz Republic (June/July 2025), which will also involve participants from Kazakhstan. The Bank will engage with the riparian countries to support further consultations with government bodies and CSOs. This includes offering translation services for the non-technical summary of the finalized 2025 ESIA into national languages Once the updated 2025 ESIA and ESMP are disclosed, riparian countries will be notified and the World Bank will discuss with each riparian how it can support consultations at the national level and in local languages. This would help bridge the challenges of organizing consultations outside of Tajikistan and may be complemented by high-level riparian meetings. The Rogun PMG and DFZ also hold periodic meetings in affected communities to discuss key issues, particularly the Rogun HPP's E&S impacts. More details on the DFZ's resettlement work and the consultations can be found at the DFZ's website: https://mmz.nbo-rogun.tj

69. ***Management believes that these consultations comply with the requirements of the ESF, demonstrating a commitment to transparency and inclusiveness. The process has been documented in the SEP.*** In addition, Management has responded to letters received from CSOs, with the responses publicly available at the following website: https://www.worldbank.org/en/programs/ rogun-hydropower-plant-project/csos

70. ***Recognizing the high E&S risks, as well as concerns raised by stakeholders, Management has been taking additional steps to strengthen transparency and the ability of communities and CSOs to engage in the Rogun HPP Project***. This includes the organization of quarterly meetings of Bank staff and Management with interested CSOs since November 2024, as well as the publication of detailed frequently asked questions (FAQ) that delve into E&S issues raised by CSOs.[22] The FAQ is a living document, which is subject to subsequent updates. Publishing the FAQ and CSO letters and responses aims to enhance communication, information sharing and transparency.

71. While the Requesters have asked that their identities remain confidential, several of the organizations nominated as representatives and advisors of the Requesters are among those CSOs that reached out to Management before the submission of the Request for Inspection. Detailed updates have been provided to those organizations, both through written letters as well as during consultation meetings to address and respond to their concerns. Finally, Management did not receive the CSOs' report on the analysis of alternatives before the Request for Inspection was filed, as it previously had been shared with the Bank's Board of Executive Directors only.

72. Moving forward, the Rogun HPP Project Stakeholder Engagement Plan (SEP) outlines a detailed framework for continuous engagement with CSOs and stakeholders throughout

[21] This meeting involved all the riparian countries, except for Afghanistan.

[22] Available at https://www.worldbank.org/en/programs/rogun-hydropower-plant-project/faqs. Two meetings so far were organized between Bank staff and Management with interested CSOs: on November 14, 2024, and on March 27, 2025. The next meeting is envisaged before end of June 2025.

implementation. These consultations will include regular meetings, information sharing, and open feedback channels. The SEP will be updated regularly to reflect engagement activities. The Grievance Redress Mechanism (GRM) that the Government has already put in place is functioning satisfactorily. It includes a channel for complaints to the Rogun PMG from riparian countries, international and national NGOs and CSOs and all other stakeholders. To date, Rogun PMG has not received complaints from riparians.

73. ***Management seeks to continuously engage with CSOs during project implementation, beyond consultations***. Management will keep civil society informed about the findings of supervision missions, where meetings with project-affected people and local CSOs will be conducted. CSOs are expected to play a critical role supporting and monitoring the implementation of the resettlement and livelihood restoration measures, benefit sharing and environmental/natural resource protection around the dam site and reservoir. CSOs, particularly women's groups, are already providing input into the development of livelihood restoration programs, with a focus on small businesses and daycare / childcare support, and future consultations will prioritize improved access to economic opportunities for resettled communities, including through gender-sensitive approaches. The RLRF, along with existing and subsequent RAPs and LRPs, will guide these efforts by addressing the physical and economic displacement of project-affected people. This work is led by the DFZ, with support from the Ministry of Labor, Migration and Employment of Population, and other ministries.

74. In addition, the updating of the RAP2 and LRP2 includes an assessment of compensation and livelihood restoration measures to date to ensure that full resettlement compensation and livelihood restoration support will be provided prior to effectiveness of the Bank's financing. An independent third-party organization or consultant with terms of reference acceptable to the Bank will be hired prior to effectiveness to undertake quarterly external RAP monitoring. It may be possible to hire both local CSOs and international CSOs for the purpose of monitoring the RAP/LRP implementation. This work is led by the Rogun PMG and the Bank will work closely with it to ensure transparency in the hiring process for the RAP monitor, which is a Condition of Effectiveness for the financing of the Rogun HPP Project. Management offers these clarifications, while noting that resettlement is occurring within Tajikistan's territory and no Requesters are from Tajikistan.

Assessment of Alternatives of the Rogun HPP

75. ***Management notes that a detailed and thorough assessment of alternatives was carried out by the Government of Tajikistan, which relied on internal and external expertise, and confirms that the Rogun HPP stands out as a preferred solution for providing clean and affordable electricity to Tajikistan and Central Asia.*** Contrary to the claim made in the Request, the highest dam alternative offered the greatest benefits in terms of energy generation and is also the least-cost option.

76. ***In 2014, the highest dam alternative was selected by the Government based on the evidence provided by the TEAS regarding its superior economic, technical and environmental performance.*** The TEAS evaluated various dam height alternatives to determine the most

technically, financially, environmentally and socially viable option for the project. Three full supply levels (fsl) were considered, corresponding to dam heights of 335 meters, 300 meters, and 265 meters, each analyzed for different installed generation capacities ranging from 3,600 MW to 2,000 MW. The TEAS concluded that all three dam height alternatives could be built and operated within international safety norms, provided specified design modifications and mitigation measures are implemented. Contrary to the claim made in the Request, the highest dam alternative, at 1,300 masl (equivalent to an fsl of 1,290 masl), was found to offer the greatest benefits in terms of energy generation and other beneficial impacts on the Tajikistan electricity system.

77. ***Alternative dam height options were considered by the TEAS considering trade-offs between the different options, including financing risks, social and environmental impacts, and opportunities for institutional arrangements and additional benefits.*** The choice of a higher dam height was justified despite the higher resettlement impact due to several key factors. Firstly, the highest dam option provided the largest system cost savings and overall economic benefits, having a positive impact on Tajikistan's electricity system. Secondly, as the TEAS concluded, it could be built and operated within international safety norms, with design modifications and mitigation measures. Thirdly, although the highest dam height would result in more resettlement, the 2014 ESIA identified measures to mitigate involuntary resettlement impacts, including compensation for lost assets, construction of replacement houses, and livelihood restoration measures for affected households. Fourthly, the highest dam option was considered the most sustainable in terms of the long-term life of the asset, with the Rogun reservoir estimated to have a lifespan of around 115 years, due to reduced sedimentation rates, and the ability to provide enhanced flood protection downstream. On that basis, the Government proceeded to start construction of the dam with the highest dam height as the design parameter.

78. In summary, the Government proceeded to start construction of the dam in 2017 using its own resources, opting for the highest dam height based on a comprehensive evaluation of economic, technical, environmental, and social factors, focusing on maximizing overall benefits while implementing measures to mitigate resettlement and other impacts.

79. ***Upon the Bank's re-engagement in the Rogun HPP, extensive modeling between 2021 and 2024 confirmed the findings of the previous studies on the selection of this alternative.*** In 2021, at the request of the Government, the Bank evaluated the options for financing the completion of the Rogun HPP in a sustainable manner. As part of the Financing Options Study, the Bank updated the economic analysis to determine whether the Rogun HPP Project remained economically viable considering: (i) cost of project completion; (ii) capital costs of alternative technologies (e.g., utility-scale solar photovoltaic, wind, and battery energy storage systems) and decommissioning of the Rogun HPP that had at that point already been one-third constructed; (iii) electricity export outlook considering the power sector development plans in main export markets for Rogun HPP electricity; and (iv) updated costs associated with retrofitting contracts with ESF requirements.

80. ***The Financing Options Study concluded that completing the construction of the Rogun HPP remained the least-cost option.*** This takes into account the decommissioning costs to address safety issues of the partial dam construction, the reinforcements needed to protect the cascade of

HPPs on the Vakhsh from flood risks[23] without investments needed to replace the energy expected to be generated by the Rogun HPP, and unrealized revenues from electricity exports. In addition, the Financing Options Study did not recommend reconsidering the decision of 2017 on the dam height, as the cost savings for construction would be negligible and the economic benefits of the Project would be significantly reduced. As part of appraisal of the Rogun HPP Project in 2024, extensive regional modeling conducted by the Bank demonstrated the Rogun HPP's ability to help replace gas- and coal-fired power generation across the region, providing stable services to enhance the development of variable renewable energy.

81. ***The Rogun HPP Project's ability to export surplus electricity to neighboring countries like Kazakhstan and Uzbekistan further enhances regional energy security and cooperation.*** By 2050, electricity demand in Central Asia is projected to at least double. To meet this rising demand through low-carbon development solutions, it is essential to scale up both renewable baseload technologies, such as hydropower, and variable renewable energy (VRE) sources, such as solar and wind. Hydropower can ramp up production when solar or wind production is not available due to weather conditions and can be scaled back or stored for future use when there is sufficient electricity supply. VRE share in the electricity mix of Central Asia is expected to increase to about 40-50 percent by 2050, up from 3 percent in 2024, translating to around 20 GW of additional capacity. Hydropower capacity in Central Asia will also need to double by 2050, providing clean energy and crucial balancing services to integrate a large share of VRE. The cost of electricity generated by the Rogun HPP remains highly competitive compared to alternative baseload sources, making it a crucial part of the least-cost supply options for both Tajikistan and the broader Central Asian region.

82. ***Management considers hydropower as an integral part of a broader strategy to ensure the sustainable development of water and energy resources across the region.*** The Bank is closely involved in the regional policy dialogue to enhance cooperation in sustainable water and energy management, including through the Central Asia Water and Energy Program (CAWEP). Some of these ongoing efforts also cover dams and reservoirs and assess issues such as existing reservoir storage in Central Asia, sedimentation, infrastructure status, and dam safety risks, among other things. CAWEP also supports regional institutions and countries in strengthening collaboration for better management of shared water and energy resources. These efforts not only aim to enhance energy security but also promote regional cooperation and sustainable management of natural resources, thereby contributing to the overall resilience and development of Central Asia.

Environmental impacts, including water availability

83. Management has carefully reviewed the claims raised in the Request that the Rogun HPP Project allegedly would create a water shortage in the Lower Vakhsh and Amu Darya Rivers, leading to irreversible consequences and disrupting the fragile state of natural and anthropogenic ecosystems. The Request argues that the Rogun HPP Project will exacerbate key environmental

[23] As part of the Option Study, costs associated with decommissioning the Rogun HPP were estimated at more than US$ 1 billion. In addition, US$318 million were estimated for flood protection measures required for spillways at Nurek HPP to protect the Vakhsh cascade against flood risks.

problems, including salinization, desertification, and degradation of floodplain tugay ecosystems, and threaten critically endangered species. These issues were carefully considered as part of the preparation of the Rogun Projects, as explained below.

Waterflow and impacts on riparians

84. Management is acutely aware of the crisis affecting the Aral Sea Basin and its potential impacts on populations in downstream countries. However, the Rogun HPP Project will have no influence on this since the cascade with Rogun HPP will be operated keeping the Vakhsh River flow pattern unchanged. Management takes very seriously all the concerns raised regarding the potential environmental impacts associated with the Rogun HPP Project. However, the findings of no impacts on water flow and robust monitoring and legal measures in place provide strong assurance that risks will be significantly minimized and manageable.

85. ***Management notes that riparian concerns have been extensively studied and have already been appropriately addressed or will be addressed as part of the E&S assessments, plans and the measures required of the Borrower under the Rogun HPP Project's Financing Agreement. Additionally, a Bank assessment confirmed that the Rogun HPP can be constructed and operated with no appreciable harm to riparian countries.*** Hydrology and climate change studies conducted under the TEAS indicated that annual water flow volumes in the Vakhsh are expected to gradually increase through 2100 due to glacial melt and increased precipitation. Additionally, reservoir operation simulations show that the Rogun HPP can operate without altering historical flow regimes. An internal assessment conducted by Bank experts in March-April 2024 concluded that filling the Rogun reservoir at an average of 1.2 km^3/year (Tajikistan's historically unused water share) will only impact water availability in the upper Amu Darya Basin (after the confluence of the Vakhsh, Panj, and Kofarnihon Rivers) that is directly available to downstream countries by 2.2 percent, causing no appreciable harm to these countries. An update to the hydrology and climate change study is being carried out by the Rogun PMG and will be finalized this year. The DSPOE has advised that the study update is not expected to result in any material change to the Rogun HPP design or operations.

86. ***Water allocation arrangements between Central Asian countries have been in place since the 1980s.***[24] The 1992 Agreement on Cooperation in the Field of Joint Management on Utilization and Protection of Water Resources from Interstate Sources ("Almaty Agreement") established the ICWC, where the countries come together and decide on annual and seasonal water allocation among the Central Asian riparian countries in the Syr Darya and Amu Darya rivers' watershed.

87. ***Tajikistan has committed to continuous adherence to water sharing arrangements and reservoir management rules and to not cause appreciable harm to riparian countries during construction, impoundment and operation of the Rogun HPP as set forth in the Financing Agreement for the Rogun HPP Project.*** Regarding riparian concerns and the requirements of OP 7.50, Tajikistan has committed in said Financing Agreement to comply at all times with the

[24] The Soviet protocol defined the average water share per country in each basin. These average shares are adjusted each year on a percent basis depending on the expected amount of water available (wet year or dry year). The 1992 Agreement created the ICWC and established the mechanism by which countries come together at ICWC and decide the allocations for that year and the seasonal profile of the water allocation.

regional water sharing arrangements (defined as the ICWC Agreement, the decisions adopted by the Interstate Commission for Water Cooperation of Central Asia (ICWC) on the Annual Allocation for member states, including decisions adopted by ICWC on seasonal water allocation), and the reservoir management rules for the main reservoirs of the Vakhsh River Basin. In addition, Tajikistan has expressly committed in said Financing Agreement not to cause appreciable harm to any of the downstream riparian countries throughout the construction, filling, and operation phases. As confirmed in the 2014 ESIA and reaffirmed in the 2023 ESIA, Tajikistan's continued adherence to international arrangements is expected to ensure that there will be no downstream impacts in term of water availability. Tajikistan's commitment to the regional agreements is detailed in the Financing Agreement and will be closely monitored by the Bank during implementation, through a series of data transparency and disclosure measures.[25]

88. ***Pursuant to those agreements, Tajikistan plans to delay full impoundment of the Rogun HPP until 2039, several years after construction ends in 2033, as reflected in the overall implementation plan.*** The reservoir will be filled progressively each year in compliance with Tajikistan's water allocation and is projected to reach its full supply level in 2039. Although Afghanistan is not a party to the regional water-sharing agreements among Central Asian countries, risks to Afghanistan are mitigated by the fact that Uzbekistan and Turkmenistan are located downstream from Afghanistan. Hence meeting regional commitments with Turkmenistan requires that water flows to Afghanistan not be affected. The Bank is supporting discussions and dialogue around regional water issues through the CAWEP.

89. ***In addition, the Rogun HPP Project has been designed with a comprehensive monitoring system, particularly concerning water flow and other related environmental issues***. It includes advanced monitoring systems, climate resilience measures, and a robust EPP approach to ensure sustainable and safe operations. The assertion that the Rogun HPP Project will contribute to a wide range of socio-economic and ecological harms is not supported by the comprehensive assessments carried out during preparation.

90. ***Management also emphasizes that the additional storage capacity of the Rogun HPP Project is a key benefit that will enhance climate resilience in the Vakhsh and Amu Darya Basins, mitigating the impacts of floods and droughts for all water uses***. The Rogun HPP Project has integrated hydrometeorological aspects to ensure comprehensive management of water resources and climate resilience. It includes advanced hydrological and meteorological monitoring systems to track water flow volumes, precipitation patterns, and glacial melt rates. These systems provide critical data for optimizing reservoir operations and mitigating the impacts of floods and droughts. In addition, the Rogun HPP Project will protect all downstream reservoirs of the Vakhsh cascade from the Probable Maximum Flood,[26] against which they were not originally designed.

[25] The Financing Agreement for the Rogun HPP Project includes a legal covenant to mandate the Republic of Tajikistan, through MEWR and with the assistance of Hydromet, to disclose to the public on its website and on a monthly basis average monthly data for each preceding month as agreed at project effectiveness on: (i) inflow and outflow data of the Rogun HPP; (ii) data on water level and discharge of the Rogun and Nurek reservoirs; (iii) water withdrawals from the Vakhsh River in Tajikistan measured at the monitoring stations/hydroposts within the jurisdiction of the BWO Amudarya Tajikistan Branch; and (iv) flow data downstream measured at the hydrometeorological station located at the Tigrovaya Balka Nature Reserve.

[26] The Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location,

By incorporating hydrometeorological aspects, and because of its large capacity for multi-year water storage, the Rogun HPP will enhance the climate resilience of the Vakhsh and Amu Darya Basins, ensuring sustainable water management for all uses and contributing to the overall stability and reliability of the region's water resources.

91. The Rogun HPP Project has been designed with a comprehensive understanding of its environmental impacts, particularly concerning water flow and other related environmental issues. Detailed studies and assessments have been conducted and findings have informed the project design and proposed implementation arrangements, including the operation of the Rogun HPP, to ensure that it operates within safe and sustainable parameters, minimizing any potential negative impacts on the environment and downstream communities.

92. Concerning impacts on downstream communities, a rapid CIA was included as part of the 2023 ESIA, which indicated limited downstream impacts due to limited changes to water flow patterns. In response to feedback received on the draft, the updated CIA will more thoroughly address potential transboundary impacts. While the CIA is currently being finalized, preliminary results confirm that water releases downstream of the Nurek Dam—and consequently of the Rogun HPP—are not expected to discernibly alter the situation in the Aral Sea. The ESPOE has concurred with the preliminary findings and will review the final version as well. Any recommendations from the CIA regarding the potential contributions of the Rogun HPP Project to cumulative impacts will be integrated into the revised ESMP.

93. ***The Request erroneously claims that the Rogun HPP will worsen water quality in the Amu Darya.*** Concerning water quality and salinity of the Amu Darya River, it is worth mentioning that the two driving forces shaping the seasonal variation in salinity are independent of the Rogun HPP: low natural drainage density of the catchment, which limits the salt loads induced by the natural runoff processes, and the snow and glacier melting in the upper catchment area, which promote dissolved salt dilution during the high-flow period (spring and summer). During low-flow periods, salinity is strongly influenced by the return of waters used for soil washing to reduce excess salinity, and for irrigation, as well as the heavy usage of fertilizers in the downstream of the Amu Darya Basin. This is a natural process in the downstream area, in Uzbekistan and Turkmenistan and the Rogun HPP Project will have no influence on this, since the cascade with the Rogun HPP will be operated keeping the Vakhsh River flow pattern unchanged. As Tajikistan must comply with regional water allocations at all times, the impounded quantity of water will be reduced during drought years to stay within the allocated national water share.

<u>Impacts on natural habitats and species</u>

94. ***The Request also inaccurately claims that the Rogun HPP will result in the degradation or destruction of critical natural habitats and endangered biodiversity resources***. The impacts in the dam area are localized and well managed, and they do not include adverse impacts on critical habitats or endangered species. It should be highlighted that the project site is a brownfield with

usually associated with the most severe combination of meteorological and hydrological conditions that are reasonably possible in the region.

heavily disturbed/altered habitats. Assessments have shown adverse impacts on terrestrial and aquatic ecosystems and biodiversity resulting from civil works, inundation of the reservoir, and extraction of construction materials. This is mostly in juniper woodlands and floodplain habitats. Baseline ecological assessments, including eDNA[27] analysis, revealed the absence of endangered fish species in the project area. The Rogun HPP Project includes a BMP to protect the habitats that will be affected within the project area of influence, namely the juniper woodland and the floodplains. Since the impacts are not on critical habitats, a "no net loss" measure, as part of the BMP is being finalized. The approval of the BMP is a condition of disbursement for activities implemented by the Rogun PMG. The BMP being finalized includes such measures as replanting and improving the juniper woodland and enhancing floodplain areas for fish and amphibians.

95. ***The Request expresses concerns primarily about critical habitats and endangered species located downstream of the Rogun HPP.*** The tugay forest in the Tigrovaya Balka Nature Reserve has already been affected by the Nurek dam and other cascades on the river. The Rogun HPP will not produce any additional tangible impact, given that the flow regime will not change. There are not expected to be additional (to Nurek) negative effect of the Rogun HPP on Tigrovaya Balka. This means that a negative impact of the Rogun HPP, or a cumulative impact of the Rogun HPP in combination with the Vakhsh cascade, can be excluded. This is consistent with the preliminary findings of the updated CIA. While the updated CIA is not publicly available yet, preliminary findings were discussed during the riparian consultations in Tashkent in October 2024. Management offers these clarifications, while noting that the Tigrovaya Balka Nature Reserve is located within Tajikistan's territory and no Requesters are from Tajikistan.

96. ***The completion and disclosure of the final versions of the 2025 ESIA, 2025 ESMP, updated CIA, and other critical instruments are progressing, and more recent surveys confirm conclusions previously drawn***. Many key surveys, such as those on biodiversity, have now been completed or are under finalization, and their findings align with the 2014 and 2023 ESIA. The findings of the updated CIA are expected to be similar to those of the rapid CIA undertaken as part of the 2023 ESIA update. Cumulative impacts on biodiversity that have materialized (e.g., related to stoppage of fish migration, impacts on Tigrovaya Balka) are the result of the existing HPPs downstream from the Rogun HPP on the Amu Darya and no further downstream impacts on biodiversity are anticipated to occur specifically as a result of the Rogun HPP Project. The recent surveys did not reveal any significant changes that would affect the conclusions previously drawn. Completion of the BMP, covering the Rogun HPP Project's area of influence as defined in the 2023 ESIA, is a disbursement condition for the financing of the activities to be implemented by the Rogun PMG. Following the feedback received during consultations, the scope of the 2025 ESIA was expanded to include the downstream sections of the Vakhsh and Amu Darya Rivers within the Rogun HPP Project's area of influence. Such studies and assessments will be thoroughly reviewed and endorsed by the Bank before Bank financing flows into the Rogun HPP Project.

[27] Environmental DNA (eDNA) analysis involves collecting and analyzing DNA from environmental samples like water, soil, or sediment to identify and track organisms, including those that are difficult to detect through traditional methods. This technique provides insights into biodiversity, species distribution, and ecosystem health. Conclusions from the eDNA analysis will be included in the 2025 ESIA.

Socio-economic impacts

97. ***Management confirms that the well-being of project affected people is central to the Rogun HPP Project's design, which aims to minimize displacement and disruption to livelihoods as much as possible***. As part of the Financing Agreement and ESCP for the Rogun HPP Project, the Government has committed to ensuring that the resettlement process complies with the requirements of the Bank's ESF and avoids resettlement where possible, particularly among communities further from the inundation zone. The DFZ has identified communities that are likely to be relocated either because they live in areas that will be inundated by the reservoir or because their safety or livelihoods could be affected by the reservoir. As the DFZ proceeds through the resettlement process, it will carefully evaluate the safety and livelihoods of communities close to the reservoir and will consult them on resettlement and livelihood options – and then plan accordingly. Any potential relocation of communities not directly affected by the reservoir will be based on their preferences, which will be sought during consultations with them.

98. The RLRF, along with existing and subsequent RAPs and LRPs, will guide these efforts by addressing the physical and economic displacement of project-affected people near the Rogun HPP site and downstream, as well as those in the reservoir area.

99. ***Consultations - including those held with project-affected people without government representatives present - have yielded valuable insights into the resettlement and compensation process, which in turn have been incorporated into the RLRF and RAPs and continue to guide implementation efforts***. For example, there has been a sustained effort to ensure that project-affected people are given choices about where to resettle and are satisfied with the places they choose, taking into account livelihoods and cultural preferences. In addition, consultations have helped ensure that new homes and structures are of better quality than what the project-affected people had before, responsive to family preferences, and that supporting social infrastructure, such as schools and medical facilities, are also in place to accommodate newly resettled families.

100. In addition, a framework approach to identify and mitigate adverse impacts on project-affected people was deemed appropriate, given that resettlement is taking place in phases spanning nearly two decades. This will correspond to inundation levels of the reservoir as well as the number of people affected by them. The RLRF is designed to facilitate the implementation of this multiple-phase, multi-year resettlement.

101. Resettlement related to the Project is only taking place in Tajikistan and has been underway since 2009 without Bank financing. In the first phase (2009-2017), 2,697 people were resettled, with a 2018 Completion Audit concluding that it was compliant with Bank policy requirements. A second phase of resettlement (2018-2026) is underway led by the DFZ and is currently being revised and updated to meet Bank requirements. During this phase 7,820 people have been resettled to date. Another 6,699 people are in the process of resettling (i.e., they have received their land and cash compensation and are building new homes, with supporting social infrastructure being provided). Another 2,400 people have been provided with options for land and are deciding on where they will resettle. ***Management would like to highlight that the DFZ has been tracking resettled project-affected people to date and none have moved to Uzbekistan or Turkmenistan.***

102. ***Resettlement on this scale is complex and takes time.*** The process of compensation and resettlement has involved discussions, negotiations and timely handling of complaints. The Bank, the Government, and the development partners will continue to work together to prioritize people's well-being. The livelihood restoration programs are expected to help improve, or at least restore, incomes and standards of living for the people who have been displaced. Efforts include improvements to and establishment of new community social infrastructure (health, education, land-based livelihood support), vocational and other training, support for access to finance to establish small businesses, opportunities to develop natural resource management and tourism activities around the Rogun reservoir, agricultural extension programs, livestock management programs and stipends to support apprenticeships. More information is available online: http://energyprojects.tj/index.php/en/rogun-hpp/eko-sots-instrument and http://mmz.nbo-rogun.tj. Management offers these clarifications, while noting that resettlement is occurring within Tajikistan's territory and no Requesters are from Tajikistan.

103. ***The Bank's ESF requires that an effective GRM be in place to allow stakeholders to raise concerns, provide feedback, and seek resolution of their concerns.*** The Bank has been working closely with the Rogun PMG and DFZ to revise and strengthen the existing GRM to ensure alignment with international best practice. The DFZ's website (http://mmz.nbo-rogun.tj) includes information on recent complaints.

104. The GRM includes the processes of receipt, acceptance, review, resolution, and closure of operational issues, concerns, problems, or grievances. According to a sampling of project-affected people in the ongoing second phase of resettlement, 42 percent have used the GRM to raise concerns about compensation and the resettlement process, which are being successfully addressed in a timely manner.[28]

Emergency preparedness

105. ***Management would also point out that for a project of this magnitude, safety is of utmost importance, and it will not be compromised***. The design and construction plans cover both the construction and operational phases, in line with ESS4, Annex 1, international standards and best practices of dam safety. The design and construction supervision of the Rogun HPP has been and is being rigorously scrutinized by a number of renowned independent experts, applying international standards and best practices. The robustness of these designs has been confirmed by the DSPOE, who, along with the Project Management Consultant, will play a key role in providing oversight on dam safety risks during project implementation.

106. Based on detailed geological investigations and seismic hazard assessments, appropriate protective measures have been incorporated into the design of the dam and associated facilities. These assessments have been carried out by reputable international consulting firms and independently reviewed by the DSPOE, which draws on expertise from relevant fields. As

[28] During the second phase of resettlement, between 2017 and April 2025, DFZ received 2,432 oral and written complaints. Of these, 444 complaints were deemed not to be relevant. DFZ handled the remaining 1,988 complaints themselves and forwarded 321 to relevant competent authorities, such as the *jamoats*. All of the relevant complaints were resolved, except for one on land allocation, which went to court and was eventually dropped.

additional surveys, investigations, and monitoring activities are conducted, their findings and recommendations will be integrated into the design during implementation.

107. Currently, 11 seismic stations are operational for monitoring the dam and reservoir areas throughout the construction, filling, and operational phases. If further studies indicate the need for additional monitoring systems, these will be installed under the guidance of the DSPOE.

108. The Rogun HPP Project has also addressed concerns regarding the geologically sensitive zone on the right bank downstream of the dam. The geology of the right abutment is a constraint, as there is a large geologically atypical zone (ATPZ) about 2 km long and 1.5 km wide. The thickness of the ATPZ ranges up to 150 m. Fitting the project structures in the right abutment is a challenge, especially the outlet structures with their energy dissipation devices. Recent design studies are re-evaluating the overall flood discharge arrangements and some modifications in the arrangements are being undertaken. Detailed geotechnical investigations, surveys, and monitoring have been conducted to assess risks, with corresponding mitigation measures reviewed and approved by the DSPOE. Monitoring will continue throughout implementation, as reflected in the Instrumentation Plan, which covers potential landslide risks.

109. In accordance with ESS4, Annex 1, an EPP will be developed at least 12 months prior to each level of impoundment and then activated. Local communities will receive suitable communication materials, such as posters and brochures, so that they are familiar with required actions in emergencies well before occasions warranting such actions might arise. Confidential EPP information will be shared with downstream riparian countries' responsible entities to ensure that they understand the potential risks and establish emergency protocols.

110. A flood forecasting system has also been installed and is operational, providing monitoring and early warnings during the construction stage. This system will be further enhanced under the Rogun HPP Project. Other emergency management measures will also be adopted and/or enhanced corresponding to the reservoir water level.

Actions

111. Management has established a thorough process to verify the achievement of all conditions for effectiveness. These comprehensive legal conditions ensure that no Bank financing will be disbursed for the Rogun HPP Project until all relevant assessments, plans and other outlined conditions in the Rogun HPP Financing Agreement are finalized and approved to the satisfaction of the Bank. A rigorous monitoring process is also in place to ensure that the Government of Tajikistan adheres to all applicable legal covenants as part of the Financing Agreements of the Rogun Projects, including commitments not to cause appreciable harm to riparian countries. More broadly, Management is committed to establishing structured and professional arrangements for continuous monitoring, evaluation and reporting of the E&S aspects of the Rogun HPP Project during implementation. This includes the PMC contract, joint supervision missions with other development partners, hands-on enhanced implementation support by the Bank ESF staff, and the use of an independent Technical Advisor. Management reserves the right to take remedial actions if legal covenants are not met during the implementation of the Rogun Projects, which may include suspending disbursements until rectified, or partially or fully canceling the proceeds.

112. Management commits to continuing support for the Government of Tajikistan's consultations with riparian countries to address any concerns related to the Rogun Projects. These consultations, ongoing since 2011, have included high-level regional meetings with representatives from Kazakhstan, the Kyrgyz Republic, Turkmenistan, and Uzbekistan. The focus of these consultations is on sharing information and gathering feedback on the Rogun HPP Project.

113. Management will engage with the riparian countries to support further consultations with government bodies and CSOs. This includes offering translation services for the non-technical summary of the finalized 2025 ESIA into national languages. Additionally, Management will discuss with riparian countries opportunities to conduct consultations with government and CSO representatives in local languages.

114. Management is also dedicated to maintaining transparency and continuous engagement with CSOs throughout the implementation of the Rogun Projects. This includes regular meetings, information sharing, and open feedback channels as outlined in the SEP. Additionally, the GRM allows stakeholders to raise concerns and seek resolutions. Management will keep CSOs informed about the findings of supervision missions and involve them in supporting and monitoring the implementation of resettlement and livelihood restoration measures as much as possible.

Conclusion

115. ***Management believes that the present Request is not eligible for inspection. Nevertheless, Management has reviewed the allegations in the Request and concluded that the Bank has correctly and thoroughly applied its policies and procedures applicable to the Project and to the matters raised by the Request. As a result, Management believes that the Requesters' rights or interests have not been, nor will they be, directly or adversely affected by the alleged failure of the Bank to implement its policies and procedures.***

Annex 1
Claims and Responses

No.	Claim	Response
1	The World Bank and several co-financiers have approved financing for construction of the Rogun HPP (Project#P181029) despite the current ESIA documentation being incomplete and based on outdated data and concepts and not addressing key concerns related to the environmental and social consequences of the project. Although, the World Bank claims that the whole project will be implemented according to the standards of its ESF, other co-financiers have already issued calls for tender for specific engineering works, which do not reference the ESF requirements and do not contain the provision that adjustments could be made based on outcomes of the ESIA finalization (e.g. see tender(s) announced by the Islamic Development Bank[1]).	***The financing for the Rogun HPP Project was approved in December 2024 based on the draft assessments and plans prepared and disclosed at appraisal with support from the Rogun TA Project, as set out under paragraph 51 of the E&S Policy.*** The Borrower prepared and disclosed the draft 2023 ESIA and ESMP in December 2023 as part of the preparation of the Rogun HPP Project. The documents incorporated advice from the ESPOE and were reviewed by the Bank before disclosure. The Bank concluded that these draft documents adequately addressed the E&S risk and impacts of the Rogun HPP Project and were sufficient to inform stakeholder engagement and Bank decision-making as they included the main E&S risks identified in the scoping exercise, and provided for the main mitigation measures to address those risks and impacts. Additionally, all necessary internal reviews and clearances were obtained as part of the due diligence process to ensure that the preparation and disclosure of documents fully comply with the ESF for projects classified as having "High" E&S risk, and specifically with paragraph 51. As a condition of effectiveness for the Bank's financing of the Rogun HPP Project, the 2025 ESIA and 2025 ESMP will be updated, redisclosed and adopted. In addition, all existing contracts entered into before the signature date of the Financing Agreement for the Rogun HPP, regardless of the source of financing, and not terminated before its effectiveness, will need to be amended to incorporate the requirements of the ESSs and the ESCP. This includes, inter alia, the requirements of the 2023 ESIA and the 2023 ESMP (regardless of the source of financing). Furthermore, all new contracts financed under the Rogun HPP Project (regardless of the source of financing) will include E&S clauses to ensure compliance with the ESSs and the ESCP, including 2023 ESIA/ESMP requirements.[2] This is consistent with the ESF's E&S Policy, which allows the Bank to set out requirements for existing

[1] General Procurement Notice Construction of Rogun Hydro Power Plant Project (Lot-4 Left Bank Structures) Financing No.TJK1042. https://www.isdb.org/project-procurement/tenders/2024/gpn/construction-rogun- hydro-power-plant-project-gpn

[2] The Rogun HPP Financing Agreement includes provisions to ensure the Project adheres at all times to ESF requirements. This means any material changes in the ESIA/ESMP during project implementation will have to be reflected in existing contracts and procurement documents.

No.	Claim	Response
		facilities or activities to meet the requirements of the ESF within a timeframe acceptable to the Bank.
2	As outlined below, given current scientifically sound evidence related to the impacts of climate change and the hydrology of the region as well as the well documented context of closed civic space in Central Asian countries, we expect the project will contribute to a wide range socio-economic and ecological harms, including but not limited to water deficit, degradation of globally important riverine ecosystems, extinction of critically endangered species, economic and physical displacement of local communities and increased cost of living.	***Management disagrees with the assertion that the Rogun HPP will contribute to a wide range of socio-economic and ecological harms. This conclusion is not supported by the comprehensive assessments carried out during project preparation as explained below***. Regarding the specific impacts of climate change and hydrology, the Bank's studies have evaluated the potential benefits and risks of the Rogun HPP comprehensively. Hydrology and climate change studies conducted under the TEAS indicated that annual water flow volumes in the Vakhsh River are expected to gradually increase through 2100 due to glacial melt and increased precipitation. Additionally, reservoir operation simulations done as part of the TEAS show that the Rogun HPP can operate without altering historical flow regimes (also acknowledged in the reports from the DSPOE).On the basis of the TEAS and DSPOE reports, the Bank conducted a “no appreciable harm assessment” in March-April 2024, which concluded that filling the Rogun reservoir at an average of 1.2 km^3/year (Tajikistan’s historically unused water share) will only impact water availability in the upper Amu Darya Basin (after the confluence of the Vakhsh, Panj, and Kofarnihon Rivers) that is directly available to downstream countries by 2.2 percent, causing no appreciable impact to these countries.[3] An update to the hydrology and climate change study is ongoing and will be finalized this year. Its results to date do not indicate changes from previous findings. The DSPOE has advised that the study update is not expected to result in any material change to the Rogun HPP design or operations. A key benefit of the Rogun HPP is that the additional storage capacity will enhance climate resilience in the Vakhsh and Amu Darya Basins, mitigating the impacts of floods and droughts for all water uses. The Rogun HPP has integrated hydrometeorological aspects to ensure comprehensive management of water resources and climate resilience. The Rogun HPP Project includes advanced hydrological and

[3] This calculation is based on the comparison of the 1.2 bcm/year impoundment which represents 2.2 percent of the ~54 bcm/year available to Afghanistan and downstream countries, below the confluence of the Vakhsh, Panj and Kofarnihon rivers (just above Qosh Tepa canal diversion).

No.	Claim	Response
		meteorological monitoring systems to track water flow volumes, precipitation patterns, and glacial melt rates. These systems provide critical data for optimizing reservoir operations and mitigating the impacts of floods and droughts on people and the environment. In addition, the Rogun HPP Project will protect all downstream reservoirs of the Vakhsh cascade from the Probable Maximum Flood,[4] against which they were not originally designed. By incorporating hydrometeorological aspects, and because of its large capacity for multi-year water storage, the Rogun HPP will enhance the climate resilience of the Vakhsh and Amu Darya Basins, ensuring sustainable water management for all uses and contributing to the overall stability and reliability of the region's water resources. The Rogun HPP will not require resettlement of downstream communities in Uzbekistan or Turkmenistan, but only of the project-affected people in Tajikistan. No Requesters are in the territory of Tajikistan. Regarding civic space for questions about or opposing the Rogun HPP, please see Item 3 below.
3	Much of the impacts capable of causing harms have not been assessed rigorously, or those assessments have not been disclosed, while the complainants (and their communities) had no chance to participate in any meaningful public consultations, as one riparian consultations were held in secrecy in early November 2023 before the World Bank disclosed the draft ESIA, while another one hastily held in Tashkent on 28 October 2024 was not based on any specific E&S documentation made available for comment prior or even after the meeting and violated many other requirements of the WB standards.[5]	***Management disagrees with the assertion that the assessments have not been rigorously conducted or disclosed, and that complainants had no chance to participate in meaningful consultations. The Rogun PMG has conducted numerous consultations at regional, national, and community levels since 2011, ensuring that stakeholders had opportunities to provide feedback. The Bank has observed a number of the larger consultations.*** During Rogun HPP Project preparation, consultations were documented, and feedback was incorporated into the 2023 ESIA and other project documents. The November 2023 Information-Sharing and Consultation Meeting of Riparian Governments on the Updated ESIA of the Rogun HPP (6th riparian consultation) was open to all stakeholders, and the advance copy of the ESIA was posted online in English (October 2023) and in Russian (early November 2023) on PMG's website

[4] The Probable Maximum Flood (PMF) is the largest flood that could conceivably occur at a particular location, usually associated with the most severe combination of meteorological and hydrological conditions that are reasonably possible in the region.

[5] CSO Letter to the World Bank on improper consultations. 8 November 2024 on the Rogun Alert website https://rogun.exposed/letters CSO Letter to the World Bank on improper consultations. 8 November 2024 on the Rogun Alert website https://rogun.exposed/letters

No.	Claim	Response
		(energyprojects.tj). Hard copies of the advance copy of the ESIA were also available at the meeting. Information on the ESIA/ESMP consultations is included in the SEP and in the report of the November 2023 meeting: https://energyprojects.tj/index.php/en/rogun-hpp/eko-sots-instrument/1215-esia-riparian-consultation-summary Consultations with riparian governments and CSOs have been ongoing for some time and began before the re-engaged with the Rogun HPP. From 2011 to 2014, the Government of Tajikistan conducted five consultations with government and CSO representatives from the riparian countries (Afghanistan, Kazakhstan, Kyrgyz Republic, Turkmenistan and Uzbekistan). Discussions focused on seismicity; sedimentation and mud flows; flood management; downstream water flows; economic feasibility; and resettlement in Tajikistan. Since the Bank's re-engagement with the Rogun HPP through the Rogun Projects, the Government of Tajikistan held consultations in Almaty, Kazakhstan, on November 8-9, 2023. These meetings involved information-sharing and consultations with riparian governments and CSOs from Kazakhstan, Kyrgyz Republic, Turkmenistan and Uzbekistan. The meetings focused on relevant riparian issues in the 2023 ESIA. They included representatives from regional governments, CSOs, and scientific organizations. The aim was to gather feedback to inform project design and respond to questions and concerns from a wide range of stakeholders. Many of the questions and comments from the participants were focused on the water flows from the Rogun HPP and their possible downstream impacts. Stakeholder comments were taken into account in the 2023 ESIA, which was disclosed in December 2023. The report of this consultation is available at energyprojects.tj and is also summarized in the SEP. Participants at the meetings were provided with advance drafts of the ESIA/ESMP. They were also informed about how they could obtain the E&S documents, either through the energyprojects.tj website or by writing to the Rogun PMG to obtain written copies. They were also informed about the GRM and how they could file complaints. Consultations on riparian issues were also conducted in Tashkent, Uzbekistan, on October 28, 2024. Facilitated by the Bank, these consultations involved more than 35 key stakeholders, including the Uzbek government, CSOs, and international NGOs.

No.	Claim	Response
		The discussions addressed environmental, social, and technical issues concerning the riparian countries. The summary of these consultations has been included in the updated SEP, which has been disclosed in-country and on the Bank's external website in May 2025. The Bank is assisting with additional riparian consultations with government and CSO representatives in Ashgabat, Turkmenistan (planned for mid-2025) and in Bishkek, Kyrgyz Republic (June/July 2025), which will also involve participants from Kazakhstan. The Uzbek government and CSO representatives have requested that, when the 2025 ESIA is eventually updated and re-disclosed, the Bank provide support for translating the non-technical summary and ESIA into Uzbek so that the Government can undertake additional consultations with communities in the Amu Darya Basin area. In addition to consultations with riparian governments and CSOs, national and community-level consultations took place throughout Tajikistan in January 2024 (in Dushanbe and various other locations including the city of Rogun, Districts of Republican Subordination, and the Khatlon Region). These consultations engaged local communities and stakeholders, providing information about the Rogun HPP Project and collecting feedback. In June 2024, three consultations took place in Dushanbe and the resettlement areas to discuss the RLRF. These meetings focused on understanding the needs of the project-affected people, including the replacement of suitable housing, structures, and lands; access to supportive social infrastructure; and efforts to restore livelihoods. The Bank has also organized information sessions with international CSOs. These meetings aimed to discuss E&S issues in detail and address concerns. This effort was part of an ongoing engagement with stakeholders to ensure transparency and meaningful dialogue, and the Bank has committed to organizing such meetings on a quarterly basis starting last November. The first quarterly meeting took place on November 14, 2024, and the second took place on March 25, 2025. The discussion during the March meeting focused on the status of conditions of effectiveness for Bank financing, progress on E&S instruments, the GRM, concerns regarding consultations and civic space, public disclosure and access to key project documents,

No.	Claim	Response
		consideration of alternatives and resettlement impacts, the role of CSOs, and third-party monitoring.
	Harm to be caused by the Project	
4	Complainants and their communities are likely to be harmed by the World Bank's errors and omissions in the design and implementation of the "Sustainable Financing for Rogun Hydropower" Project (P181029)[6] and "Technical Assistance for Financing Framework for Rogun Hydropower Project" (P178819) and the lack of disclosure and meaningful public consultation, especially for the communities downstream of the Vakhsh Hydropower Cascade.	***Management notes that riparian concerns have been extensively studied and have already been appropriately addressed or will be addressed as part of the E&S assessments, plans and the measures required of the Borrower under the Rogun HPP Project's Financing Agreement. Additionally, a Bank's assessment confirmed that the Rogun HPP can be constructed and operated with no appreciable harm to riparian countries*** The Bank is assisting with additional riparian consultations with government and CSO representatives in Ashgabat, Turkmenistan and in Bishkek, Kyrgyz Republic (planned for mid-2025), which will also involve participants from Kazakhstan. When the updated 2025 ESIA and 2025 ESMP are disclosed, riparian countries will be notified and the Bank will discuss with each riparian how it can support consultations at the local level. For further details on consultations, see Item 3 above; on EPPs, including for riparian communities, see Item 17 below.
5	During the planning and preparation of the ESIA for the Rogun HPP Construction Financing Project, the interests of people living downstream, particularly those living in the Aral disaster zone in the Amu Darya River basin, were completely ignored.[7] Damage may result from the World Bank's and the borrower's failure to comply with the Bank's Environmental and Social Framework (ESF) and the failure to develop a robust Environmental and Social Management Plan (ESMP) and Environmental and Social Commitment	***Management considers that meaningful consultations were conducted at the local and national levels with the riparian countries (see Item 3 above)***. The 2023 ESIA includes an assessment of the potential impacts on downstream communities and as mentioned above, the filling of the Rogun HPP is not expected to cause material adverse effects on these communities. The 2023 ESIA and 2023 ESMP are being updated and their finalization, disclosure, and adoption by Tajikistan is a condition of effectiveness for the Bank's financing. The ESCP forms part of the Financing Agreement and is a legally binding document, which the Republic of Tajikistan, as recipient of the Bank's financing ("Recipient") has committed to implement. The

[6] Project P181029 https://projects.worldbank.org/en/projects-operations/project-detail/P181029

[7] Karakalpakstan, the Khorezm region of Uzbekistan and the Dashoguz (Tashauz) velayat of Turkmenistan are usually considered the "environmental disaster zone of the Aral Sea," but negative socio-ecological consequences are also recorded beyond its borders in the territories of Uzbekistan, Turkmenistan and the Kyzyl-Orda region of Kazakhstan.

No.	Claim	Response
	Plan (ESCP), which detail how the World Bank and the borrower, in consultation with the community, will address significant social and environmental issues arising from the project and prevent harm to the population and ecosystems of the Amu Darya river basin**.**	Bank will conduct regular supervision and implementation support missions to confirm compliance with the ESCP. A rapid CIA was included in the December 2023 ESIA, which indicated limited downstream impacts, largely due to the legacy effects of the existing cascade on the Vakhsh River. In response to feedback received on the draft, the 2025 ESIA is updating the CIA to more thoroughly address potential transboundary impacts. The updated CIA is currently being finalized, but preliminary results confirm that water releases downstream of the Nurek Dam—and consequently of the Rogun HPP—are not expected to discernibly alter the situation in the Aral Sea. The ESPOE has concurred with the preliminary findings and will review the final version as well. The conclusions of the updated CIA will be reflected in the 2025 ESIA, which is a condition of effectiveness for the Bank's financing for the Rogun HPP Project. Any recommendations from the CIA regarding the potential contributions of the Rogun HPP Project to cumulative impacts will be integrated into the revised ESMP. The Aral Sea has faced major challenges since the 1960s due to large-scale irrigation projects that reduced water inflow to less than 10 percent of natural levels. Today, the southern part—known as the Large Aral Sea and fed by the Amu Darya—remains heavily degraded, with limited prospects for recovery at present. According to the 2014 and 2023 ESIA, the Rogun HPP will not contribute to further degradation and will have no impact on the current state of the Aral Sea. The technical and environmental studies demonstrate that it is possible to operate the Vakhsh cascade with the Rogun HPP in a way that the river flow pattern downstream of the cascade remains unchanged. The Rogun HPP will be progressively filled during the vegetation period.[8] Tajikistan will use the share of water allocated to it (as agreed by the member states in the ICWC) that has remained unused for the initial filling. The Financing Agreement includes covenants related to Dam Operations and Flow Monitoring, including the development of reservoir management rules, and the obligation to cause the Rogun OJSC to operate the Rogun HPP during the operational

[8] The vegetation period is defined as the period from April to September when irrigation (growing season) takes place.

No.	Claim	Response
		phase once full supply has been achieved in such a manner that the Government complies at all times with the Regional Water Sharing Arrangements and the Reservoir Management Rules for the Vakhsh River Basin, and the Government does not cause appreciable harm to any of the downstream riparian countries. (See to Item 6 below for details.) Tajikistan has a strong record of compliance with the basin's water sharing agreements and is committed to operating the Vakhsh cascade in this way. This means that building and operating the Rogun HPP will not reduce water available to downstream riparians for irrigation. Whereas other changes in consumptive water use in the Amu Darya Basin will have direct effects on the Aral Sea, operating the Rogun HPP as described above will not negatively affect it. The Rogun HPP offers important flood control benefits, which have positive effects on the entire downstream area. The Rogun HPP could benefit all downstream water users in the Amu Darya Basin by providing additional water for irrigation in exceptionally dry years. According to the TEAS, the Vakhsh cascade as presently operating, including Nurek dam, is not designed to handle a Probable Maximum Flood. Thus, the Rogun HPP has been designed as a multipurpose scheme, allowing safe evacuation in such a case. The appropriate operation of Rogun HPP spillway facilities would provide protection of Nurek and the downstream areas. Along the Vakhsh cascade, the Rogun HPP can contribute to improved flood routing and therefore to lower downstream flow peaks.
6	We expect that the inevitable reduction and seasonal redistribution of the Vakhsh River flow during the construction, filling of the reservoir and operation of the Rogun hydropower station will create a water shortage in the Lower Vakhsh and Amu Darya rivers, which will lead to irreversible consequences and disrupt the already fragile state of natural and anthropogenic ecosystems, which, mainly, was not taken into account or was directly ignored in the ESIA of the Rogun HPP.	***Simulations of reservoir impoundment and operation show that the Rogun HPP can operate without altering historical flow regimes (see Item 2 above for details)***. The Bank's Financing Agreement for the Rogun HPP Project (Schedule 2, Section IV.A.3) includes a covenant to ensure that the operation of the plant during the reservoir impoundment is carried out in such a manner that: (a) the Recipient complies at all times with the Regional Water Sharing Agreements, including observance of the Annual Allocation (meaning using no more than the agreed and otherwise unused Annual Allocation to Tajikistan), and with the interim Reservoir Management Rules for the Rogun Reservoir; and (b) the Recipient does not cause appreciable harm to any downstream riparian countries. A similar covenant is included in Schedule 2, Section IV.B.4 for the operational phase once the full supply level has been achieved.

No.	Claim	Response
		Furthermore, the Financing Agreement for the Rogun HPP Project includes a covenant requiring the development and adoption of interim Reservoir Management Rules for the Rogun Reservoir during the construction and impoundment stage, and the Reservoir Management Rules for the Main Reservoirs in the Vakhsh River Basin, all in form and substance satisfactory to the Bank and in a manner that complies with the national legislation and the provisions of the Financing Agreement. Annual allocations for each country are defined twice a year at the ICWC of Central Asia, when the seasonal allocations and releases from the reservoirs are also defined and agreed by the riparian countries. In addition, and along the same lines, Tajikistan's agreement to not shift additional flows from summer to winter and to maintain the amount shifted during historical Nurek operations (4.2 bcm/y) is documented in the minutes of riparian consultations, as well as in statements in the 2014 and 2023 ESIA (and the reports of the TEAS and the ESPOE) to not alter the seasonal flow regime. Furthermore, Tajikistan has committed in the Financing Agreement to not causing appreciable harm to any of the downstream riparian countries (see Item 2 above on the assessment of no appreciable harm). As Tajikistan must comply with regional water allocations at all times, the impounded quantity of water will be reduced during drought years to stay within the allocated national water share.
7	Moreover, even the change in the flow regime, which is mentioned only in passing in the ESIA of the Rogun hydroelectric station, will lead to the aggravation of key environmental problems, as well as the need for a high-cost transformation of agriculture and municipal water supply in the middle and lower reaches of the Amu Darya. In the worst-case scenario, the redistribution of runoff will lead to the complete degradation of the local socio-economic structure with enormous social consequences.	No changes are expected in the flow regime due to the Rogun HPP. Once the Rogun reservoir is impounded, downstream countries should not be able to distinguish the new flow regime from the historical Nurek cascade operation. See Items 2 and 6 above.
8	The Complainants, who live on the lands washed by the waters of the Amu Darya River, have felt throughout all their lives the consequences of the Aral Sea disaster, triggered by the thoughtless construction of dams, canals	The Rogun HPP is not expected to have any influence on salinity, since it will be operated keeping the Vakhsh River flow pattern unchanged. Two driving forces act to shape seasonal variation in the salinity of the Amu Darya River and are independent of the Rogun HPP: the low natural drainage density of the catchment, which limits the

No.	Claim	Response
	and other hydraulic infrastructure, which caused the redistribution of the Amu Darya flow and the destruction of the Aral Sea. Current baseline conditions in the region shared by this crisis have been completely omitted when planning Rogun HPP Project and drafting the ESIA report. The population of most regions of the lower reaches of the Amu Darya and its delta have been on the brink of extreme physical survival for many years due to salinization and desertification of soil, resulting harm to agricultural productivity and deteriorating human health due to toxic dust storms and low-quality water supplies, with often health threatening concentrations of salts. Most migrants from the Aral Sea region indicated environmental degradation as the leading reason for migration. Two family members of one of the two complainants also migrated out of the region due to deteriorating environment. Deterioration of health, loss of livelihood due to lack of water or its poor quality, uncertainty of survival prospects in an area where the habitat is degraded - this is what has been a heavy moral, psychological and physical oppression for many years that influenced the complainants, their families, and communities.	salt loads induced by the natural runoff processes, and the snow and glacier melt in the upper catchment area, which promote dissolved salt dilution during the high-flow period (spring and summer). During low-flow periods salinity is strongly influenced by the return of waters used for soil washing to reduce excess salinity and for irrigation. This is a natural process in the downstream area in Uzbekistan and Turkmenistan. Please refer to Item 5 above.
9	The additional reservoir of the Rogun hydroelectric power station with a live volume of 10 cubic kilometers, at the operational stage, in dry years can have a decisive influence on the reshaping of the flow of the Amu Darya River and the state of the ecosystems and population dependent on it up to the river delta. These scenarios are not considered in ESIA. During the construction and filling of the reservoir of the Rogun hydropower station, even according to preliminary estimates of the World Bank,	Please refer to Item 2 on water flow impacts and Item 5 above on the updated CIA conclusions and the concurrence of the ESPOE.

No.	Claim	Response
	within 13–16 years the Amu Darya flow into the Aral Sea will be reduced by 0.8 - 1.2 cubic kilometers annually (this will amount to at least 25% of the current flow into the Amu Darya Delta),[9] which will inevitably lead to a progressive catastrophe in the already existing zone of environmental disaster and its spreading to new areas.	
10	To date, we note the failure to take into account full consideration the cumulative impacts of the Rogun hydropower station during different project lifecycle stages (construction, filling of the reservoir, operation), in conjunction with other functioning and planned water infrastructure projects downstream along the Amu Darya. As we understand it, based on the World Bank's own data, during 15-year long reservoir filling phase, there will be over 20% reduction in water flowing into Aral Sea and no identified coordination with other new large projects along the Amu Darya, for example the Qosh-Tepa canal in Afghanistan.	Please refer to Items 2 and 5 above.
11	Combined with an evidence-based data about the impacts of climate change in the region (including desertification, salinization, and overall lowered water flow), the operations of the Rogun Dam would be expected to severely exacerbate a range of ecological, social and economic problems – including among others: a) devastating impacts on critically endangered species of fish and other riparian species as well as currently intact tracts of floodplain tugai forests which are dependent on the flow regime of the rivers of the Amu Darya basin – one of which was designated as a UNESCO World Natural Heritage Site in 2023,	***Water flow analysis has shown that the filling of the Rogun HPP will not have a material effect on downstream flow in the Vakhsh River (see Item 3 above).*** The 2023 ESIA and the CIA (both the rapid CIA and updated CIA currently being finalized) show that the tugay forest in the Tigrovaya Balka was already affected by the Nurek dam and other cascades on the river. The Rogun HPP is not expected to produce any additional tangible impact, given that the flow regime is not expected to change. Regarding the fish population, baseline ecological assessment included in the 2023 ESIA that was disclosed in December 2023, including eDNA analysis, indicated an absence of endangered fish species in the project area.

[9] Nazariy A.M. Changes in Amu Darya river annual and seasonal flows. September 2023. Presentation (in Russian) https://rivers.help/pdf/2023_Nazariy.pdf

No.	Claim	Response
12	b) declines in living standards and health condition of those of local residents who live downstream and around the site (most particularly for those from local communities that rely on the watershed for irrigating farmland), given the loss of land and water availability as well as higher release of salts into the air, and	Please see Items 5 and 8 above.
13	c) social dislocation caused by loss of connection to the land and to surrounding communities, and corresponding out-migration, raising the specter of increased cross-border economic and socio-political tensions. (See Appendix I for detail on cumulative effects)	***Management notes that the Rogun HPP Project aims to minimize displacement wherever possible***. The Rogun HPP Project will result in the displacement of over 50,000 people around the dam site and the reservoir. The RLRF, along with RAPs and LRPs, set out the entitlements and support to address the physical and economic displacement of the project-affected people. The well-being of affected communities is central to the project's design, and consultations—including those held without government representatives—have provided valuable insights into the resettlement and compensation process, which continue to guide implementation efforts. To date, the majority of project-affected people have been resettled to newly built communities or host communities in the Rogun area, with land provided for housing, agriculture and other productive uses. The GRM complaints have focused on: replacement of land plots allocated to project-affected people; amount of compensation; re-evaluation of the value of houses and other structures; allocation of land plots for commercial/retail use; assistance with documentation; allocation of communal land for specific purposes; and requests for drinking water while water systems are being constructed. According to DFZ's data, no project-affected people have migrated to Turkmenistan or Uzbekistan. Management offers these clarifications, while noting that resettlement is occurring within Tajikistan's territory and no Requesters are from Tajikistan.
14	As a result of these changes, downstream regions are threatened with salinization of land\waters and loss of fertility of large irrigated areas, degradation and desertification of lands due to lack of fresh water, which will necessitate a change in the way of farming due to	The Rogun HPP is not expected to have any influence on salinity, since it will be operated keeping the Vakhsh River flow pattern unchanged. The water in the lower reaches of the Amu Darya River water is characterized by decreasing quality mainly related to salinity, the major ions being sulphates, chlorine, sodium and potassium: The longitudinal increase in deoxygenating pollutants can be mainly considered as indicative of the loss of organic matter from irrigated areas, which, in conjunction

No.	Claim	Response
	changes in the flow regime of the Amu Darya.[10]	with salinization, contributes to the major degradation processes affecting the land resources surrounding the river. The major factor impairing water use in the lower part of the river can thus be attributed to the secondary salinization processes originating from the lithological composition of the watershed, driven and increased by the return waters and irrigation activities. However, as noted in Item 8 above, these are natural processes that will not be affected by the Rogun HPP, since the Rogun HPP will be operated keeping the Vakhsh River flow pattern unchanged. The Aral Sea has suffered greatly due to massive irrigation schemes that were built in the 1960s, and which led to a very severe reduction of water inflow, to less than 10 percent of natural inflows. It has been shrinking very considerably, and salinity has increased. Today, the southern part, also known as the Large Aral Sea, which is fed by the Amu Darya, is significantly degraded, with no identified solution for recovery in the foreseeable future. The Rogun HPP Project will not cause any change in the situation of the Aral Sea. Protocol No. 566 (ICWC/BVO)[11] also included a scheme for water saving and protection measures, aimed at optimizing the use of water resources. This included among others a regulation of drainage water release to the Amu Darya, so that Amu Darya salinity does not exceed 1000 g/m^3. See also Item 24 below.
15	Reduced flows will also cause environmental degradation in our areas. In particular, due to an increase in mineralization (salt content) in water and the release of salts into the air from dried-out areas, the number of associated diseases will sharply increase.	Please refer to Items 5, 8 and 14 above.

[10] Uzbekistan - Country Climate and Development Report. World Bank. 2023.
[11] Protocol No. 566 (ICWC/BVO) is related to water management and allocation in Central Asia, specifically concerning the Amu Darya Basin.

No.	Claim	Response
16	As a result of the implementation of the Rogun HPP project, the risk of degradation of the aquatic and coastal ecosystems of the Amu Darya basin will increase, with the loss of their recreational properties, biological resources important for local communities and the destruction of unique biological diversity. In particular, the most important tracts of floodplain tugai ecosystems, which have already been significantly reduced due to changes in the flow induced by previously built reservoirs, will be under the threat of degradation, including the World Heritage Site Tugay Forests of the Tigrovaya Balka Nature Reserve and the Amudarya Nature Reserve, a transboundary reserve between Uzbekistan and Turkmenistan. Among the endemic fish species, the two species of Amudarya shovelnose sturgeons, both recognized by the IUCN as critically endangered status - CR*)* may go extinct due to increasing changes in the flow regime of the water and sediments in the river. In our nature conservation programs the complainants used those sturgeons as flagship species representing the biodiversity of the Amu Darya River basin, while historically they were also used by rural healers as traditional medicine (before their numbers were reduced by impacts from upstream water infrastructure). Unless their habitat is protected from further negative dam impacts, our children and grandchildren will only ever know these species in books or local museums, and cultural ties with riverine life will be severed.	***Management notes that there are no protected areas nor critical habitats present within the project area of influence, as defined in the 2023 ESIA; sites identified downstream of the Rogun HPP Project (but upstream of Nurek) have no connectivity with the Vakhsh River and will therefore experience no potential effects.*** There will be no significant downstream impacts arising from the Rogun HPP Project that extend downstream of the Nurek dam, and therefore there is no pathway for potential effects on the Tigrovaya Balka protected area. The rapid CIA prepared for the Rogun HPP Project determined this, and it was confirmed in the updated CIA currently being finalized, which states: "There will be no additional (to Nurek) negative effect of Rogun HPP on Tigrovaya Balka. This means that a negative impact of Rogun HPP, or a cumulative impact of Rogun HPP in combination with the Vakhsh cascade, can be excluded." A BMP is being finalized to provide management of impacts on non-critical habitats (namely, juniper woodland and flood plains) within the project area of influence, as defined in the 2023 ESIA. The CHMP will address impacts on intangible cultural resources and sacred sites, ensure stakeholder consultation and provide management options (avoidance, awareness, chance-find procedures) for any potential construction impacts within the project area of influence. The ecological baseline data to be included in the 2025 ESIA, including eDNA analysis, did not show the presence of the shovelnose sturgeon. It was the cascade on the Amu Darya that changed the migratory pattern of these fish, which led to their disappearance. No other endangered species were identified to be at risk of extinction. Neither the Small Amu-Darya shovelnose sturgeon (*Pseudoscaphirhynchus hermanni*) nor the Amu Darya shovelnose sturgeon (*Pseudoscaphirhynchus kaufmanni*), were detected during eDNA analysis. Management offers these clarifications, while noting that the Tigrovaya Balka Nature Reserve is located within Tajikistan's territory and no Requesters are from Tajikistan.
17	The decades-long threat of the implementation of plans for the construction of the Rogun hydropower plant against the backdrop of a progressive decrease in the volume of water entering the region has already become a source of major stress for complainants, REDACTED and local	***Management notes that, since re-engaging with the Rogun HPP, the design and construction supervision of the Rogun HPP has been and is being rigorously scrutinized by renowned experts, including those in the DSPOE, applying the international standards and best practices*.** ***Management notes the importance for riparian communities to be informed on***

No.	Claim	Response
	communities. This threat created a feeling and state of alarming uncertainty about their fate among members of local communities and all residents of the Amu Darya valley. This is especially painful for the complainants as REDACTED. In addition, for the residents of the Amu Darya Valley, the risks of collapse of the overlying dams pose a great threat, but the population is not even informed about the likely consequences and emergency action plans in the event of different scenarios of such accidents.	***emergency response procedures in the event of a dam break***. The 2025 ESIA will clarify the approach followed for the preparation of EPPs for the Rogun HPP, which are being developed successively for each impoundment level planned during construction. Key points expected in the 2025 ESIA include: • Per ESS4 requirements, an EPP will be developed at least 12 months prior to each level of impoundment, and then activated. This means there will be construction stage EPPs and a final EPP when the dam reaches full supply level (fsl). Given that the Rogun HPP is located at the top of the Vakhsh River cascade, the Government is also preparing an EPP for the whole cascade. Before being finalized, the EPPs will be thoroughly reviewed by the DSPOE, the Bank and other development partners. • Following this approach, the current construction stage EPP for the Rogun HPP (at reservoir water level elevation of 1,100 masl and a dam crest at 1,110 masl) shows that a dam break will not result in dam failure risk downstream of Nurek, including for the Nurek dam. • Where potential risks are identified downstream of Nurek HPP, appropriate emergency action plans and mechanisms will be established in coordination with the national and local governments, including activation of warning systems. Local communities will receive suitable communication materials, such as posters and brochures, that will describe emergency response procedures so that they are familiar with potential hazards and required actions in emergencies well before occasions warranting such actions might arise.
18	Complainants' communities have not received any information about the expected socio-environmental impacts of the project, the ESIA materials are not available in Uzbek, Karakalpak and Turkmen languages, complainants are not aware of any consultations or surveys conducted in their potentially affected regions in the process of preparing the ESIA. A failure to provide such information is a violation of national legislation and requirements of international law, e.g. the Aarhus	Consultations with the governments and CSOs of riparian countries on the impacts of the Rogun HPP have been going on for some time (see Item 3 above), and E&S documents have been shared with participants. The CSOs say they have shared information on the meetings with stakeholders in local languages. Upon the Bank's re-engagement with the Rogun HPP, the Government of Tajikistan, with support from the Bank, initiated discussions with riparian state governments and CSOs (except for Afghanistan, as, at present, diplomatic relations have not been re-

No.	Claim	Response
	Convention. The lack of reliable information in the ESIA about the consequences for the lower reaches of the river in different scenarios for the use of the Rogun HPP deprives members of the complainants' communities (and local authorities alike) of an opportunity to plan for the future, to make informed choices between attempts to adapt to environmental deterioration or migration from their homes.	established between the countries). Information on these discussions has been posted on the Rogun PMG's website. It should be noted that each riparian government is responsible for notifying its affected population about any downstream impacts of the Rogun HPP. Management acknowledges that the 2023 ESIA has not yet been made available in the Uzbek, Karakalpak or Turkmen languages. The working language of the discussions among the riparian countries has been Russian. The Uzbek and Turkmen governments are aware that the documents are available in Russian on the Rogun PMG's website. At the October 2024 consultation in Tashkent, the Uzbek government and CSOs commented on the ESIA. Once the 2025 ESIA is disclosed, the riparian governments will be able to carry out consultations in local languages, and the Bank has offered to support this process. Key issues will include downstream water flows and emergency preparations should the Rogun HPP or any of the dams on the Vakhsh cascade fail.
19	For the Complainants and other residents of our countries, the project documents do not provide for compensation measures and damage compensation mechanisms for cases where negative impacts below the cascade cannot be avoided. The project documentation neither provides a venue for filing compensation claims for losses in case of a dam burst or malfunctioning.	***Management wishes to clarify that the Rogun HPP Project is providing compensation only to people in Tajikistan who are physically and economically displaced as a result of the Rogun HPP construction and filling of the reservoir in line with ESS5 (i.e., the communities that would be under water and/or face dam safety issues)***. Due to security concerns, dam safety plans, including the EPPs, are not publicly disclosed as noted above in Items 4 and 17. The Rogun HPP Project's GRM (as set out in the SEP) includes a channel for complaints to the Rogun PMG from riparian countries, international and national NGOs and CSOs and all other stakeholders. Complainants can contact the PMG at the following addresses (Online: esia.rogun.hpp@gmail.com; Website: https://energyprojects.tj/index.php/en/rogun-hpp; Telephone: ++992 37 235 74 16 or +992 37 235 74 17; or by mail: Grievance Manager, Project Management Group for Energy Facilities Construction. 5/1 Shamsi str., 6th floor, 734064, Dushanbe, Tajikistan). The Stakeholder Engagement Lead in the PMG is responsible for collecting and managing grievances from these stakeholders. The Rogun PMG will consider such complaints and respond to them in a timely way. If the outcome is not acceptable, the complainant may proceed to the second tier of the GRM.

No.	Claim	Response
20	We expect that the project could create a migration/displacement crisis in the already disadvantaged Amu Darya basin from the upper reaches of the Vakhsh to the very lower reaches of the Amu Darya. More than 50 thousand people will be forcibly resettled from the Rogun reservoir bottom in Tajikistan and more will migrate from downstream areas (e.g. in Turkmenistan and Uzbekistan) experiencing the loss of livelihoods due to redistribution of water flows caused by the creation of the Rogun HPP reservoir upstream, with many of those searching for places to live, new jobs, in surrounding countries (e.g. Uzbekistan, Kazakhstan and Turkmenistan) and potentially creating socio-economic pressures and igniting civil unrest. In the lower reaches of the Amu Darya, the number of potential migrants and economically deprived people will depend on the modes of operation of the Rogun hydropower reservoir as the regulator of the whole Vakhsh Cascade in different periods of water availability.	The DFZ has been tracking project-affected people resettled to date. None have moved to Uzbekistan or Turkmenistan. The vast majority have resettled on land provided to them by the Government, where they have built houses and structures with the compensation they have received. In some cases, DFZ says project-affected people have opted not to receive land, but to take their cash and move to cities throughout Tajikistan. Management offers these clarifications, while reiterating that resettlement is occurring within Tajikistan's territory and no Requesters are from Tajikistan.
21	The impending changes in the Vakhsh River flow and its impact on the lower reaches of the Amu Darya, as well as the contribution of these changes to the cumulative impacts and their effects associated with other projects in the Amu Darya basin are of major concern. Lack of information on potential impacts does not allow both the authorities of the riparian countries and local communities to develop adequate countermeasures and adaptation to the potential negative consequences of the construction of the Rogun hydropower station. However, it is projected by the World Bank's "Uzbekistan - Country Climate and Development Report." that just in the agricultural sector of Uzbekistan adaptation of the irrigation system to water scarcity through 2030 will cost additional US$8.7 billion (mostly in Amu-Darya basin. Stating that the World Bank clearly	See Item 5 above on the CIA. ***Additionally, given the nature and location of the Rogun HPP on the Vakhsh River, a tributary of the Amu Darya River (an international waterway), OP 7.50 was triggered for both Projects***. The usual riparian notification procedure was followed. In accordance with the policy, riparian notification letters and all relevant information about the Projects were sent to Kazakhstan, the Kyrgyz Republic and Turkmenistan in September 2023, to Afghanistan in October 2023 and to Uzbekistan in December 2024. Three of the countries confirmed that they had no objection to the Bank proceeding with processing the Projects further. Another country responded disagreeing with any existing, planned, ongoing or potential water uses that might impact its current, ongoing and future legitimate water uses in the shared basin. One other country emphasized the need to adhere to environmental and safety standards, and the rational use of the region's water resources. To address the riparians' concerns, the Government of Tajikistan has committed to adhering to existing water sharing arrangements, maintaining seasonal flow regimes, and ensuring that no

No.	Claim	Response
	points to a direct causal link with development of upstream reservoirs: "*transboundary allocation issues and poor regional cooperation have made it challenging to coordinate the planning and operations of such (water) infrastructure, while the unplanned and regionally uncoordinated development of infrastructure in upstream regions amplifies the risks of water shortages for downstream regions.*"[12] Other dependent sectors like municipal water supply, health system, etc. will also confront water scarcity and resulting decrease in its quality, which in turn will decrease the overall living standards and increase climate adaptation costs in our communities.	appreciable harm is caused to any of the downstream riparian countries, as well as providing data transparency. These commitments are legally binding and enforceable since they are reflected as covenants in the Financing Agreement. Based on this, and following its own assessment, the Bank concluded that the Projects would not result in appreciable harm to the other riparian countries and would not be harmed by other riparians' potential water use. Accordingly, the Projects have been and will be processed under paragraph 8(c) of OP 7.50. The Uzbekistan Country Climate and Development Report (CCDR) highlights significant challenges related to water availability, driven by climate change impacts such as extreme temperatures and erratic precipitation patterns. These challenges include a high risk of water shortages, and the need for climate-resilient irrigation practices. The report emphasizes the importance of sustainable water and land use to maintain ecosystem services and suggests that investment in adaptation measures will support broader regional water conservation efforts. The CCDR emphasizes the need for investment in climate-change adaptation measures to build resilience against water scarcity and to support regional coordination and approaches for enhanced water conservation. These issues are independent of the Rogun HPP, which is not directly linked to the water availability concerns outlined in the CCDR. See also Item 5 above on the CIA
22	The Complainants state that the upcoming threats of water shortages, a decrease in water quality, changes in the mode of water supply will irreversibly change their environment, cause irreparable damage to the biological diversity of the region, the culture of local communities and can lead to the collapse of the region's economy, which is based on irrigated agriculture, giving rise to unemployment, poverty, as a consequence of environmental and economic migration from the region. Impacts of Rogun HPP coupled with other water infrastructure planned in the basin may eventually make anthropogenic agricultural ecosystems	***There will be no material adverse effects on downstream communities since the water flow downstream of the Nurek dam will remain unchanged.*** Please refer to Items 2 and 5 above. Regarding cultural aspects, the cultural heritage impact assessment under the 2023 ESIA focuses on direct impacts from preparatory works, resettlement, and flooding, and indirect impacts from land slippage and landscape alteration. Mitigation measures in the CHMP include evaluating, excavating, recording, and relocating resources in the flooding zone and risk areas. The CHMP addresses impacts on intangible cultural resources and sacred sites, ensuring stakeholder consultation. Successful implementation of the CHMP is expected to mitigate significant residual impacts on

[12] **Uzbekistan - Country Climate and Development Report.** November 2023 https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099111423124532881/p1790680f452f10ba0a34c06922a1df0003

No.	Claim	Response
	reach a threshold in resilience capacity, after which the current socio-economic system will collapse and migration flows will become massive and irreversible. (For a more detailed explanation of the expected changes, see the Appendix I)	cultural heritage. The CHMP is a condition of disbursement.
23	At the same time, the Rogun hydroelectric power station is presented by proponents as a reliable cost- effective optimal way to put an end to power shortages in winter and reduce greenhouse emissions in the region, while, when analyzed objectively, it looks like one of the most expensive and time-consuming "false solutions" which contradicts basic principles of climate justice. In September 2024 the ADB project paper clearly confirms that costs of Rogun electricity far exceed present values.[13] Expensive energy produced at Rogun HPP and exported to the region will increase electricity bills for the vulnerable population of the countries, such as Uzbekistan and Kazakhstan. Officials of those countries are being lured into signing long-term power purchase agreements for energy, most of which will be available only in a decade or two after the Rogun HPP completion. The Complainants see that inflation has increased in Tajikistan, where electricity tariffs are soaring in order to achieve "production cost recovery"[14] and citizens there are encouraged by authorities to switch back to coal and other dirty energy sources for heating purposes. The Complainants believe that the bet on completing the Rogun hydroelectric power station with the "world's tallest dam" (335 meters) will	By 2050, electricity demand in Central Asia is projected to double under a business-as-usual scenario (without decarbonization targets). Under the decarbonization scenario (with a power sector net-zero target by 2050), demand could nearly quadruple, to support the electrification of end users such as buildings, transportation, and industry. To meet this rising demand through low-carbon development, a significant scale-up of VRE sources, including solar and wind, is essential. Their share in the electricity mix is expected to increase to about 40 to 50 percent by 2050, up from 3 percent in 2024. This translates to around 20 GW of additional variable renewable energy capacity. Complementing this, hydropower capacity in Central Asia will need to double by 2050. Hydropower will not only provide clean energy but also offer crucial balancing services to seamlessly integrate a large share of VRE at the regional level. The synergy between hydropower's stability and the variability of solar and wind power will be instrumental in ensuring a stable and sustainable energy supply. The cost of electricity generated by the Rogun HPP remains highly competitive compared to alternative baseload sources, making it a part of the least-cost supply options for both Tajikistan and the broader Central Asian region. Power Purchase Agreements with Kazakhstan and Uzbekistan have been negotiated following commercial practices, with energy already available during the construction period at a competitive cost. Electricity tariffs across Central Asia remain below cost recovery levels. This creates perverse incentives and results in implicit subsidies to fossil fuels, especially in the heating sector. Governments across the region are targeting cost-

[13] "The sustainability risk for Barqi Tojik is considered substantial due to the higher cost of energy purchases from independent power producers and the **Rogun HPP**. These costs exceed the tariffs Barqi Tojik receives for domestic sales and, in some cases, even surpass the revenue obtained from export sales." Reconnection to the Central Asian Power System Project - Additional Financing: Report and Recommendation of the President https://www.adb.org/projects/documents/taj-52122-002-rrp

[14] On the role of rising electricity tariffs in inflation see: **World Bank. July 2024. Tajikistan Economic Update:** **https://thedocs.worldbank.org/en/doc/32cdc98fe3e6e0120eb15b05aa2b9faa- 0080062024/original/Tajikistan-Economic-Update-Summer-2024-en.pdf**

No.	Claim	Response
	push the development of Central Asian power systems onto a high-emissions path by promoting the most expensive and time-consuming decarbonization methods, thus closing opportunities to pursue much cheaper alternatives which could be built much faster (e.g. wind and sun). The exports of expensive energy produced at Rogun HPP could significantly increase electricity bills for the population of the countries purchasing power from Rogun HPP compared to other possible decarbonization scenarios. Besides electricity systems of Central Asia are prone to catastrophic blackouts, often caused by malfunctioning of large generation units.[15] Adding giant Rogun Hydro as a large single source of maneuvering capacity may increase a risk for all countries involved in case of its malfunctioning. This will negatively affect the livelihoods of communities in Uzbekistan, where one of the complainants resides.	recovery tariffs to ensure financial sustainability, allowing utilities to cover production and maintenance costs. This promotes reliable and high-quality services, encourages efficient use, attracts investment, and supports environmental sustainability. Additionally, it ensures fair cost distribution among users, preventing cross-subsidization. All subsidy reforms in Central Asia are accompanied by programs to mitigate impacts on the most vulnerable segments of the population. In terms of regional grid stability, hydropower plants, especially those with storage capabilities like the Rogun HPP, can quickly ramp up or down their power output to match system fluctuations, strengthening regional grid stability.
24	In the view of the history of environmental degradation in the Aral Sea region and risks/harms described above, the complainant expect serious negative environmental consequences from the Rogun HPP Project to affect them personally, their communities and wider downstream environment in Uzbekistan and Turkmenistan where 8 to 10 million people living in the zone of influence of the Amu Darya River, including dependent canal systems (Karakum, Karshi, Amu -Bukhara).	***Management acknowledges that the Request raises important regional E&S concerns about impacts from the existing HPP cascade in the Vaksh river and from investments in the region's river basins.*** However, there are no indications that these concerns are actually linked to the Project based on the assessments and studies carried out on the Rogun HPP since 2014. Please refer to item 5 above.
	Failures to Comply with World Bank Policy Requirements and Procedures	
25	The project is subject to the World Bank's 2018 ESF, including its Environmental and Social Standards (ESSs). Neither the World Bank nor the borrower has met the	The ESF is a set of standards that provides a flexible approach and continuous improvement for the management of E&S risks. Specifically, the ESF provides flexibility in terms of the documentation acceptable at the time of project appraisal

[15] https://caneecca.org/en/the-winterstans/

No.	Claim	Response
	requirements of ESS1, ESS3, ESS4, ESS5, ESS6, and ESS 10. The World Bank also violated requirements of the ESP and failed to adhere to the ESF "Vision". The borrower's environmental and social management plan (ESMP) does not contain practical mitigation measures, even for the items marked in the ESIA TOR as requiring mitigation.[16] It also does not follow the logic and present full contents prescribed by the ESS1. Major deviations from the requirements of the ESS1 are also found in the draft Environmental and Social Commitment Plan (ESCP), which does not contain key obligations necessary to mitigate potential impacts and is largely devoid of clear substantive requirements beyond promises to compile in future action plans prescribed by policies. From our perspective, we cannot understand how the World Bank could ever use it to keep the Borrower accountable, which is the prime purpose of ESCP. Since the completion of the previous ESIA in 2014 the Borrower has not effectively implemented mitigation and monitoring measures to meet the requirements set forth in the World Bank approved E&S documents and no solid plans are presented now for the finalization of the current ESIA and ESMP.	and Board presentation. Paragraph 51 of the ESF Policy states that "The Bank will disclose documentation relating to the E&S risks and impacts of High Risk and Substantial Risk projects prior to project appraisal. This documentation will reflect the E&S assessment of the project and be provided in draft or final form (if available). The documentation will address, in an adequate manner, the key risks and impacts of the project, and will provide sufficient detail to inform stakeholder engagement and Bank decision-making. Final or updated documentation will be disclosed when available." Consequently, the 2023 ESIA and 2023 ESMP approved by the Bank were disclosed in December 2023 and were deemed to adequately reflect the level of E&S risk the Rogun HPP Project may pose, and to form the basis for meaningful consultation with CSOs and riparian countries. While the drafts provide a useful account of the potential E&S impacts and their mitigation, several other E&S instruments remain under preparation, and others require updating to incorporate feedback gathered during the consultations process. The finalization and disclosure of the 2025 ESIA, 2025 ESMP, updated CIA and other critical instruments are conditions of effectiveness for the Bank's financing. The BMP and CHMP are conditions of disbursement for relevant project activities. Many of the key surveys, such as those on biodiversity, have now been completed, and their findings align with the 2014 and 2023 ESIA prepared by the Government of Tajikistan and financed by the Bank. None of these recent surveys revealed any significant changes that would affect the conclusions previously drawn. The negotiated ESCP forms part of the Financing Agreement for the Rogun HPP Project. It is a legally binding document with specific actions and timeframes designed to address and mitigate the risks identified under the relevant ESSs. The ESCP is a robust framework that comprehensively addresses the E&S risks associated with the Project. The ESCP is aligned with the Bank's ESSs, particularly ESS1, which mandates a thorough assessment and management of E&S risks and impacts.

[16] For example the [Terms of Reference] for ESIA states that Biodiversity Management Plan "*will include working with Rogun and Tigrovaya Balka experts to assess the feasibility of having Rogun release water in a pattern and amount that at least partially mimics previously naturally occurring floods, which ended with the construction of Nurek HPP*". The ESIA does not include results of the feasibility study. The ESMP states that the biodiversity management plan, Fisheries plan, cultural heritage plan, etc. should be disclosed prior to the WB Board review. None of those documents has been disclosed\consulted as of October 20, 2024.

No.	Claim	Response
		Specifically, the ESCP outlines material measures and actions that the Republic of Tajikistan is committed to implementing. It requires not only the preparation, disclosure and adoption of key E&S instruments, but also their application throughout project implementation. The commitments include detailed institutional arrangements, staffing requirements, training programs, monitoring and reporting mechanisms, and grievance management procedures. These elements are designed to ensure that the Project is conducted in a manner that effectively mitigates potential impacts and complies with the ESSs. As an integral part of the Financing Agreement, the ESCP serves as a critical accountability tool. It is subject to regular monitoring and reporting by the Bank and the Rogun PMG, ensuring that all commitments are met. The plan is designed to be adaptive, allowing for revisions in response to project performance and unforeseen circumstances, thereby maintaining its relevance and effectiveness throughout the project duration. ***The legal conditions are meant to ensure that no Bank financing will be disbursed for the Rogun HPP Project until all the relevant assessment and plans are finalized in a manner acceptable to the Bank as per the provisions of the ESF***.
26	Stakeholder Engagement Plan (SEP) has no specific timetable and clear procedures for consultations on the key E&S documents, which are listed as disclosable in the ESIA documentation. As a result no meaningful consultation took place up to date. Some key documents such as Volume 2 of the ESIA (actual full environmental assessment report) and Biodiversity Action Plan and Resettlement Action Plan (RAP#2) have not been disclosed as of 1 February 2024. Stakeholder engagement Plan SEP and associated procedures do not comply with ESS10. Riparian consultations organized in 2023 in secrecy and in absence of valid draft ESIA, have not met basic standards of being accessible and meaningful. Thus, the communities where the complainants live were deprived of the only opportunity to hear about the project and raise	***Management notes the point about the timetable and procedures and is working to ensure that the Rogun PMG updates the SEP, taking into account the forthcoming disclosure of the 2025 ESIA and 2025 ESMP, RAP2 and LRP2, all of which the Rogun PMG and DFZ are working to finalize***. The documents will then be disclosed for consultations. The updated non-technical summary will also be disclosed in the national languages of the riparian countries, along with relevant material on downstream impacts. To ensure the involvement of relevant stakeholders in the November 2023 riparian consultations, the Prime Minister of Tajikistan sent official invitations to the governments of Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan requesting them to facilitate the participation of the government officials and CSO representatives in the consultations. Given the challenges for the Government of Tajikistan to host consultations in riparian countries, the Bank has been facilitating the organization of consultations with government and CSO representatives.

No.	Claim	Response
	questions. The SEP also has no integration of a contextual reprisal risk assessment, meaning there is a complete lack of recognition of the repercussions facing those who may raise questions. In effect the SEP does not acknowledge, let alone mitigate, the potential risk for anyone to raise their voice about the project, and the associated potential for harm in this context that is well documented to be one of the most repressive on the planet today.	Please refer to Item 3 above for further details. The SEP's objectives include commitments to "consult with stakeholders to determine their views regarding impacts and implications" and to "provide sufficient opportunity for stakeholders to express their opinions and concerns." Its principles include the following: "Encourage stakeholders to share their thoughts, concerns, and feedback without fear of reprisals. Active listening is essential during these interactions." The GRM section of the SEP adds that "Participants in the GRM must be free from reprisal, whether from authorities, Rogun HPP, DFZ, communities, or other community members." The November 2023 riparian consultation in Almaty and the October 2024 riparian consultation in Tashkent included candid comments from stakeholders about their concerns regarding the Rogun HPP downstream impacts. The SEP also provides information on the Bank's Grievance Redress Service, to which individuals who believe the Rogun HPP Project has negatively impacted them can make a complaint.
27	Given factors above we believe that the current project documentation does not comply with the World Bank's policy requirements, while the World Bank management does not undertake sufficient efforts to make it happen. [Appendix II] on Correspondence with the World Bank Management contains the detailed analysis of non-compliance undertaken by the CSOs and sent to the leadership of the World Bank in October 2024. The same analysis also available at a special website dedicated to the Rogun HPP Project: ***https://rogun.exposed/non-compliance***	***Management considers timeframes for the preparation of the E&S instruments for the Rogun HPP Project are consistent with paragraphs 51 and 52 of the ESF.*** The ESF is a set of standards that provides a flexible approach and continuous improvement to the management of E&S risks. Specifically, the ESF provides flexibility in terms of the documentation acceptable at the time of project appraisal and Board presentation. Paragraph 51 of the ESF Policy states that "The Bank will disclose documentation relating to the E&S risks and impacts of High Risk and Substantial Risk projects prior to project appraisal. This documentation will reflect the E&S assessment of the project and be provided in draft or final form (if available). The documentation will address, in an adequate manner, the key risks and impacts of the project, and will provide sufficient detail to inform stakeholder engagement and Bank decision-making. Final or updated documentation will be disclosed when available." Consequently, the 2023 ESIA and 2023 ESMP approved by the Bank were disclosed in December 2023 and were deemed to adequately reflect the level of E&S risk the Rogun HPP Project may pose, and to form the basis for meaningful consultation with CSOs and riparian countries. As noted in Item 25 and elsewhere, finalization, disclosure, and adoption of key E&S documents are conditions of effectiveness or

No.	Claim	Response
		disbursement for the Rogun HPP Project. ***The legal conditions are meant to ensure that no Bank financing will be disbursed for the Rogun HPP Project until all the relevant assessment and plans are finalized in a manner acceptable to the Bank as per the provisions of the ESF***.
	How the Harm Could Be Avoided	
28	1. To be useful for identifying and preventing harms, it is critical that the ESIA and all E&S tools should be extended to assess thoroughly downstream impacts all the way to the Amu Darya Delta - including its confluence with the Aral Sea and its rural periphery with oases vulnerable to droughts – in terms of forecasting the flow regime at each downstream river stretch as well as its dependent components: freshwater biodiversity, ecosystem processes (services) of the river, local communities and their river-related socio-economic activities (e.g. irrigation). All probable scenarios of water regulation by Rogun HPP and the cascade on downstream areas in Amu Darya Basin should be considered in the impact assessment. Cumulative Impact Assessment should not substitute for the specific assessment of Rogun HPP impacts on riparian countries and downstream ecosystems, but seriously consider and model how Rogun impacts may amplify those of new large water infrastructure projects in downstream areas, where we are already witnessing severe water stress. All this should be done in the context of a full spectrum of plausible climate change scenarios. The E&S instruments should include the study of the very feasibility\ probability of future fulfillment of the old, largely outdated, water-management agreements signed in the 1990s between post-Soviet riparian countries (excluding Afghanistan) and identify adjustments and improvements in those agreements necessary to de-risk basin-wide water management under alternative	***Management notes that the updated CIA is expanding its spatial coverage to take into account the entire Amy Darya Basin***. Its preliminary results point out that the Rogun HPP will not have further impacts to the Aral Sea or the downstream stretches of the Amu Darya River. Specific scenarios assessed in the updated CIA include the following: Scenario 1: present situation as the baseline scenario, which assumes that all countries in the Amu Darya basin would continue to use their share of Amu Darya water as they have done so far. Scenario 2: Tajikistan using the full share allocated to it by ICWC/BVO agreements, with the consequence that the 1.2 km³ of water not used so far on average would no longer be available for downstream users. Scenario 3: rapid reservoir filling. This scenario assumes that the Rogun reservoir would not be filled with the thus far unused water over a period of up to 16 years, but would be rapidly filled within three years, retaining 3.3, 5 and 5 km³ of water in three consecutive years, afterwards returning to a normal operation pattern as per Scenario 2. Scenario 4: additional shift of water, assuming that, once the reservoir is filled, the Rogun HPP would shift an additional 5 km³ of water per year from summer to winter, with the aim of maximizing winter electricity generation. In addition to the negative effects of the filling period mentioned above, Scenario 5: Qosh-Tepa, is like Scenario 4, but assuming that in addition to that, Afghanistan would divert a yearly volume of 10 km³ of water through this canal. For further details, see Item 5 above. Any recommendations from the CIA regarding the potential contributions of the Rogun HPP Project to cumulative impacts will be integrated into the revised ESMP. Biodiversity conservation is integrated into the Rogun HPP Project, in line with the ESF. The BMP is under preparation and will be disclosed for consultation when ready. Its completion, disclosure, and adoption are conditions of disbursement for the

No.	Claim	Response
	development scenarios in the completely new climatic, economic and geopolitical situation of mid-21 century.	relevant project activities. Field surveys have not identified critical habitats. In line with ESS6 of the Bank's ESF, the BMP will include a no net loss plan for the protection of juniper woodland and floodplain areas. Additionally, environmental flow regimes are being designed to protect downstream ecosystems.
29	2. As the affected community members, the complainants would have expected that international financial institutions would have supported robust analysis of alternatives based on the most up to date, scientifically, environmentally, socially and economically sound data, including a no project option in accordance with ESS1. This not a formality, but a necessity, since expected socio-ecological impacts downstream and those from resettlement are directly associated with the size of the reservoir, while potential decarbonization efforts may be uneconomical and counterproductive due to high cost of the electricity produced by the Rogun HPP project. First of all, it should consider options for the Rogun Project completion which downsize the dam height and allow to use saved resources to diversify Tajik energy system over-reliant on hydropower (for example see the CSOs' study).[17] Analysis of alternatives should also include comparison of different operation regimes possible at Rogun HPP to be able to assess the full range of negative impacts and benefits it can bring to downstream communities and the ecosystems of the Aral Sea basin. Another aspect that requires attention is additional financial and energy allocations that will be needed for mitigation measures in irrigation, municipal supply, healthcare, other sectors. Decisions on the plan for Rogun HPP Project completion should be based on the outcomes of the analysis of	***Management notes that the analysis of alternatives carried out for the TEAS concludes that the Rogun HPP stands out as a least-cost solution for providing clean and affordable electricity to Central Asia. Upon the Bank's re-engagement with the Rogun HPP; this was confirmed by extensive regional modeling work carried out by the Bank during project appraisal (see Item 23 as well).*** Alternatives to the Rogun HPP, including different dam heights and other renewable technologies, were thoroughly assessed during the TEAS financed by the Bank between 2011 and 2014, and during the Financing Options Study in 2021 and project appraisal (see item 23 as well). The highest dam alternative was selected based on its superior economic performance (see below for further details). Updated analysis performed during project appraisal confirmed that the Rogun HPP remains the least-cost solution for providing clean and affordable electricity, supporting the region's transition to a low-carbon future. The Rogun HPP Project is designed to significantly increase the supply of renewable energy, thereby reducing reliance on fossil fuels and supporting the region's low-carbon development goals. According to extensive regional modeling done by the Bank, the Rogun HPP, along with other large-scale hydropower projects, is expected to displace gas- and coal-fired generation, and provide stability services to further enhance the development of variable renewable energy, leading to substantial environmental and economic benefits. Moreover, the cost of electricity generated by the Rogun HPP remains highly competitive compared to alternative baseload sources, making it a part of the least-cost supply options for both Tajikistan and the broader Central Asian region. This is crucial for meeting the increasing power demand and supporting economic growth and development aspirations of the region. The Rogun HPP Project's ability to export surplus electricity to neighboring countries like

[17] Report on Analysis of Alternatives: What is more efficient than "the tallest dam in the world"? sent to all WB Executive Directors in December 2024 https://rivers.help/pdf/2024_En_The_tallest_dam_in_the_world.pdf

No.	Claim	Response
	alternatives.	Kazakhstan and Uzbekistan further underscores its role in enhancing regional energy security and cooperation. Alternative Dam Heights The TEAS evaluated various dam height alternatives to determine the most suitable option for the Rogun HPP Project. Three full supply levels (fsl) at masl were considered, corresponding to dam heights of 335 meters (fsl of 1,290 masl), 300 meters (fsl of 1,255 masl), and 265 meters (fsl of 1,220 masl). Each height was analyzed for different installed generation capacities, ranging from 3,600 MW to 2,000 MW, resulting in a total of nine alternatives studied. The TEAS concluded that any of the alternatives could be built and operated within international safety norms, provided that specified design modifications and mitigation measures are implemented. The highest dam alternative, at 1,300 masl (fsl of 1,290 masl), was found to offer the greatest benefits across most economic sensitivities. The TEAS recommended the highest option due to its superior performance in terms of energy generation and overall beneficial impact on the Tajikistan electricity system. Despite the higher resettlement impact. the Government's choice of a higher dam height was justified due to several key factors: • Economic benefits: The highest dam option (335 meters) was found to provide the largest system cost savings and overall economic benefits. The economic analysis showed that this option would have a significant positive impact on Tajikistan's electricity system, making it the most beneficial in terms of energy generation and cost efficiency. • Technical and dam safety considerations: The TEAS concluded that the highest dam option could be built and operated within international safety norms, provided that specified design modifications and mitigation measures are implemented. This option was technically justified considering the long-term safety and operational efficiency of the dam. • Social impact mitigation: Although the highest dam height would result in a larger number of people to be resettled, the 2014 ESIA identified measures to mitigate the impacts of such resettlement. The RAPs include compensation for lost assets,

No.	Claim	Response
		construction of replacement houses, and livelihood restoration measures to help affected households rebuild their lives in the new locations. • Environmental aspects and sustainable life of investment: The highest dam option was also considered the most sustainable in terms of the long-term life of the asset. The sedimentation study estimated that the Rogun HPP would have a lifespan of around 115 years, significantly reducing the sediment filling rate of the Nurek reservoir and ensuring continued river regulation for an extended period. • Trade-offs and sensitivities: The TEAS considered various trade-offs between the different dam height options, including financing risks, macro-economic implications, social and environmental impacts, and opportunities for institutional arrangements and mutual benefits among countries. The highest dam option generally showed the greatest benefit across most sensitivities, making it the preferred choice despite the higher resettlement impact. In summary, the decision of the Government to opt for the highest dam height was based on a comprehensive evaluation of economic, technical, environmental, and social factors, with a focus on maximizing the overall benefits while implementing measures to mitigate the resettlement impacts. The Government acknowledges that the choice of a higher dam will result in increased physical and economic displacement around the dam and the reservoir and has committed to identifying and providing choices for suitable resettlement sites, drawing on consultations with project-affected people and taking into account safety and land-based livelihoods. To the extent possible, the Government aims to avoid resettlement, particularly among the communities further away from the inundation zone. The Rogun Financing Options Study, completed by the Bank in 2021, further assessed these dam height options and confirmed the rationale for selecting the tallest height. The study highlighted that the tallest dam option (335 meters) would yield the largest system cost savings and provide the most significant benefits in terms of energy generation and economic impact. The tallest height was selected because it maximizes the hydropower potential, ensuring a longer lifespan for the reservoir (100+ years) due to reduced sedimentation rates, and providing enhanced flood protection downstream

No.	Claim	Response
		(thus providing enhanced protection to Tajikistan and riparian countries from increased flood risks resulting from climate change impacts). Additionally, the tallest dam height supports the strategic goal of exporting surplus electricity to neighboring countries, thereby enhancing regional energy security and cooperation. The study also concluded that, with over a third of the Rogun HPP already completed, decommissioning and mitigation of risks to the Vakhsh cascade would involve substantial additional costs and investments needed to replace the energy expected to be generated by the Rogun HPP, and result in significant foregone revenues from electricity exports, making non-completion a non-viable option at this stage.
30	3. Public participation should be fully implemented in all riparian countries in a manner that protects members of civil society from retaliation. After analysis of alternatives and additional assessments of downstream impacts omitted in current ESIA, the project proponents must conduct broad consultations with downstream communities in all riparian countries, especially in potentially affected areas, including appropriate presentation of findings in national languages, languages of minorities (e.g. Karakalpak) and Russian, as common language for transboundary communication in the region.	The Government of Tajikistan, with support from the Bank, has held consultations with riparian government and CSO representatives. Since 2011, the Government of Tajikistan has held several high-level meetings with riparian governments and CSO representatives to discuss the downstream impacts of the Rogun HPP (see Item 5 above). The Bank has offered support in facilitating meetings in riparian countries and providing materials in local languages, once they have been finalized and disclosed on the Rogun PMG's website. Since the Bank's re-engagement with the Rogun HPP through the Rogun Projects, the Government of Tajikistan held consultations in Almaty, Kazakhstan, on November 8-9, 2023. These meetings involved information-sharing and consultations with riparian national and regional governments, CSOs and scientific organizations from Kazakhstan, Kyrgyz Republic, Turkmenistan and Uzbekistan. The meetings focused on relevant riparian issues in the 2023 ESIA. The aim was to gather feedback to inform project design and respond to questions and concerns from a wide range of stakeholders. Many of the questions and comments from the participants were focused on the water flows from the Rogun HPP and their possible downstream impacts. Stakeholder comments were taken into account in the 2023 ESIA, which was disclosed in December 2023. The report of this consultation is available at energyprojects.tj and is also summarized in the SEP. Participants at the meetings were provided with advance drafts of the ESIA/ESMP. They were also informed about how they could obtain the E&S documents, either through the energyprojects.tj website or by writing to the Rogun PMG to obtain

No.	Claim	Response
		written copies. They were also informed about the GRM and how they could file complaints. Consultations on riparian issues were also conducted in Tashkent, Uzbekistan, on October 28, 2024. Facilitated by the Bank, these consultations involved more than 35 key stakeholders, including the Uzbek government, CSOs, and international NGOs. The discussions addressed environmental, social, and technical issues concerning the riparian countries. The summary of these consultations has been included in the SEP, which has been updated to include additional information on consultations. See also Item 3.
31	4. In the Complainants' opinion, from many possible alternative scenarios of the Rogun HPP Project completion, the priority should be given to those which: a. Guarantee that the Rogun HPP reservoir filling and operation does not exacerbate social, environmental and economic consequences of the Aral Sea Crisis - the largest human- induced ecological disaster in Asia.	***Management notes that reservoir impoundment and operation simulations show that the Rogun HPP can operate without altering historical flow regimes (see Item 6 above).*** The Bank's Financing Agreement (Schedule 2, Section IV.A.3) for the Rogun HPP includes the commitment to comply at all times with the Regional Water Sharing Agreements, including observance of the Annual Allocation (meaning using no more than the agreed and otherwise unused Annual Allocation to Tajikistan), and with the interim Reservoir Management Rules for the Rogun Reservoir. Annual and seasonal allocations for each country are discussed in detail in Item 6 above, which also discusses Tajikistan's commitments on water flows and operation of the Rogun HPP in a manner that will not cause appreciable harm to any of the downstream riparian countries (see also Item 2 in this regard). As Tajikistan must comply with regional water allocations at all times, during drought years, the impounded quantity of water will be reduced to stay within its allocated national water share.
32	b. ESIA and Resettlement Framework should address impacts on and needs of both upstream and downstream communities and minimize numbers of resettled and economically displaced by the project. Most negative impacts (displacement, flow disruption, economic hardships) could be minimized by decreasing the dam height and reservoir volume.	Item 2 above explains how the 2023 ESIA addresses downstream impacts of the Rogun HPP. The RLRF and RAP2 cover the people affected in the project area, as defined in the 2023 ESIA. For the reasons cited in Item 3 above, resettlement instruments for downstream communities are not required for the Rogun HPP Project. Management offers these clarifications, while noting that resettlement is occurring within Tajikistan's territory and no Requesters are from Tajikistan.

No.	Claim	Response
33	c. Develop, prior to financing decision, enforceable equitable agreements between all riparian countries to guarantee that Rogun HPP and other new water infrastructure will not worsen downstream flow conditions for natural ecosystems and local population dependent on irrigation. Fully implement precautions required by the World Bank's operational policy 7-50 "Projects on International Waterways" to allow all riparian countries to make informed decisions in the inclusive and equitable decision-making process.	While it is not within the Bank's remit to change existing agreements between countries, the Bank has worked to support the riparian countries of the basin to develop equitable agreements among themselves. It is important to note that the legal covenants as referenced in Item 6 above require compliance with regional water sharing arrangements, including the annual water allocations and seasonal allocations and releases defined twice a year at the ICWC. The Regional Water Sharing Agreements (1992, Almaty Agreements), which govern water sharing in Central Asia, established the mechanisms by which countries come together and agree on annual water sharing allocations within the ICWC. The seasonal distribution of flows is under the umbrella of the Regional Agreements. Furthermore, as noted already, the Recipient has committed in the Financing Agreement not to cause appreciable harm to any of the downstream riparian countries. Given the nature and location of the Rogun HPP Project, the Bank's OP 7.50 on International Waterways was triggered and the riparian notification procedure was followed, concluding in the Bank's determination that the Rogun HPP Project could go forward. See additional information in Items 21 and 31 above.
34	d. Safeguard floodplain tugay ecosystems (including the Tigrovaya Balka World Heritage) and other critically important biodiversity in the areas downstream from the Vakhsh Hydropower cascade by providing artificial floods: special environmental flow regime with binding agreement to ensure its implementation.[18] Reassess impact of reduced inflow into Amu-Darya Delta during reservoir filling period and its consequences for flora and fauna and make sure the damage is prevented.	The Rogun HPP will not have a material effect on the downstream flow from the Nurek dam. Impacts on the Tigrovaya Balka reserve were caused by the existing Vakhsh River hydropower cascade and occurred before the Rogun HPP development. The tugay forest was already affected, and Rogun will neither improve nor worsen conditions. Please see Item 28 above for further details on biodiversity.

[18] For specific requirements see https://www.researchgate.net/publication/378267865).

<table>
<tr><th>No.</th><th>Claim</th><th>Response</th></tr>
<tr><td>35</td><td>e. Diversify and make climate-proof the development of the renewable energy system of Central Asia to guarantee stable production of affordable electricity based on climate-justice principles.</td><td>Extensive regional modelling work carried out by the Bank during the project appraisal demonstrated that the Rogun HPP stands out as the least-cost solution for providing clean and affordable baseload electricity to Central Asia.

See also Items 23 and 29 above.</td></tr>
<tr><td></td><td>Retaliation or threats</td><td></td></tr>
<tr><td>36</td><td>Given a very problematic record on suppression of civil society activists in all countries of Amu- Darya Basin, the complainants expect that retaliation in some form is highly possible and therefore request strict confidentiality.</td><td>The identities of the Requesters have not been shared by the Inspection Panel and are not known to Bank Management. In any case, the Bank does not disclose the identities of complainants who wish to remain anonymous.</td></tr>
<tr><td></td><td>Contacts with the World Bank Management</td><td></td></tr>
<tr><td>37</td><td>We have opened conversations with World Bank management on multiple occasions, including:

In January-October 2024 complainants and supporting CSOs wrote many letters to the World Bank Management and got unsatisfactory formal answers to some questions, with partly inaccurate information. In particular those were:

1. Request for wider riparian consultations after full ESIA disclosure. January 18, 2024
2. World Heritage and Biodiversity issues 27 February 2024
3. ESIA critique, request to bring up to standard multiple parts of it March 3, 2024
4. New request for improved public participation and full disclosure March 28
5. Rogun HPP ESIA violates Environmental and Social Standard 1 April 2, 2024
6. Resettlement Framework Consultations Critique 4</td><td>Bank Management has responded to letters received by the CSOs. All Bank response letters are listed below and publicly available at: https://www.worldbank.org/en/programs/rogun-hydropower-plant-project/csos

<table>
<tr><th>Date</th><th>Response</th></tr>
<tr><td>March 6, 2024</td><td>World Bank response to Rivers without Boundaries Public Fund</td></tr>
<tr><td>May 3, 2024</td><td>World Bank response to Rivers without Boundaries Public Fund</td></tr>
<tr><td>April 16, 2024</td><td>World Bank response to Rivers without Boundaries Kazakhstan</td></tr>
<tr><td>May 14, 2024</td><td>World Bank response to Rivers without Boundaries Kazakhstan</td></tr>
<tr><td>August 30, 2024</td><td>World Bank response to CEE Bankwatch</td></tr>
<tr><td>October 22, 2024</td><td>World Bank response to Rivers without Boundaries Public Fund</td></tr>
<tr><td>October 22, 2024</td><td>World Bank response to Bank Information Center and other organizations</td></tr>
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July 2024

7. **On lack of civic space and human rights risks. 17 July 2024**
8. **Request for Meetings Prior to Consideration of the Project by the Board. 26 July 2024**
9. **Rogun HPP Project fails to Comply with the Environmental and Social Policy Requirements. 10 October 2024.**
10. **Rogun HPP Project: Analysis of non-compliance with the World Bank Standards (sent to President and the Board, October 2024. Also available in PDF format in English and in Russian) – *World Bank response October 28, 2024***
11. **Letter on the World Bank's involvement in large hydropower projects (23 October 2024) – *World Bank Response,* November 19,2024**
12. **Letter to the World Bank on improper consultations. 8 November 2024 –**
13. **Letter to the WB on November 14 "consultations". November 26 –**
14. **Report on Analysis of Alternatives: What is more efficient than "the tallest dam in the world"? sent to all WB Executive Directors on 6 December 2024 –**

Most responses we got did not contain answers to most of our questions and included some highly misleading arguments. None of substantive requests that we put forward has been followed in substance and most promises made by the Management remain unfulfilled.

See **Appendix II** on the CSO Correspondence with World

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<table>
<tr><td>October 28, 2024</td><td>World Bank response to BIC</td></tr>
<tr><td>December 13, 2024</td><td>World Bank response to Rogun Alert Coalition</td></tr>
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The response letter dated December 13, 2024, includes responses to the CSOs' letter to the Bank on "improper consultations" dated November 8, 2024 and the follow up email to the WB on the November 14 "consultations."

Management had not received the "Report on Analysis of Alternatives: What is more efficient than "the tallest dam in the world"?" prior to the Request for Inspection. Management understands that this document was shared with the Bank's Board.

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No.	Claim	Response
	Bank Management.	

No.	Claim	Response
38	**APPENDIX I (**provided by the local complainants-environmental experts) **MECHANISMS OF THE SOCIO-ECOLOGICAL IMPACTS OF THE ROGUN HPP PROJECT ON THE POPULATION AND ECOSYSTEMS OF THE LOWER AMU DARYA** **Problem Statement** The Rogun hydroelectric power station with a reservoir volume of 13 cubic kilometers is a key factor determining the flow regime in the Amu Darya basin in the future. At one time, the expectation that further redistribution of flow from summer to winter would create a threat of environmental and socio-economic degradation in downstream countries led to significant international tensions between upstream and downstream countries. Today in the Amu Darya basin there are basic legal agreements establishing general principles of water allocation, but there are no agreements that would determine the solution to the entire range of issues related to the coordinated management of water flow at present and in the future after the completion of the Rogun hydroelectric complex. In addition, the current system of agreements does not include the most important prospective water user – Afghanistan. In the context of increasing climate change, all this creates enormous risks of using a new facility with significant damage downstream.	Please see Items 2, 5, 31 and 33.
39	The World Bank in the document "**Key Issues for Further Consideration of the Proposed Rogun Hydropower Project** " back in 2014, it highlighted the shortcomings of the current water flow regulation regime and recommended the development of alternative "cooperative" regimes	The key issues referenced in the cited document were carefully taken into account in the design of the Rogun Projects. For instance, Component 4 of the Rogun HPP Project includes financing for the development of Reservoir Management Rules for the Main Reservoirs in the Vakhsh River basin, including the interim Reservoir

No.	Claim	Response
	(paragraphs 63-70).[19] This document, based on the results of the ESIA and feasibility study of the Rogun HPP 2014 (paragraph 71), emphasizes that "*Under any mode of operation of the Rogun HPP dam, there will be benefits for the riparian countries in terms of the development of additional institutional mechanisms - be it international legal obligations, financial guarantees, or both to ensure that the reservoir will be built, filled, and operated as agreed.*" This statement shows that proper international mechanisms did not exist in 2014 (and new ones have not been created until 2024). In the submitted materials of the 2023 ESIA there are no specific recommendations on the above issues, there are no draft additional water management agreements, there are no prescribed and binding mechanisms guaranteeing the safe and mutually beneficial use of the Rogun HPP in the context of all hydraulic structures of the transboundary basin, and there is no description of actions and mechanisms for eliminating the consequences of damage in case of natural and man-made accidents or disasters, mechanisms for joint coordination of actions in eliminating damage.	Management Rules for the period of Rogun reservoir construction, reservoir filling and operation. Also, please see Item 33 above.
40	Meanwhile, the creation of the Rogun hydroelectric power station will create significant social and environmental problems long before the facility is put into operation. So in the same World Bank document, in paragraph 47, in the context of the impact on the Aral Sea, it is recognized that at the filling stage "*in the case of creating the largest reservoir (option 1290 m), this will lead to an average*	A rapid CIA was included in the 2023 ESIA, which indicated limited downstream impacts, largely due to the legacy effects of the existing cascade on the Vakhsh River. In response to feedback received on the draft, the updated ESIA is updating the CIA to more thoroughly address potential transboundary impacts. The updated CIA is currently being finalized, and its conclusions are expected to confirm the earlier assessment. The updated analysis that is being finalized confirms

[19] https://www.worldbank.org/content/dam/Worldbank/document/eca/central-asia/World%20Bank%20Note%20-%20Key%20Issues%20for%20Consideration%20on%20Proposed%20Rogun%20Hydropower%20Project_eng.pdf

No.	Claim	Response
	annual reduction in downstream flow by 0.83 billion cubic meters annually for 16 years." Moreover, in 2013–2022, the annual inflow into the Amu Darya delta and the Aral Sea averaged 4.1 billion cubic meters.[20]	that water releases downstream of the Nurek Dam—and consequently from the Rogun HPP—are not expected to discernibly alter the situation in the Aral Sea. Hydrology and climate change studies conducted under the TEAS indicated that annual water flow volumes in the Vakhsh River are expected to gradually increase through 2100 due to glacial melt and increased precipitation. Additionally, reservoir operation simulations done as part of the TEAS show that the Rogun HPP can operate without altering historical flow regimes (also acknowledged in the reports from the DSPOE).On the basis of the TEAS and DSPOE reports, the Bank conducted a "no appreciable harm assessment" in March-April 2024, which concluded that filling the Rogun reservoir at an average of 1.2 km^3/year (Tajikistan's historically unused water share) will only impact water availability in the upper Amu Darya Basin (after the confluence of the Vakhsh, Panj, and Kofarnihon Rivers) that is directly available to downstream countries by 2.2 percent, causing no appreciable impact to these countries.[21]
41	Meanwhile, the 2023 EIA declared an almost complete refusal to consider and mitigate the socio- ecological consequences downstream of the Vakhsh cascade of hydroelectric power stations under various possible scenarios for regulating runoff and changes in water availability, including under the influence of climatic factors. Given already unacceptably high degree of environmental and social harms caused by human- induced water infrastructure impacts, the denial to assess and prevent possible harms of the Rogun HPP in the areas downstream of the Vakhsh Hydropower Cascade is likely to lead to multidimensional harms to local communities and nature,	Please see Items 5 and 11 above. The amount of water reaching the southern Aral Sea is largely determined by the amount of water abstracted for irrigation by Afghanistan, Tajikistan, Turkmenistan, and Uzbekistan.

[20] Nazariy A. Changes in annual and seasonal runoff in the Amudarya river basin (report at a seminar in Almaty 04- 05.09.2023): https://rivers.help/pdf/2023Nazariy.pdf
[21] This calculation is based on the comparison of the 1.2 bcm/year impoundment which represents 2.2 percent of the ~54 bcm/year available to Afghanistan and downstream countries, below the confluence of the Vakhsh, Panj and Kofarnihon rivers (just above Qosh Tepa canal diversion).

No.	Claim	Response
	which should be assessed in the context of the Aral Sea crisis. **Aral Sea Catastrophe and Its Legacy** We, who live on the lands washed by the waters of the Amu Darya River, have felt the consequences of the Aral Sea disaster all our lives, triggered by the thoughtless construction of dams, canals and other hydraulic infrastructure, which caused the redistribution of the Amu Darya flow and the destruction of the Aral Sea. Current baseline conditions in our region shaped by this crisis have been completely omitted when planning Rogun HPP Project and drafting the ESIA report. Research results show that due to a reduction in the flow of the Amu Darya, by 2017 in the Muynak district the percentage of saline lands reached 96%, in Karakalpakstan as a whole it exceeded 80% of the area of all irrigated land,[22] and yields fell by half, which led to severe economic consequences for the population of the region.[23] The population of most regions of the lower reaches of the Amu Darya and its delta have been on the brink of extreme physical survival for many years. Among residents of the Aral Sea region (delta of the Amudarya River), the prevalence of eye and respiratory diseases,[24] anemia,[25] diabetes mellitus,[26] respiratory and oncological diseases is	

[22] http://www.cawater-info.net/library/rus/aral_and_prearalie_2017.pdf
[23] https://aral.mptf.uz/site/aralsea.html
[24] https://cyberleninka.ru/article/n/geograficheskie-ekologicheskie-strukturnye-osobennosti-regionov-i-svyazannye-s-nimi-bolezni-naseleniya-yuzhnogo-priaralya
[25] https://cyberleninka.ru/article/n/vliyanie-klimata-na-sostoyanie-zdorovya-naseleniya-priaralya
[26] https://cyberleninka.ru/article/n/vliyanie-klimata-na-sostoyanie-zdorovya-naseleniya-priaralya

No.	Claim	Response
	increasing.[27,28] Since the 1960s, the incidence of coronary heart disease has increased 18 times,[29] pneumonia - 19 times, chronic bronchitis - 30 times.[30] The decline in the quality of drinking water has led to an increase in kidney stone diseases: among the rural population of Karakalpakstan, the incidence of cases has increased by 4.2 times.[31] Extremely high rates of child mortality and morbidity are recorded in the Aral Sea region.[32] [33] According to scientists, at least 46.4% of respiratory diseases in children are caused by air pollution with sulfates due to dust storms caused by desertification of areas of the bottom of the dried-up Aral Sea.[34] Research by Doctors Without Borders (2001–2002) revealed a high prevalence of multidrug-resistant tuberculosis in the Republic of Karakalpakstan (13% of new and 40% of recurrent cases).[35] Environmental threats and the loss of the economic basis of existence simulated population migration from an environmental disaster zone. In 2000, UNHCR reported that, including the Aral Sea regions of Uzbekistan, Turkmenistan, and Kazakhstan, the number of environmental migrants exceeds 50,000 people, but indicated that this is incomplete data. The report provides data from sociological surveys of 1995-1998, according to	

[27] https://cyberleninka.ru/article/n/ekologo-geograficheskiy-aspekt-aralskogo-krizisa-chast-1-razvitie-aralskoy-problemy-ee-izuchenie-otsenka-i-razrabotka-meropriyatiy
[28] https://cyberleninka.ru/article/n/chislennoe-modelirovanie-rasprostraneniya-pyli-s-vysohshey-akvatorii-aralskogo-morya
[29] https://cyberleninka.ru/article/n/geograficheskie-ekologicheskie-strukturnye-osobennosti-regionov-i-svyazannye-s-nimi-bolezni-naseleniya-yuzhnogo-priaralya
[30] https://cyberleninka.ru/article/n/geograficheskie-ekologicheskie-strukturnye-osobennosti-regionov-i-svyazannye-s-nimi-bolezni-naseleniya-yuzhnogo-priaralya
[31] https://cyberleninka.ru/article/n/otsenka-sostoyaniya-zdorovya-naseleniya-priaralya
[32] https://www.dw.com/ru/the-Aral-Sea-problem-will-never-be-solved/a-832279
[33] https://cyberleninka.ru/article/n/problemy-ekologicheskogo-krizisa-aralskogo-morya-i-ego-vliyanie-na-zdorovie-naseleniya
[34] https://cyberleninka.ru/article/n/ekologo-gigienicheskaya-otsenka-okruzhayuschey-sredy-territoriy-prilegayuschih-k-zonam-anthropogennogo-vozdeystviya-v-regione
[35] https://ru.msf.org/article/kazhdyy-den-prinyav-lekarstva-ya-chuvstvuyu-sebya-kak-budto-ya-uzhe-umerla-bolnaya-mlu-tb

No.	Claim	Response
	which 250,000 migrants from the Aral Sea region indicated environmental degradation as the leading reason for migration. The UNHCR rapporteur believes that in dry years, "economic competition for water resources in the Aral Sea zone could lead to the migration of about 300,000 refugees from the Uzbek part of the Aral Sea zone to other regions of Uzbekistan, Turkmenistan, Russia and Kazakhstan."[36] Meanwhile the 2023 UN Country Assessment for Uzbekistan shows grim prospects: "Water availability is expected to decrease by 29.4% by 2030 in the Amudarya basin due to the construction of the Qosh-Tepa canal in Afghanistan, and climate change. As a result, the land area under cultivation in the Amudarya basin may decrease by 18.9%. The estimated impact would be equal to 0.7% of GDP and about 250,000 jobs could be lost in crop production. The Kashkadarya, Bukhara, Khorerzm regions and **Karakalpakstan** will face the biggest impacts from the construction of the Qosh-Tepa canal and, to mitigate these impacts, the adoption of water saving technologies, water tariffs that reflect the scarcity 39, and regional development plans that mitigate disparities in the economic impact have been suggested."[37,38]	

[36] Most probably, the number of migrants from the Uzbekistan portion of the Aral Sea area exceeds 50,000 people. Data obtained in the course of the social surveys performed in 1995-1998 showed that for the quarter of a million migrants from the Aral Sea area, the primary reason for migration was their concern about the quality of the environment. In the years of scant precipitation, economic competition for water resources in the Aral Sea area could potentially cause migration of about 300,000 refugees from the Uzbek part of the Aral Sea area to other regions of Uzbekistan, Turkmenistan, Russia, and Kazakhstan. UN High Commissioner for Refugees, 2000, Aman A. Population Migration in Uzbekistan. P. 20. https://digitallibrary.un.org/record/539486?ln=es&v=pdf

[37] https://uzbekistan.un.org/sites/default/files/2024-02/2023%20Uzbekistan%20CCA%20Update_Final.pdf

[38] For comparison, the World Bank's recent report predicts: *"Already limited water resources are projected to decline in Uzbekistan. By 2050, water resources are projected to decline in Syr Darya (by 5 percent) and Amu Darya (by 15 percent) as the glaciers feeding the two rivers recede, even in the 2°C warming scenario. Forecasts project that a 2°C increase would shrink glacier cover by half and a 4°C increase would shrink it by more than three-quarters. For some catchments, estimates project an even steeper*

No.	Claim	Response
42	**Mechanisms underlying the Environmental Disaster** Our education, knowledge, work experience (30 years or more), sense of responsibility to our communities and nature, allow us to assess the wide range of real and potential threats posed by the Rogun hydroelectric power station project for the middle and lower reaches of the Amu Darya basin. In this regard, we attach a brief description of the possible mechanisms of change predicted for the worst-case climatic and socio-political scenarios, which must be considered in any ESIA. We believe that in the Amu Darya basin, <u>the processes of natural and anthropogenic desertification</u> <u>and ecosystem degradation will significantly accelerate</u> due to the combination (synergy) of several cumulative effects caused primarily by the construction of the Rogun hydroelectric station: (I) combinations of planetary processes of climate change, including an anomalously large warming gradient in the Central Asian region [3]and a decrease in the Amu Darya flow due to the second cumulative effect:	Please refer to Item 2 above.
43	(II) reduction of the Amu Darya flow due to the filling of the reservoir of the Rogun hydroelectric station and the sub-synchronous development of the new irrigation area by the Kosh-tepa canal (see below/separately),	***The updated CIA includes a scenario taking into account the Qosh Tepa canal. However, construction of the Qosh Tepa Canal is beyond the control of the Rogun HPP Project, as the canal is being built by Afghanistan***. The Qosh Tepa canal is designed to divert from 10 to 13 billion cubic meters per year (bcm/y) from the Amu Darya every year, while the impoundment of the Rogun HPP will represent 1.2 bcm/y only during the impoundment period and is within the agreed Tajikistan annual

decline of 30–40 percent in water availability by 2050".**Uzbekistan - Country Climate and Development Report.** November 2023 https://documents.worldbank.org/en/publication/documents- reports/documentdetail/099111423124532881/p1790680f452f10ba0a34c06922a1df0003

No.	Claim	Response
		allocation. Each year Tajikistan comes together with the other Central Asian countries in the ICWC to agree on the annual water allocations for each country and minimum ecological flows to the Aral Sea (based on existing agreements). However, the Qosh Tepa canal in Afghanistan is beyond the control of these water sharing agreements and of the Rogun HPP Project.
44	(III) pollution of the Amu Darya waters with salts washed out (from the Kosh-Tepa massif) and agricultural (IV) waste (residues of fertilizers and pesticides) which cannot be diluted to safe concentrations due to lack of water.	The water of Amu Darya has a high concentration of calcium carbonate, and its content in organic matter is very low, due to the low content of humus in the catchment area. Salt content has increased markedly due to drainage water from irrigated areas and wastewater inflow from settlements. Before 1960, salinity of the Aral Sea was around 1 percent (10 g/l). Due to the shrinking water volume, the salt content started to rise and reached approximately 3 percent (30g/l) in 1990. This development led to a gradual extinction of a large number of invertebrates and of most freshwater fish species in the lake, due in part to detrimental effects of the shrinking lake on spawning areas, but mostly to mortality caused by increasing salinity. Natural reproduction of freshwater fish had stopped completely at a salinity of 14 g/l, which was reached in the mid-1960s. To compensate for this, some marine invertebrates and fish were introduced into the lake, and some of these species developed very well, allowing even for a considerable commercial fishery as a replacement for the original freshwater fisheries (see Plotnikov et al. 2014 for details). Hypersaline conditions (i.e., salt content of >35 g/l, the same as sea water) then led to a gradual decrease in the number of the introduced species of marine invertebrates and fish as well. Since the late 1990s, when salinity reached 60 g/l, the Large Aral Sea has been completely without fish, and only a few crustaceans that are adapted to conditions of such extreme salinity have survived.
45	In this regard, the predictable/stable in volume and regime/schedule flow of the Vakhsh River below the dams of the entire Vakhsh cascade acquires a very high importance in terms of its contribution to the preservation of natural ecosystems and any deviation of these two parameters from historically established ones threatens with fatal, scientifically predictable consequences for the entire Lower Amudarya basin, including all its ecosystems.	Please see Items 2 and 5 above.

No.	Claim	Response
46	**Degradation of anthropogenic agro-ecosystems** Anthropogenic ecosystems—the agricultural lands and unique agglomerations that have developed in the region over many thousands of years—will suffer even more severely and irreversibly. Due to the shift and unpredictability of the distribution of the Amu Darya flow - across construction stages, during the filling of the reservoir and throughout the entire period of operation of the Rogun hydroelectric power station, the flow regimes and volumes will change. The most important activities carried out in the region's agriculture and which will predictably be disrupted are timed to coincide with the existing flow schedule of the Vakhsh and Amu Darya as a whole, which has been established over the years: · Massive irrigation, strictly timed to the various phases of development of the most important agricultural crops, primarily cotton, the basis of the economy of the entire region.	Please see Item 5 above.
47	· Massive leaching of soils and soils from salts accumulated due to evaporation in the previous season, the most important reclamation measures, is also timed to coincide with this schedule. (or from salts accumulated due to evaporation of irrigation water during the previous seasonal cycle).	Please see Item 5 above.
48	· Filling reservoirs in the Amu Darya basin, including the zones of the Karakum, Karshi and Amu - Bukhara canals, the most important event ensuring the sustainability of agriculture and anthropogenic ecosystems in general, is also strictly confined to this schedule/regime.	Please see Item 5 above.

No.	Claim	Response
49	Due to the above changes in the flow regime of the rivers, as well as due to at least three cumulative effects indicated above, mass phenomena will occur in the middle and lower reaches, such as:	Please see Item 5 above.
50	· Land salinization and loss of fertility of large areas, especially on the periphery of oases, which will affect increasingly larger areas due to lack of water for irrigation and reclamation, which will lead to general degradation of agriculture in the region,	Please see Item 5 above.
51	· Desertification of abandoned lands due to lack of water will lead to their withdrawal from agricultural use and the beginning of their involvement in desertification processes, with the final loss of fertility and agricultural value.	Please see Items 2, 5, and 11 above.
52	· Social, as a consequence of the first two - the forced need to change the way of farming due to changes in the flow regime of the Amu Darya and water intake regimes for irrigation and reclamation leaching, as well as their (irrigation regimes) discrepancy with the biological cycles/growth phases of cultivated agricultural plants.	Please see Items 2 and 8 above.
53	**Exacerbation of economic and social problems of the region** The degradation of anthropogenic ecosystems due to the impact of three cumulative effects will lead to the formation of the next, fourth cumulative effect (IV) - the socio-economic situation in the region will sharply worsen, which will cause a drop in the standard of living and a decrease in the quality of life, which will begin to cause an outflow of population from the region, in essence, mass environmental migration: · Decline in living standards (economic parameter).	***Management does not consider that the Rogun HPP will cause the exacerbation of economic and social problems in the region, as set out in Items 54-57.*** The Rogun HPP will provide clean and affordable energy to people in Tajikistan and the broader region, thus opening up opportunities for economic development and growth. For further details see Item 2 above. Management is not aware of studies that would confidently support the conclusions regarding the cumulative impacts cited in the Request. See Item 5 above.

No.	Claim	Response
	Due to land salinization and loss of soil fertility, there will be a sharp reduction in the agricultural production base, which will lead to massive competition for the land fund that has retained its quality/fertility and is provided with irrigation water. People who lose in this competition will be doomed to a sharp decline in income, a drop in living standards, and marginalization due to the inability to find alternative work. Will decrease productivity in rural farms, including a fall production food.	
54	· Decrease in quality of life (physiological parameter). Due to the increase in mineralization (salt content) in the water, the release of salts into the air from dried-out massifs will sharply increase the number of associated diseases, previously described for Karakalpakstan and other regions of the Aral ecological disaster zone, only these phenomena will become much wider.	Please see Item 2 above.
55	· Environmental and economic migration as a consequence of the imposition of cumulative effects. A sharp deterioration in the standard of living and quality of life will force people to environmental and economic migration from the affected area to other, less affected regions of their countries and outside their countries, thereby formalizing the category of "ecological refugees from the region.	Please see Item 2 above.
56	· Loss of cultural diversity and cultural identity. Massive impoverishment of the population, loss of connection with the host environment, participation in migration flows, often uncontrollable and unpredictable, will lead to a sharp decline in the cultural diversity of the region and the loss of cultural identity, cultural ties between communities and within the communities	Please see Item 2 above.

No.	Claim	Response
	themselves due to their physical destruction.	
57	**Degradation of natural ecosystems** The implementation of all planned activities for the construction of the Rogun hydroelectric power station, as well as the combination of the cumulative effects indicated above, will predictably lead to shock and stress conditions in the animal and plant world. In turn, this will certainly lead to a depletion of biological diversity and general degradation of the ecosystems of the Amu Darya basin.	The baseline ecological data collected in the 2023 ESIA and confirmed in its update indicate that there are no endangered species in the project area. Furthermore, the BMP, which is a condition of disbursement and is currently being finalized includes a no net loss plan for the floodplains and the juniper woodland.
58	In particular, the ecosystems of the tugai forests of the Amu Darya floodplain, as particularly valuable ecosystems that are already experiencing colossal anthropogenic pressure, will be threatened with severe degradation and extinction.	Please see Item 13 above.
59	The unique components of biological diversity in the Lower Vakhsh and Amu Darya basins are not identified as valuable components, described or considered in the presented ESIA materials. First of all, these are tracts of floodplain tugai forests, entirely dependent on the flow regime of the rivers of the Amu Darya basin. In 2023, one of them, the Tigrovaya Balka Nature Reserve, was deservedly recognized as a UNESCO World Natural Heritage Site, however, other massifs preserved in specially protected natural areas of the coastal countries downstream are of no less value. In addition, the Vakhsh-Panj-Amu Darya floodplain complex has enormous transboundary value and is an important migration corridor, for example for Bukhara deer, which became the subject of a special protocol under the Bonn Convention on Migratory Animals. In the lower reaches of the Amu Darya there are	Please see Items 11 and 16 above. Several protected tugay sites exist along the course of the Amu Darya outside of Tajikistan. They have all been degraded due to increasing use, but mainly due to changes in water regime and availability. The 2023 ESIA findings conclude that the Rogun HPP Project will have no significant impact on these areas. As the Rogun HPP Project does not have any additional (to Nurek) impact on the Tigrovaya Balka reserve, the BMP only covers the management of the non-critical habitats (juniper woodlands and floodplains). The CHMP baseline includes elements of physical heritage, incorporating palaeontological, archaeological and historical resources; and ethnographic heritage, which includes places of local cultural significance for project-affected communities, related intangible heritage, traditional practice and local knowledge. The CHMP area of influence is set out in the 2023 ESIA.[39]

[39] The CHMP area of influence is a 1km buffer around the full supply level (fsl) and all Project components.

No.	Claim	Response
	several tugai massifs, the impact on which also requires an environmental assessment, including the Amu Darya Nature Reserve, which is cross-border with Uzbekistan.	Management offers these clarifications, while noting that the Tigrovaya Balka Nature Reserve is located within Tajikistan's territory and no Requesters are from Tajikistan.
60	Endangered species - the Amudarya shovelnose sturgeon (endemic to this basin), Aral salmon, pike asp, as well as wetland and aquatic species of amphibians, reptiles, mammals and birds - will be put under the threat of complete extinction.	The ecological baseline data, including eDNA,[40] did not show the presence of the shovelnose sturgeon. It was the cascade on the Amu Darya that changed the migratory pattern of these fish, which led to their disappearance. No other endangered species were identified to be at risk of extinction.
61	First of all, these are two species of sturgeon endemic to the Amu Darya basin: the small and large Amu Darya false sturgeon (*Pseudoscaphirhynchus hermanni*[41] and *Pseudoscaphirhynchus kaufmann).*[42] Both are recognized by the International Union for Conservation of Nature (IUCN) as critically endangered species (status - CR) and are included in the Red Book of Turkmenistan and Appendix 2 of the Bonn Convention. Along the Amu Darya and Vakhsh also migrates the Pike Asp (*Aspiolucius esocinus*),[43] assessed by the IUCN as a threatened species (EN) and listed in the Red Book of Turkmenistan. The impact of the Rogun HPP project on these fish and ways to increase their chances of survival under appropriate environmental flow design and control should be an integral part of the ESIA and environmental and social management plans.	Neither the Small Amu-Darya shovelnose sturgeon (*Pseudoscaphirhynchus hermanni*) nor the Amu Darya shovelnose sturgeon (*Pseudoscaphirhynchus kaufmanni*), were detected during eDNA analysis.

[40] Environmental DNA (eDNA) analysis refers to the genetic material that is released by an organism to its environment as dead skin/plant cells, hair, feces, urine, saliva, mucous, gametes, etc. This material can be collected from the environment through water, sediment, soil, or air sampling, subjected to DNA isolation and tested to determine presence of the target species without observing the organism directly.
[41] https://www.iucnredlist.org/species/18600/156719289
[42] https://www.iucnredlist.org/species/18601/120872031
[43] https://www.iucnredlist.org/species/39462/156728608

No.	Claim	Response
62	The impoverishment of the population due to the loss of agricultural resources will also lead to an increase in the illegal harvesting and consumption of wild flora and fauna. These and other important indirect and secondary mechanisms of impacts on ecosystems, biological resources and endangered species of biota are not considered in the EIA of the Rogun HPP.	Management knows of no report that refers to illegal harvesting and consumption of wild flora and fauna. If such a report exists, the Bank would review it. The BMP that is being prepared and is a condition of disbursement for the relevant activities will provide mitigation measures that include a no net loss plan related to the floodplains and the juniper woodland.