Indus Consortium
Humanitarian Environment and Development Initiatives

FACT SHEET

Environmental and Social issues of Balakot Hydro-power project in Pakistan

History

The Balakot Hydropower Project, located in Balakot- Pakistan, was first identified by the Khyber Pakhtunkhwa Energy Development Organization (PEDO) in 1995 with the technical collaboration of the German Agency for Technical Cooperation (GTZ). The feasibility study for the project was conducted by PEDO in 2013 through a Joint Venture of Consultants led by Mirza Associates Engineering Services (Pvt.) Ltd (MAES). In 2017, under the Hydropower Development Investment Program, the Asian Development Bank showed interest in Balakot HPP and appointed Aqualogus (Portuguese Consultant) as a project preparatory consultant to conduct a review and technical due diligence of the 2013 Feasibility Study. ADB updated the said Feasibility Study Report in July 2019 under the "Hydropower Development Investment Program" (HDIP).[1]

Introduction

The Balakot Hydropower Development Project is an energy initiative in Pakistan designed to contribute 300 MW of electricity to the national grid through a run-of-river hydropower mechanism on the Kunhar River about 18.6 km upstream from the town of Balakot. It is a long tunnel diversion-type hydropower project and headrace tunnel (HRT) extending more than 9.1 km, which will divert water from the reservoir created by the dam to the powerhouse. The project involves acquiring 226.42 acres of land and an additional 1.925 acres of land for slope stabilization, compounding environmental degradation.

This project is co-financed by ADB ($ 300 Million), and AIIB ($ 250 Million) commenced in 2020 and to be completed by June 2027.[2][3]

Current Status of the Balakot Hydropower Plant

Balakot HPP is listed in the IGCEP 22-31 in (Committed + Optimized) Projects, and as per status, the PC-i is Approved with Scheduled for Commissioning in Dec 2027.
In the Transmission System Expansion Plan (TSEP 2024-2034), a new power dispersal and import/export project is planned for 2027-28. This includes a 2 km, 500kV double-circuit transmission line, named **"In/Out of Maira – Suki Kinari HPP S/C at Balakot HPP."** It is designed to enhance connectivity and improve power transmission between hydropower plants in the region.

Violations of labor laws and labor rights:

There are two companies called **"Ghulam Rasool and Co. GRC"** and **"CGGC (Chinese)"** is engaged in construction work and is not maintaining fair relations with the labour engaged in construction work.

(1) **No formal contracts for labour**. The major example is that none of the laborers has received any written contract from the company. The hiring and termination processes are not followed by the company and often dismisses laborers without prior notification and termination process leading to

[1] https://pedokp.gov.pk/Main/psp/52

[2] https://www.adb.org/projects/documents/pak-49055-007-rrp

dismission of labourers without due process. They also stated that the daily or monthly wages are not given as per the minimum wage criteria set by the Government of Pakistan. Local laborers have reported that, during the holy month of Ramadan, their wages were deducted by the contractor company due to the government's reduced working hours policy. Though local labourers have established the **Insaaf Labour union** to protect the laborers' rights but neither the company nor the financiers are respecting the right of bargaining of labour.

(2) Non-compliance with the safety of laborers: During the field visit and consultations with labor representatives at the Tailrace site of the Balakot Hydropower Plant, serious lapses in worker safety and emergency preparedness were reported. Multiple safety incidents have occurred during construction activities, including the tragic death of one laborer and another case where multiple worker sustained serious injuries during the early morning shift. Despite the urgency, no adequate medical assistance was available until late in the afternoon, when the ambulance arrived, underscoring a critical failure in the site's emergency response mechanisms. Workers reported that although an ambulance is stationed at the site, it is largely symbolic. Furthermore, there is no full-time medical doctor or first aid personnel available during active construction hours, leaving workers exposed to untreated injuries and delays in care.

(3) **No compensation for the housing damaged during tunnel construction.**

The Local residents reported a major flaw in the compensation mechanism, which is provided to those who are formally displaced by the construction site, but no compensation mechanism exists for those affectees whose houses have been damaged as a result of blast tunneling construction work. Tunnel blasting and shocks have severely damaged local homes and infrastructure and impacted on the water channels relied upon by mountainous communities. The Communities living near blasting and excavation zones have repeatedly complained to the project contractors and local administration, but no remedial action has been taken. This has disproportionately affected low-income households, who are now facing the loss of shelter and increasing vulnerability.

(4) **Noise pollution and air pollution:** The construction work is generating persistent noise and air pollution. Tunnel blasting creates high decibel levels that affect the mental and physical well-being of local residents, especially elderly people, children, women, patients, and individuals with learning disabilities. Prolonged noise exposure has contributed to increased mental health issues, anxiety, and sleep disruption. Simultaneously, the movement of heavy machinery and blasting has led to intense dust pollution, and worsening air quality. Residents reported frequent breathing difficulties, eye irritation, and other respiratory health issues. The cumulative environmental burden has resulted in numerous formal complaints lodged with the local administration of Balakot, by communities demanding urgent action, including the construction of protective retaining walls to act as noise buffers.

(5) **Muck (Tunneling Waste) Disposal Issues:** The disposal of tunneling waste (muck) remains a persistent and escalating issue. Of the ten proposed muck disposal sites, only one site has been assessed as technically and environmentally feasible as of June 2024. The lack of suitable disposal sites has led to construction delays, budget overruns, and adhoc dumping practices. Some waste has reportedly been deposited near riverbanks and steep slopes, increasing the risk of soil erosion, sedimentation, and contamination of local water bodies. These practices do not fulfill the Pakistan National Environmental Quality Standards (NEQS) and the ADB Safeguard Policy Statement (SPS) 2009, both of which require the minimization of adverse effects on natural ecosystems and

watercourses. The much disposal poses a significant threat to the availability and quality of freshwater sources in the project-affected area. With water courses already under stress due to construction, extraction, and improper waste disposal near rivers and streams, there is a high likelihood of surface and groundwater contamination.

(6) **Taking community water for construction work:** One of the most critical is the diversion of a historically community-owned stream by the project developer for construction use. The company has installed two large pipelines to extract water directly from Sangar Nalla (stream), which has long served as a primary irrigation source for over seventy farming families in the area. This stream is vital for livelihoods, food security, and traditional cropping systems. Its diversion has already disrupted seasonal cultivation, directly threatening local food production and economic resilience. The stream also supports eco-tourism activities, as the area is known for its natural beauty and attracts tourists, which is an income source for residents.

(7) Community Grievances Mechanism: Although a Grievance Redress Mechanism (GRM) has been established, limited community engagement and awareness about the mechanism have restricted its effectiveness. Key issues include insufficient compensation, lack of local employment opportunities, and fears of environmental degradation. Many grievances remain unresolved due to slow responses from project authorities. Compensation payments for 2,247 displaced persons (DPs) have been delayed due to legal and administrative issues, including inheritance mutations, title disputes, and court cases. Women have been particularly affected, with only 10% of female DPs receiving compensation, leaving 1,104 women without financial support. In addition, approximately 65% of DPs reported that the compensation was insufficient to cover relocation and livelihood restoration costs.[4]

(8) **Job opportunities and employment:** Local communities have raised concerns about the distribution of project benefits, particularly in terms of infrastructure development and job opportunities. Most employment generated has been for skilled workers from outside the region. While a grievance mechanism exists, delays in responding to complaints and limited involvement of local representatives have undermined its credibility.

(9) **Lack of meaningful community consultations:** Many community members were unaware of the existence of the Grievance Redress Mechanism (GRM), which limited their ability to raise concerns or seek redress for project-related impacts. Local community members have submitted written complaints but to no avail.

The GRM is established for dispute resolution but lacks trust among affected communities and companies. The Compensation-related issues remain unresolved, and several locals have refused to accept low compensation as a form of protest against the injustice. The joint family compensation which should be on a per-person basis rather than considering collective ownership and family structure. The compensation provided is significantly lower than the market value of the property.

[4] https://www.adb.org/sites/default/files/project-documents/49055/49055-007-smr-en_10.pdf