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The Governance of the TAPI Pipeline

Political, Social, and Environmental Challenges

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The Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline has important implications for energy security and regional integration in South Asia. To begin with, it will do much to address South Asia's growing electricity demand, which will require a 118% increase in installed capacity to 1,067 gigawatts (GW) by 2040.[1] The pipeline will also provide a relatively cleaner fuel that has multiple uses in fertilizer and petrochemical industries. Yet, due to the complexity of large-scale energy projects and the volatility of South Asia's political landscape, the project is likely to result in a number of critical governance challenges that will require active engagement by the United States and regional partners.

Construction on the TAPI pipeline began in 2015 and is expected to be completed in 2022. Once operational, the pipeline will carry 33 billion cubic meters of gas from the Galkynysh fields in Turkmenistan through Herat, Nimruz, and Kandahar in Afghanistan and Multan, Dera-Ghazi Khan, and Quetta in Pakistan, before culminating at the Indian border town of Fazilka. Partially funded by the Asian Development Bank (ADB), the $10 billion pipeline runs 1,600 kilometers (km) and is expected to be in operation for a period of 30 years. The project has been heralded by multiple U.S. administrations as a facilitator of energy access and peacebuilding in Central and South Asia.[2] Proponents of the pipeline point toward the environmental benefits of replacing coal with gas, as well as the economic incentives provided by transit fees and energy trade. Despite security threats from terrorist groups and conflicts between India and Pakistan, the TAPI project has made significant progress in recent years. Currently, the Turkmen portion of the pipeline is nearing completion and land procurement is underway in Afghanistan.

Existing discourse on the TAPI pipeline has overwhelmingly focused on geopolitical issues, which reflects the political volatility of the region. As the project gains momentum, however, there is a growing need to view geopolitics not so much as an impediment to energy integration but as a governance challenge that can be managed through appropriate dispute-resolution mechanisms. Moreover, policymakers should look beyond geopolitics and consider the social and environmental challenges of the pipeline.

This essay examines some of the political, social, and environmental challenges of the TAPI pipeline and considers similar projects that have succeeded in navigating such challenges. It then concludes by contextualizing the importance of addressing these challenges for U.S. interests in an integrated and peaceful South Asia.

Political Challenges

The volatility of South Asia's geopolitical landscape means that the TAPI pipeline must account for the risk of deliberate disruption caused by political conflicts. This project, as well as broader regional cooperation in South Asia, is encumbered by the enduring military conflict between India and Pakistan. In the last seven years, the two countries have engaged in numerous cross-border skirmishes, including air strikes in each other's territory in 2019. Yet, in February 2021, they signed a cease-fire agreement that lays out processes for peaceful de-escalation of tensions, marking the first time in eighteen years that such progress has been made in the bilateral relationship.[3] While these peaceful overtures are welcome, New Delhi's apprehensions that Pakistan can use the TAPI pipeline to control India's energy security are unlikely to diminish. Similarly, Pakistan's often unstable relationship with Afghanistan makes Islamabad wary about gas supply disruptions. Therefore, the project would benefit greatly from a legal regime around pipelines. The Transit Protocol of the Energy Charter and its dispute-resolution mechanism can provide a valuable framework in this regard.

The charter is a multilateral framework for energy cooperation designed "to promote energy security through the operation of more open and competitive energy markets." The Energy Charter Secretariat is currently working with government and industry representatives from the 53 signatories and contracting parties to negotiate the Transit Protocol as a legal framework to facilitate energy trade across borders. This instrument, once available, can be used as a framework by TAPI member countries to address conflicts and ensure undisrupted supply.[4]

In the context of India-Pakistan relations, an effective dispute resolution mechanism related to the TAPI pipeline can build on the experience of the Indus Water Treaty signed in 1960. The World Bank facilitated the treaty to ensure peaceful negotiation between India and Pakistan on sharing the waters of the Indus River. Although not without limitations, it has remained intact through three wars and provides a platform for raising objections and engaging in negotiations, which the TAPI project could incorporate to address the political challenges of energy cooperation. Any legal regime established for the pipeline could complement the positive momentum in India-Pakistan relations, while safeguarding the project from future geopolitical instability.

Social Challenges

The TAPI pipeline is expected to require the involuntary resettlement of some local populations, affecting the livelihood of significant numbers of people in multiple countries. An impact assessment

completed by the TAPI Pipeline Company shows that the project may affect agricultural land and heritage sites in Afghanistan and Pakistan, result in resettlement of a number of households, and increase the risk of road accidents.[5] The project is also expected to impede access to natural resources by community members during the construction phase while only having a marginal impact on increasing local employment.

In addition, the influx of foreign workers during the construction phase is likely to have significant social impacts. For example, the shift of ethnic groups in Afghanistan and Pakistan to areas that they do not traditionally inhabit may exacerbate tribal conflicts.[6] While the pipeline is meant to traverse areas of Afghanistan mainly populated by Pashtuns, it may also have an impact on vulnerable minorities such as the Hazaras, who have faced significant ethnic and religious persecution. In Pakistan, the pipeline will traverse areas inhabited by ethnic minorities such as the Pashtuns and the Baloch. Some stakeholders object that ethnic minorities in these countries have been excluded from participating in and benefiting from transnational energy and connectivity projects. Inequality and exclusion have fueled insurgencies and terrorist groups in the region that routinely sabotage energy and other infrastructure.[7] Therefore, it is important that policymakers address some of the social challenges of the TAPI pipeline.

In this regard, the human rights agreement for the Baku-Tbilisi-Ceyhan (BTC) pipeline in Azerbaijan, Georgia, and Turkey is of great relevance. The pipeline carries crude oil 1,768 km from the Azeri-Chirag Deepwater Gunashli field and condensate from Shah Deniz in Azerbaijan across Georgia and into Turkey. The BTC pipeline became operational in 2006 and was built by a company operated by BP. Faced with the challenge of establishing social safeguards in a region where autocratic regimes are firmly entrenched, BP managed to build consensus on the issue of human rights by including certain standards within key operational documents.[8] The Voluntary Principles on Security and Human Rights were referenced in both the joint statement and the security protocol for the East-West Energy Corridor of the BTC pipeline.

Other human rights measures incorporated under the project's legal regime include the legally binding Human Rights Undertaking. BP also trained the security forces in charge of guarding the BTC pipeline on human rights issues and created an independent monitoring body to assess the impacts of the pipeline on communities. These policies can be contextually applied to the TAPI project.

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Upholding the human rights of local communities can discourage attempts to sabotage the pipeline and encourage greater international investment in cross-border infrastructure in South Asia.

Environmental Challenges

The TAPI pipeline will traverse areas that are considered ecologically vulnerable and home to endangered species.[9] In Afghanistan and Pakistan it will run through multiple protected areas such as national parks, biosphere reserves, game reserves, and wildlife sanctuaries. Further complicating efforts, these areas frequently span international borders, such as the Registan–North Pakistan Sandy Desert shared by Afghanistan, Iran, and Pakistan.

To reduce the impact of the TAPI pipeline on the environment, the TAPI Pipeline Company and the ADB have considered multiple routes and several mitigation measures. The member countries can contribute to these efforts by building the capacities of domestic environmental institutions, particularly through the development of human resources and investment in state-of-the-art technology. These countries should also provide greater leverage to international environmental organizations to operate in the region. Unfortunately, in multiple South Asian countries, governments actively undermine the capacities of environmental organizations in order to fast-track economic development. This has resulted in projects that benefit a small group of elites, while substantial economic and environmental costs are borne by the general population.

The TAPI pipeline provides an opportunity for South Asian countries not only to collaborate with the TAPI Pipeline Company and ADB on reducing the ecological impacts of infrastructure development, but also to engage on transboundary environmental cooperation. South Asia is extremely vulnerable to climate change, and cooperation on the region's transboundary rivers, arid regions, and glaciers is undermined by political conflicts, as well as the relegation of environmental issues to "low politics" within regional policymaking. The TAPI pipeline provides an opportunity to use the "high politics" of energy security to stimulate greater collaboration on the environment.

Such collaboration on reducing the environmental impacts of the pipeline can branch out into environmental conservation of vulnerable and endemic species in the Registan Desert, thereby providing another avenue for integration between Afghanistan and Pakistan. India and Bhutan have been relatively successful in utilizing an energy project to broaden their environmental cooperation.[10] Given this precedent, energy integration could regenerate dialogue on establishing "peace parks" in South Asia's ecologically unified but politically disputed borderlands.[11]

Conclusion

The TAPI pipeline is only one component of a broader agenda to develop interconnected energy systems in Asia. The Central Asia–South Asia power project and the regional hydroelectric projects under the Bangladesh, Bhutan, India, Nepal Initiative are among a number of transnational initiatives aimed at advancing energy and environmental goals while decreasing potential for conflicts between erstwhile rivals.[12] Notwithstanding the benefits for energy security, these projects can produce enormous impacts on local populations and the environment, as described in the preceding analysis. It is therefore important to address the governance challenges of

the TAPI pipeline to ensure that transnational energy infrastructure enables rather than impedes ecological integrity, human rights, and peacebuilding.

To address the political, social, and environmental challenges examined in this essay, the TAPI member countries should consider creating formal channels of collaboration and mechanisms for dispute resolution. The United States, as one of the primary supporters of the TAPI pipeline and broader energy integration in the Indo-Pacific region, can bring together public and private actors to address these challenges through joint-training programs, workshops, and public consultations. Collective governance of the pipeline could harmonize technical, legal, social, and environmental standards across borders, which will go a long way toward integrating energy systems in South Asia.

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Endnotes

1 South Asia Regional Initiative for Energy Integration (SARI/EI), "Overview of South Asian Power Sector," 2018, http://www.safirasia.org/sites/default/files/3ALLTH~1.PDF.

2 Lynne M. Tracy, "The United States and the New Silk Road" (remarks, Washington, D.C., October 25, 2013), https://2009-2017.state.gov/p/sca/rls/rmks/2013/215906.htm.

3 Dinakar Peri and Suhasini Haidar, "India, Pakistan Agree to Observe 2003 Ceasefire," *Hindu*, February 25, 2021, https://www.thehindu.com/news/national/india-pakistan-agree-to-ceasefire-along-border/article33930265.ece.

4 Mirza Sadaqat Huda, *Energy Cooperation in South Asia: Utilizing Natural Resources for Peace and Sustainable Development* (Routledge: Abingdon, 2020).

5 TAPI Pipeline Company, "Environmental and Social Impact Assessment Study—Pakistan," 2020.

6 Ibid.

7 Muhammad Mushtaq and Zahra Shakil Mirza, "Understanding the Nexus Between Horizontal Inequalities, Ethno-Political Conflict and Political Participation: A Case Study of Balochistan," *Ethnopolitics* (2021): 160–71.

8 Mirza Sadaqat Huda and Saleem H. Ali, "Energy Diplomacy in South Asia: Beyond the Security Paradigm in Accessing the TAPI Pipeline Project," *Energy Research and Social Science* 34 (2017): 202–13.

9 TAPI Pipeline Company, "Environmental and Social Impact Assessment Study—Afghanistan," 2020.

10 Mirza Sadaqat Huda and Saleem H. Ali, "Environmental Peacebuilding in South Asia: Establishing Consensus on Hydroelectric Projects in the Ganges-Brahmaputra-Meghna (GBM) Basin," *Geoforum* 96 (2018):160–171.

11 Saleem Al, P*eace Parks: Conservation and Conflict Resolution* (Cambridge: MIT Press, 2007).

12 The Central Asia–South Asia power project will enable the export of hydroelectricity from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan. The Bangladesh, Bhutan, India, Nepal Initiative is a subregional architecture of countries in eastern South Asia that is building transnational regional dams to export hydroelectricity from Bhutan and Nepal to India and Bangladesh.

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