
CROSS-BORDER PIPELINES IN SOUTH ASIA: SOME REFLECTIONS ON LAW AND POLICY

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ABSTRACT

In the global quest for energy security, the transportation of petroleum products and materials across nations play a significant role. While maritime shipping is the primary mode of energy transport in coastal regions, in the case of land-locked nations in particular, cross-border pipelines provide the energy 'lifeline'. Appropriate legal and contractual frameworks are critical to the long term political stability and economic viability of international energy pipeline projects. The establishment of the India- Nepal Petroleum Pipeline and also the ongoing construction of India-Bangladesh Friendship Pipeline provide an interesting set of recent bilateral agreements. The present article reviews the bilateral legal arrangements India has entered into with countries in the neighbourhood in which competing rights and interests of the different stake holders are adjusted. Against the backdrop of cross-border pipelines being developed in South Asia, the article seeks to understand the law and policy considerations that impact the development of international energy pipeline projects.

Key words: International pipelines, energy cooperation, petroleum transit, international law, South Asia

I. Introduction

Energy is a primary ingredient to economic activity and industrial growth. Energy consumption is often indicative of the state of the economy and national development. Access to adequate and uninterrupted supply of energy on a regular basis at reasonable prices is critical to economic development and social welfare. Indeed, energy security of a nation depends upon its ability and preparedness to meet domestic demand, including through imports from abroad. Hence, international trade in, and transit of, petroleum and petroleum products through transportation pipeline networks is a vital question of profound practical importance for many nations.

Cross-border energy cooperation can play a significant role in regional economic development. It is indeed a reality in a number of regions around the world. For instance, the interconnection of electrical grids through high voltage transmission lines across international borders in Europe. Likewise, in the US and Canada as well as in the Nordic countries, cross-border electricity cooperation exists for a long period of time. Similarly, India has a longstanding, bilateral energy exchange agreement with Nepal, especially for the benefit of border regions—an arrangement that goes back to the early 1970s. As resource endowments and production potential vary across South Asia, there exists tremendous scope for beneficial transnational cooperation in the energy sector. Likewise, the region is geographically proximate to the natural resources-rich Central Asia on the one hand, and the South East Asia/ASEAN region, on the other. Several studies confirm that there is much potential for commercially-viable energy cooperation between the supply-rich Central Asia and the energy-starved South Asia through the construction and operation of transnational energy pipeline projects involving India.

The present article is structured as follows: **Part II** provides a brief overview of the prospects for beneficial petroleum trade in South Asia. **Part III** reviews two international pipeline constructions agreements that India has signed in recent years with Nepal and Bangladesh respectively with a view to promote cross-border trade in petroleum products. **Part IV** concludes with some reflections on the law and policy issues in international energy pipelines.

II. Cross-Border Energy Trade in South Asia

As a large nation with a towering reach all across the region, India has a vital role to play in promoting cross-border energy trade in South Asia. A recent study notes:

‘Refined petroleum is an important essential commodity that enjoys consumer as well as industrial demand and of which India is a major source for all South Asian countries. Refined petroleum exports represent India’s strength in refining as well as the transport cost advantage of exporting a bulky product to a proximate location. Because of its rapid growth in crude oil refining capacity over the past decade, India now ranks fourth globally in total refining capacity. Thus, it has emerged as one of the world’s largest exporters of refined petroleum products’.¹

From a commercial perspective, it is being pointed out that there is considerable scope for expanding regional petroleum trade in South Asia. This could be achieved; it seems, by utilizing the excess capacity in the Indian petroleum refineries to service the growing demand in the neighbouring nations.² Currently, much of the Indian petroleum product exports are going to markets located at a considerable distance, rather than destinations in South Asia. Within the region itself, Bangladesh, Myanmar, Sri Lanka and Bhutan hold significant demand potential, and India is already serving Nepal with petroleum products.³ With India gearing up to become a gas-based economy by increasing the share of natural gas in its primary energy mix, and aggressively expanding its domestic gas pipeline networks and distribution channels, the refineries in India’s north-eastern region- Digboi, Guwahati, Bongaigaon and Numaligarh refineries in Assam- are expanding the capacity for processing imported crude oil. It is noted that the refinery expansion and increased production can likely help to export petroleum products from India to Bangladesh.

III. India’s International Energy Pipelines

A. India-Nepal Petroleum Pipeline

South Asia’s first cross-border energy pipeline was constructed between India and Nepal recently. It is a 69-kilometer-long petroleum product pipeline project, linking neighbouring

¹ Sanjay Kathuria (ed.; 2018), *A Glass Half Full: The Promise of Regional Trade in South Asia*, South Asia Development Forum, Washington, DC: The World Bank, at p. 55.

² For instance, Indian gas major, GAIL, conducted technical level discussions for export of re-gasified LNG to Pakistan via Wagah Border. See Ministry of Petroleum and Natural Gas, Government of India (2016), *Annual Report 2015-16*, p. 72.

³ See SAARC Energy Centre (2020): *Assessment of Pipelines as the Preferred Mode for Transporting Crude/Oil Products within SAARC Member States*, Islamabad: Pakistan, February 2020.

towns on the Indo- Nepal border.⁴ Compared to many of the international pipeline projects constructed or being developed around the world, the present international pipeline is modest and small in terms of size and scale. Yet, this is an important moment for the South Asian region, as it brings together the two nations to facilitate energy access and economic development across the borders.

Technical studies in the last decade had already indicated the long-term commercial viability of a cross-border energy pipeline project connecting India with Nepal. Several models and methods of ownership, operation and maintenance of the proposed pipeline project were on the table for discussion for over a decade. The Indian Oil Corporation even signed a memorandum of understanding with Nepal Oil Corporation for laying a 35-kilometre product pipeline between Raxaul and Amlekhgunj in September 2004.⁵



Map for Illustration purpose only.⁶

⁴ Of the total length of the cross-border pipeline, 32.7 km is in Indian Territory and 36.2 km in Nepal. See Nepal News Report (10 April 2018), “Nepal-India Cross Border Pipeline to be completed by 2020,” available at <https://www.ktm2day.com/2018/04/10/nepal-india-cross-border-oil-pipeline-to-complete-by-2020/> (Accessed on 19 April 2022).

⁵ See Indian Oil Corporation Ltd (2005), *Annual Report 2004-05*, “Business Development”, at p. 28.

⁶ Available at URL: <https://www.ktm2day.com/2014/08/04/modi-pledges-to-develop-india-nepal-cross-border-petroleum-pipeline/> (Accessed on 19 April 2022).

The pipeline project was originally proposed by the IOC in 1997. For many years, the Project was opposed by the “transport lobby” in Nepal, and the Project remained uncertain with numerous difficulties.⁷ The cross-border project, however, received political support and diplomatic momentum after 2014 when Prime Minister of India, Shri Narendra Modi, on a state visit, acceded to Nepal’s request for the construction of the pipeline. Subsequently, in August 2015, both nations signed a bilateral agreement: ‘Memorandum of Understanding between the Government of India and the Government of Nepal for the Construction of Petroleum Products Pipeline from Raxaul, India to Amlekhgunj, Nepal, and Re-engineering of Amlekhgunj Depot and Allied Facilities’.⁸

The Intergovernmental Agreement of 2015 provides the basis for the construction of the aforesaid cross-border petroleum products pipeline. The MoU allocates the responsibility of constructing the pipeline to the Indian Oil Corporation (IOC) and the Nepal Oil Corporation. While the Project facilities in Nepal would be handed over to the government of Nepal after completion, IOC will supply the petroleum products to the NOC on the basis of the supply contracts signed between them for an extendable period of 15 years. The agreement is renewable after the initial period. The agreement allows third party access to the pipeline based on commercial tariff rates. Likewise, even in the event of termination of agreement between the corporations, the access to the pipeline will continue to be commercially available through the payment of due tariffs to the operator.⁹

The agreement envisaged the completion of the Project within 30 months.¹⁰ Nepal agreed to arrange all permits and licenses necessary for the construction of the pipeline: land, regulatory and statutory approvals were agreed to be made available for the Project. Detailed provisions stipulating the division of responsibilities between the Parties and the corporations concerning

⁷ In an internal note by the External Affairs Ministry to the IOC, it was noted: “Given the complex political reality in Nepal, it would be advisable for IOC to handle the pipeline issue with utmost caution and avoid making any commitments for its execution unless there is absolute clarity on land availability on both sides, and a mutually accepted framework for security, construction, operation and management issues has been evolved.” See Sujay Mehdudia and Prashant Jha, “MEA cautions IOC on Nepal Project”, *The Hindu*, 02 May 2013; available at URL: <https://www.thehindu.com/business/Industry/mea-cautions-ioc-on-nepal-project/article4673990.ece> (accessed 17 June 2022).

⁸ See Press Information Bureau, Government of India, Cabinet Approval Note of 12 August 2015. Available at : <https://pib.gov.in/newsite/PrintRelease.aspx?relid=124943> (accessed on 01 July 2022).

⁹ See Article 1: ‘Project Execution’, *Memorandum of Understanding*.

¹⁰ See Article 3: ‘Timelines’, *Memorandum of Understanding*.

the construction of the pipeline as well as the security of the pipeline, treatment of personnel and the maintenance of operation equipments were also laid down in the agreement.¹¹

For dispute settlement, the MoU provides for mutual consultation and negotiation as the methods available between the Parties. It states: ‘Any difference regarding interpretation and implementation or application of any provision of this MoU will be resolved through mutual consultation or negotiations between the Parties’.¹²

As per the division of responsibilities under the agreement, the Indian Oil Corporation (IOC) invested around 2 Billion Indian Rupees in the Project and allied facilities, linking its petroleum depot in Motihari through Raxaul (Bihar) to Amalekhgunj, Nepal. In July 2019, the Pipeline became technically operational and it was officially inaugurated in September 2019 as fully functional.¹³ The project is expected to bring much-needed stability and reliability to the distribution network for petroleum products inside Nepal.

Till recently, in the absence of a dedicated pipeline, the only way for common Nepalese to access the much needed primary fuels and energy products was to transport them through overland road tankers. With political strife in Nepal, and agitations spilling over to the streets, the land-route was always fraught with frequent blockage and highway closures on the India-Nepal border towns, leading to fuel-shortages of all kinds at times. The pipeline is designed to reduce leakage and ensure supply cleaner and cheaper fuel, bringing relief to energy consumers in Nepal. Moreover, it is also estimated that the Nepal Oil Corporation will be able to save considerable amount in terms of road-transportation tariffs every year.¹⁴

The successful completion of the cross-border petroleum pipeline project is giving an impetus for more creative ideas for enhancing bilateral energy cooperation between the two countries in South Asia, and also elsewhere in the region. In a recent High-Level official meeting of the representatives of the two countries, it was decided to explore the prospects for developing more energy pipeline networks between the two countries. In this context, the discussions revolved around linking Siliguri (Bengal, India) to Jhapa (Nepal) through a petroleum pipeline,

¹¹ See Article 4: ‘Division of Responsibilities’, *Memorandum of Understanding*.

¹² See Article 5: ‘Final Provisions’, *Memorandum of Understanding*.

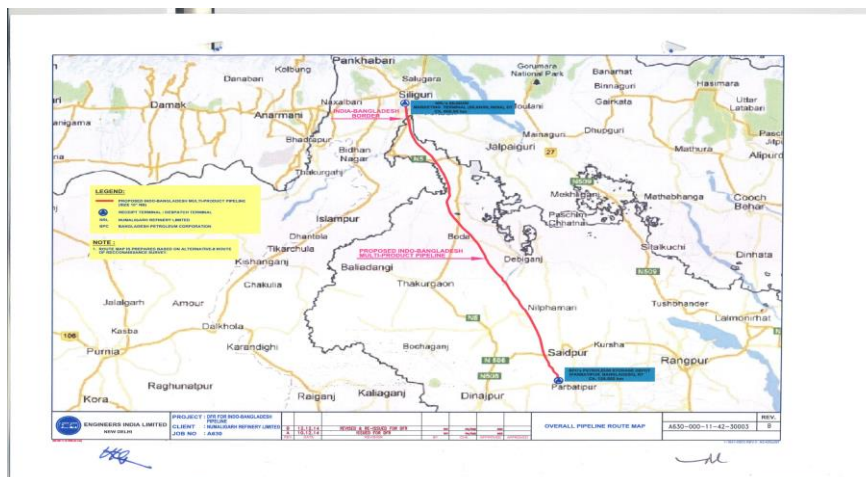
¹³ See PTI, “India-Nepal petroleum products pipeline project inaugurated,” *The Hindu Business Line*, Chennai, 11 September 2019; available at URL: <https://bit.ly/36OSnFU> (accessed on 31 March 2022).

¹⁴ Nepal Oil Corporation currently spends around Rs 500 million annually in transportation costs for procuring the energy resources through road tankers from India. See “Nepal India Petroleum Pipeline Project”, *The Kathmandu Post*, 24 January 2013, available at URL: <https://www.sharesansar.com/newsdetail/nepal-india-petroleum-pipeline-project> (accessed 17 June 2022).

and to establish a natural gas pipeline from Gorakhpur (Uttar Pradesh, India) to Bhairahawa in Nepal. It has also been proposed to extend the existing pipeline from Amlekhgunj to Lothar in Chitwan. While these proposals have not reached the stage of final investment decision, technical feasibility studies investigate their financial and commercial viability.¹⁵

B. India- Bangladesh Friendship Pipeline

The India-Bangladesh Friendship Pipeline Project seeks to connect Siliguri in West Bengal with Parbatipur in Dinajpur district of Bangladesh. The 130-kilometer long petroleum product pipeline is part of the cross-border connectivity projects being undertaken in recent years by India in close cooperation with Bangladesh, including projects to ease-up connectivity with landlocked North-East India.¹⁶ Numerous bilateral initiatives and agreements have been signed between the two countries in recent years with a view to enhance cross-border trade and transit, reviving historic linkages of rail, road, inland waterways and port connectivity in the region.



Map of the India-Bangladesh Friendship Pipeline ¹⁷

In April 2015, an agreement was negotiated between Numaligarh Refinery Ltd and Bangladesh Petroleum Corporation Ltd for the implementation of the India-Bangladesh Friendship Pipeline project. In October 2017, Ms. Sushma Swaraj, then External Affairs Minister went to Dhaka

¹⁵ IANS, "India, Nepal to expand energy cooperation, explore new pipeline," *The Economic Times*, New Delhi, 24 August 2020; available at URL: <https://bit.ly/39T5N5y> (Accessed on 31 March 2022).

¹⁶ For an impressive list of bilateral projects listed up for improving and enhancing the cross-border connectivity between India and Bangladesh, see the Joint Statement of 17 December 2020 issued after the Virtual Summit between Prime Minister Modi and his Bangladesh counterpart Sheikh Haseena, available at URL: <https://bit.ly/2YYNgyp> (Accessed on 23 April 2022).

¹⁷ The Map is originally attached to the India-Bangladesh Friendship Pipeline Agreement of 2018, available at URL: <https://bit.ly/3syLT6S> (Accessed on 07 March 2022).

to co-chair the 4th Joint Consultative Commission along with her Bangladesh counterpart AH Mahmood Ali. Later, the negotiated text was finalized with the signing of a Memorandum of Understanding between the aforesaid two entities- NRL and BPC- for the Sale Purchase Agreement for the supply of petroleum products.¹⁸ In April 2018, India and Bangladesh signed the Memorandum of Understanding for the construction of the India-Bangladesh Friendship Pipeline between Siliguri (in India) and Parbatipur (in Bangladesh).¹⁹

Even before the completion of the Pipeline Project, India cooperated with Bangladesh in supplying petroleum products from its refineries through road-tankers across the border in the Siliguri Corridor of Bengal region. In this context, an official report notes:

In February 2016, India supplied 2200 MT of High Speed Diesel as a goodwill gesture to Bangladesh from Siliguri Marketing Terminal of Numaligarh Refineries Ltd (NRL) to Parbatipur storage depot of Bangladesh Petroleum Corporation (BPC) in Bangladesh. Work is in progress to build the Indo-Bangla pipeline connecting Siliguri and Parbatipur. Till the time the pipeline gets completed, Numaligarh Refinery Limited will supply High Speed Diesel to Parbatipur through rail/rack.²⁰

The Sales Purchase Agreement signed between the two oil national entities will allow the supply of Gas Oil from India to Bangladesh for a period of 15 years, and the same could be further extended based on mutual consent. Of the nearly 130 kilometre-long proposed pipeline, only about five kilometres will be within the territory of India, and the rest of the pipeline is to be constructed within the territory of Bangladesh. As per the Memorandum of Understanding signed between the two countries, the finance, construction and implementation of the entire cross-border energy infrastructure Project, however, shall be undertaken by the Government of India acting through its instrumentalities. To be specific, the NRL will undertake the project construction on behalf of the Government of India.

¹⁸ See *Sale and Purchase Agreement between Numaligarh Refinery Ltd (NRL) and Bangladesh Petroleum Corporation (BPC) for Supply of Gasoil*, 22 October 2017, Government of India: Ministry of External Affairs.

¹⁹ See *Memorandum of Understanding between India and Bangladesh for Construction of the India-Bangladesh Friendship Pipeline between Siliguri (in India) and Parbatipur (in Bangladesh)*, Government of India: Ministry of External Affairs, 09 April 2018; available at URL: <https://bit.ly/3syLT6S> (Accessed on 07 March 2022).

²⁰ See the *Annual Report of the Ministry of Petroleum and Natural Gas*. Government of India: Ministry of Petroleum and Natural Gas, *Annual Report 2016-17*, page 11, available at URL: <https://bit.ly/3qeMYzo> (Accessed on 24 May 2022).

As the Project is being envisaged as an inter-governmental initiative, the Government of Bangladesh has undertaken the responsibility to ensure the right of way and land rights of the pipeline, and to also resolve and settle disputes and claims arising out of the operation of the Pipeline within the territory of the country. Article IV of the Memorandum of Understanding states the obligations of Government of Bangladesh and the Bangladesh Petroleum Corporation in this context as follows:

GOB shall provide in its territory all infrastructures, needed for the Project on gratis basis. The land acquisition and requisition cost shall be borne by BPC. GOB shall make arrangements to provide land free from all encroachments and encumbrances and make all arrangements for the personnel of the implementing agency and its authorized representatives to enter Bangladesh and access the land and property, including private land and property for the purpose of implementation of the Project. Rent for temporary use of land on the Bangladesh side shall also be borne by GOB....GOB shall provide all necessary clearances for the project in an expeditious and time bound manner in accordance with the agreed project schedule. GOB shall settle all disputes, compensation claims, administrative clearances etc., relating to land within Bangladesh territory for implementation of the Project. ²¹

For the purpose of construction and implementation of the Project, the Memorandum of Understanding envisages close coordination and cooperation between the two Governments and the two petroleum entities, the BPC and the NRL. While the laws of Bangladesh are generally applicable at all times within the territory of the country,²² for facilitating the Project-related activities of the workers and their equipments and machineries on the construction route, certain exemptions and exclusions are provided for.²³ Wherever costs are involved in compliance with legal obligations, the BPC has agreed to look after the interests of the Project stakeholders from the other country.²⁴

²¹ See *Memorandum of Understanding between India and Bangladesh for Construction of the India-Bangladesh Friendship Pipeline between Siliguri (in India) and Parbatipur (in Bangladesh)*, Government of India: Ministry of External Affairs, 09 April 2018.

²² *Ibid.* Articles VIII and XV.

²³ *Ibid.* Articles VI and VII

²⁴ *Ibid.*

It is also instructive to note that the cross-border pipeline once constructed shall be jointly owned and operationalized by the two business entities- the Bangladesh Petroleum Corporation and the Numaligarh Refinery Ltd. The Memorandum of Understanding states in this context:

BPC and NRL will be owner of the pipeline in their respective country. Both BPC and NRL shall bear all costs with regards to Maintenance/Insurance/Security etc., for respective sections of the IBFPL in India and Bangladesh. Operation of the Pipeline shall be through a Standard Operating Procedure to be finalized between NRL and BPC. Assets created by the Project in the territory of Bangladesh shall be vested in Bangladesh Petroleum Corporation (BPC) after the completion of the Project. The running and maintenance of the pipeline will be done in collaboration between NRL and BPC.²⁵

With regards to potential issues and disputes that may arise in the context of the cross-border pipeline, it is envisaged that these shall be “resolved amicably through mutual consultation and negotiations between the Parties.”²⁶ The Memorandum of Understanding also makes it clear that the respective national laws will apply in relation to the Project activities executed within the territory of the country concerned.²⁷ From the legal structuring of the Indo-Bangladesh Friendship Pipeline project, it is clear that the Project Model being envisaged is that of an Interconnector. The successful execution of the cross-border pipeline project will enable both nations to build on mutual trust and goodwill and to look forward to setting up even more ambitious goals in bilateral energy cooperation and regional development.

IV. Conclusion

Achieving energy security is the central goal of major states today. To facilitate the growing needs for petroleum resources and products, the construction and operation of cross-border pipeline networks are necessary. To protect the transnational infrastructure projects and the rights and interests of all stakeholders, it is necessary to have a strong regional legal regime with binding norms and enforceable mechanisms. In the absence of binding common rules,

²⁵ See Article XI, *Memorandum of Understanding between India and Bangladesh for Construction of the India-Bangladesh Friendship Pipeline between Siliguri (in India) and Parbatipur (in Bangladesh)*, Government of India: Ministry of External Affairs, 09 April 2018.

²⁶ See Article XII.

²⁷ See Article XV.

geopolitical factors impact the realization of technically-feasible and commercially-viable initiatives.

It is widely known that in the context of South Asia, a number of regional gas pipeline projects have come to be discussed extensively in policy circles and diplomatic conferences in recent years. Although the region is not rich in hydrocarbon resources, it is located in geographic proximity with areas with enormous petroleum resources- Central Asia, Middle East, Iran, Myanmar. Numerous studies indicate that it is both technically viable and commercially feasible to construct and operate transnational energy pipelines linking India with gas producers in the region-Iran, Turkmenistan, Qatar. Yet, geopolitical factors and trust-deficit among major players have meant that large international projects such as the Turkmenistan-Afghanistan-Pakistan- India (TAPI) pipeline agreements are yet to be realized on the ground.

Be that as it may, the successful completion of the India-Nepal Petroleum Pipeline project is a great boost for beneficial energy cooperation in South Asia. Likewise, the ongoing construction of the India-Bangladesh Friendship Pipeline project is also emblematic of the growing number of trade and transport connectivity infrastructure projects being facilitated by India and Bangladesh. Prospects are also opening up for the development of other cross-border pipeline energy projects in India's neighbourhood, especially with Bhutan and possibly, Myanmar. While the India-Nepal pipeline is already functional, the India-Bangladesh pipeline is swiftly moving to completion. It augurs well for the regional energy cooperation scenario in South Asia that these modest but important initiatives are taking place, setting the stage for gainful institutional experience and larger, transnational energy security projects in the times to come.