ENERGY SECURITY AND THE IPI PEACE PIPELINE: CHALLENGES AND OPPORTUNITIES

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Abstract

The Iran-Pakistan-India (IPI) peace pipeline is considered a win-win proposition for the three countries which may lead to enhanced economic interdependence and promote durable confidence building measures. This project can be integrated into the Chinese led economic integration initiatives called the Belt and Road Initiative (BRI), which is expected to help Pakistan become an economic hub and energy corridor for the major rising economic states in the region like China and India. Massive industrialization in the South and South-East Asian region has exponentially increased the energy demand to cater to the global market needs. This paper investigates why notwithstanding the consistently growing energy demands in the region the IPI has as yet not materialized despite being an opportunity for both economic development and conflict resolution. Following a retrospective analysis of the developments since the project was announced, the paper concludes that political disputes among neighboring countries of South Asia and US sanctions on Iran are the core challenges that have hampered this and other development initiatives. Sanctions, however, have generally remained ineffective in international relations due to the rise of complex interdependence. Iran and Pakistan, as participant countries in the peace pipeline, are determined to continue the project for viable peace and development in the region.

Keywords: IPI-Peace Pipeline, Economic Interdependence, Energy Security, Development.

Introduction

Energy security is the primary issue area for countries in pursuing economic growth and essential for the smooth functioning of industrialized economies.[1] The fast growing technological advancements and rising interdependence are features of an increasingly globalized world. Yet, a population of almost two billion in developing parts of the world lack energy resources required to meet their basic needs. Despite this lack of access to energy and security, some regions in the developing world have performed remarkably well, owing to their fast economic and technological growth rate. But the majority of the developing countries are still grappling with issues of energy security that has significantly affected their industrial growth. Among these developing societies, the South Asian region alone encompasses 22% of the world's total

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population, while nearly half of the population (40%) lives below the poverty line. A large portion of the population lives without appropriate access to energy.[2]

Since the Cold war, oil has become an indispensable strategic resource.[3] The Middle East has the world's largest oil reserves supplying to most of the regions in the world.[4] The Arab Oil Embargo in the 1970s, demonstrated the power of oil in shaping the political behaviour of the global powers and their subsequent efforts to monopolize strategic oil assets.[5] During the last few decades, the global economy has witnessed soaring prices in the world oil market particularly due to the political turmoil in the Middle East. This has had a deep impact on Asian countries in general and the South Asian region in particular. China, India and Pakistan are rapidly growing economies with a huge appetite for energy which if not properly ensured might lead to a great economic crisis.[6]

Energy security is becoming a critical issue for these three countries which they need to ensure, by putting aside their differences for peace and viable economic growth. India and Pakistan both have deeper stakes for their future survival, hence in the longer run, both require collaborating with each other particularly in energy matters.

Geo-strategically, Pakistan's position as an economic and energy corridor can serve as a linchpin for peace and economic integration in the region. It is the shortest route for the supply of Iranian, Turkmen and Persian Gulf oil and gas to India and China.[7] This new configuration of economic and energy route through China Pakistan Economic Corridor (CPEC) enhances the geo-political significance of Pakistan in global politics, i.e. historically like the construction of the Suez and Panama Canals enhanced the geopolitical importance of their respective regions.[8]

The IPI is a significantly important neo-functionalist cooperative project that would enhance economic interdependence amongst the members involved. Puri posits that the project might precipitate a domino effect leading to peaceful relations between India and Pakistan.[9] It is, therefore, imperative that the viability of the project may be explored. The paper primarily relies on journal articles and news articles to determine whether the project will help improve the prospects of peace and development in South Asia. Although, this project has the potential to reshape the power structure in the region by creating new alliances and changing old rivalries into new friendships, its implementation has been delayed indefinitely. The governments in Pakistan and Iran have shown interest in reviving the deal. This paper examines the events leading to the renewal of the interest by analyzing the details of the project since its initiation.

Evolution of the IPI Project

Pakistan, in addition to taking advantage of the pipeline for its domestic consumption, is in the pivotal position to provide a conduit for energy transportation to other states in the region.[10] The IPI pipeline or the peace pipeline project planned to transport gas through 2600 km distance from Iran's South Pars gas field to India via Pakistan. Initially the IPI was conceived in 1989 by Mr. Ali Shams, the Deputy Foreign Minister of Iran, and Mr. Rajendra Pachauri the then Director-General of the Tata

Energy Research Institute in Delhi. Initially the official Indian response was obscure due to poor relations with Pakistan, however, after further analysis, India agreed to the consortium. In 1993, India finally signed a Memorandum of Understanding (MoU) with Iran.[11] There are three route options, through land, deep sea and shallow sea. India has been more concerned about the security rather than the economic costs and technical issues of the project.

Initially, internally Pakistan could not develop a complete consensus supporting the pipeline transit, due to the strained relations with India. As such, Pakistan refused to let the pipeline go through its territory. Furthermore, Pakistan Navy also had security concerns, as allowing the Indo-Iran pipeline to pass through Pakistan's Economic Exclusive Zone, will give the Indian navy an excuse to enter Pakistani waters. In addition, Pakistan seemed more interested in the Turkmenistan-Afghanistan-Pakistan (TAP) pipeline project which would be 40% cheaper than the Indo-Iran project.

In response to Pakistan's failure to provide a transit route or a political decision in favor of joining the project, Iran and India began discussions over a deep waters route, in order to avoid the Pakistan territory altogether. However, the deep-sea pipeline option, in addition to being costlier than the land option, is prone to security risks. Due to increasing energy demands, India had to speed up the land route option. Keeping the geopolitical complexity in mind, India used these conditions as incentives to pressurize the US to hasten its civil nuclear deal. There was also a growing realization within Pakistan that by staying out of the pipeline project it might also lose the option to earn a transit fee, which initially at a minimum was to be US $ 500 million per annum. After due deliberation, in 2001-2002 then President Musharraf considered it as a transit gas pipeline with monetary benefits until realizing energy need in Pakistan and engaging India into this project till 2005-2006, eventually Pakistan desired to be part of project and the pipeline will be allowed through its territory.[12]

Finally, it was assumed that the Indo-Iranian pipeline, now dubbed the IPI or the 'peace pipeline,' would play a pivotal role in mitigating political rifts between India and Pakistan and begin a new chapter of cordial relations leading towards economic integration. Originally, the IPI was worth US $ 7.5 billion covering a distance of 2600 km stretching from the south of Iran to India, with an approximately 400 miles of line planned through Pakistan's resource rich province of Balochistan. Iran has the second largest gas reserves in the world after Russia, estimated at 812 trillion cubic feet.[13] Through the IPI, Pakistan would not only address its growing energy needs but also earn a hefty transit fee.[14]

The initial phase of the project was to provide 110 million standard cubic meter per day, of which nearly 25% was to cater to domestic demands, 25% was to be transported to Pakistan, while 50% was to be transported to India. To meet future demands, a parallel pipeline was also proposed to be constructed. Pakistan further requested for higher gas off-take, and proposed another dedicated Iran-Pakistan pipeline. India objected to this move,[15] however, recent developments indicate an interest by both Iran and Pakistan to renew work on the Iran Pakistan pipeline.[16]

According to Pakistan's Ministry of Oil & Gas, the construction of pipeline at Pakistan's site was to start by late 2009 and finish by 2011, but this dream is yet come to fruition. The cost of the entire pipeline inside Pakistan was estimated around US $ 2.6 billion. Iran had in 2007 already embarked on the construction of the nearly 1100 km (690 miles) long project with an estimated cost of about US $ 4 billion. India planned to spend US $ 0.6 million to construct the 344 km (215 miles) long pipeline within its territory. Due to various geo-political reasons and US sanctions on Iran, Pakistan so far has not been able to begin the construction of the pipeline, where as in March 2010, the state Television of Iran stated that it had completed almost 907 km of pipeline construction, and was waiting for India and Pakistan. The project was expected to function completely during 2014.[17] Although in 2009, India withdrew from the project but in March, 2010, India again showed interest in the project. However, Pakistan continued it with Iran and renamed it as IP Gas or Iran-Pakistan gas pipeline. India's civil-nuclear deal, political turmoil in Pakistan and new sanctions on Iran pushed India out of signing the final deal. Pakistan wants to go ahead with the bilateral agreement with Iran as it is facing a huge energy crisis and mounting public pressure on the government to meet the energy deficit. Both Iran and Pakistan seem hopeful that India may join the consortium; otherwise, the option of China replacing India is also on the cards. In 2004, China and Iran signed a contract worth US $ 100 billion for a period of 25 years. Iran is to supply China with gas, and in return, China will help Iran build energy related infrastructure.[18] But, these development commitments are hampered by the on and off US sanctions on Iran and regional political disputes.

In early 2010, officially both Iran and Pakistan agreed to sign a US $ 7.5 billion pipeline deal, as India was staying out of peace pipeline project. The deal was finalized from both sides, by the Inter State Gas System (ISGS) a semi-autonomous company from Pakistan, and from the Iranian side by the National Iranian Oil Company (NIOC).[19] In March 2010, officially both Iran and Pakistan signed the Heads of Agreement (HoA) and Operational Agreement in Istanbul. The 'sovereign guarantee' was signed by S.R. Kasaezadeh, Managing Director of the NIOC, and Irshad Kaleemi, Joint Secretary of the Ministry of Petroleum and Natural Resources.[20]

During a tripartite summit on Afghanistan's security in 2010, presidents of both Pakistan and Afghanistan endorsed the peace pipeline with Iran for 30 years.[21] India also asked Iran for a joint meeting of the India-Iran Joint Working Group the same year in New Delhi. In this regard, Indian External Affairs Minister S M Krishna visited Tehran to embark on pipeline gas issue in fear that it will remain out of deal as Iran and Pakistan signed the final deal in March 2010.[22] Despite having reservations that it expected to be addressed, the Indian side was optimistic about the finalization of the deal (UPI, March 2010). The willingness of both India and Pakistan to embark on project comes to halt with another round of subsequent US pressure on both countries to isolate Iran during early years of President Obama, and Trump repealing US-Iran deal. The US fears that any kind of deal will help Iran to finance its nuclear program. These international political developments have almost forced Indian side to stay out of the deal. Moreover, India has not only been given relaxation to continue to import oil from Iran but also a reiterating commitment towards its civil nuclear deal by the US. This

one-sided offer has put Pakistan into a zero-sum game, reinforcing its decision to go for the energy project.

Energy Consumption, Strategy and Options for India and Pakistan

The rapid industrial growth and growing population in both India and Pakistan has raised the demand for high energy. Both countries consume more energy than produced. The IPI project is one of the core options for both countries to deal with their increasing energy immediately.[23]

India's huge growing economy primarily relies on oil and coal-based fuels.[24] It generates almost 50% of its electricity from coal, 32% from oil and rest from natural gas, hydro and nuclear resources. The energy production from coal and oil has stagnated in the last few years and the demand for its economic growth is increasing. India's core strategies are focused on nuclear power projects. Currently, India has 14 nuclear reactors operating commercially while nine are under construction. Existing reactors supply only 3% of India's electricity need, whereas by 2050, all projects will provide nearly 25% of the total electricity.[25] Indian owned oil and gas reserves are not enough, while its domestic demand is increasing rapidly. In addition, the capacity of thermal, hydroelectric and nuclear generation is lower than the demand, which has prompted the policy makers to seriously rethink the use of natural gas fuel for the future as the optimal choice to produce electricity.

During 2006, the total domestic demand in India for natural gas was 43 billion cubic meters which rose to 110 billion cubic meters in 2010.[26] India was also seriously considering constructing a gas pipeline from Oman, as an agreement was signed in 1994, but the high cost has hampered the project. Furthermore, two other projects went on the shelves as well. The Myanmar project via Bangladesh was dropped due to economic reasons, as well as the Afghan project, which is unlikely due to political instability in Afghanistan. Therefor the IPI is more economical and viable for India to sign the deal.

Despite ongoing energy projects under the China-Pakistan Economic Corridor (CEPC), Pakistan is currently facing an acute energy short fall. Through the IPI project, Pakistan can not only reduce its natural gas short fall, but can also use this gas pipeline to generate 5,000 megawatt electric power which can potentially address its energy requirements.

Why the Delay in IPI Gas or Peace Pipeline?

The study shows that there have been a myriad of reasons and factors involved in the delay of the project since its inception. Despite all parties realizing that it is politically, economically and environmentally the most feasible project, there are multiple domestic and regional/international issues, which have kept the IPI project from being implemented. These have been discussed below in detail while some issue areas have been touched upon earlier.

Regional/Domestic Hurdles for IPI-Peace Pipeline

The hurdles to the pipeline are varied and related to issues within all three members of the consortium. Firstly, the main reason for the delay is the rivalry between India and Pakistan and the trust deficit between the two. Pakistan initially was not in favor of the IPI gas pipeline as it was considered as a challenge to the status quo in the region.

Secondly, India has also been reluctant as it is skeptical of the security of the pipeline in Balochistan. India considers Balochistan as the home of many terrorist outfits while Baloch grievances and their opposition may also put the pipeline in jeopardy.[27] India fears that in case of any crisis with Pakistan, the pipeline may be cutoff, which will worsen the economy and energy condition and escalate more tension in the region. The situation worsened in 2016 when Pakistani security agencies arrested an Indian spy Kulbhushan Yadav in Balochistan. He has been charged for spying for India and conducting other terrorist related activities in the provinces. Pakistan took this issue to multiple regional and international forums including UN General Assembly. Pakistan has consistently blamed India for causing the persistent security threats and chaos in Balochistan by financing and providing support to Baloch militants, who have been attacking Pakistan's domestic gas pipeline, electric grids, transformers, and other public or private properties, the kidnapping and killing of Chinese engineers. Since 2003 almost 100 attacks have made by Baloch militants and out of 100 some 15 attacks targeted gas installations.[28]

Thirdly, the issues related to the price of the gas and transit fees has also slowed down the pace of the project. By 2008, Iran was willing to invest and start the project, whereas, the India and Pakistan negotiation process was quite slow.[29]

International Factor

In addition to the regional and local factors, international considerations have also had an impact on the commencement of the project. Iran's relations with the US is also a hurdle in the implementation of the IPI peace pipeline. The US has concerns about Iran's nuclear program and behavior and has its doubts about the IPI pipeline. The US is concerned at the prospect of Iran gaining political leverage with the construction of the IPI pipeline.[30] The US has repeatedly tried to dissuade the Indians and Pakistanis from going ahead with the deal, which seems to be the main reason it has not been implemented.[31]

Since the inception of the program, the US has been trying to lobby for extension of TAP into the Turkmenistan-Afghanistan-Pakistan-India (TAPI) by including India in the project, so that Iran may be excluded from energy security or energy politics of this region. Indian cabinet also approved TAPI gas pipeline, but the security situation in Afghanistan has become more volatile.[32] The US also offered to bring electricity from Tajikistan via Wakhan Corridor in Afghanistan to Pakistan, but again the project is dependent on the security situation in Afghanistan.

Both India and Pakistan understand that the IPI project is a *win-win* situation for both sides but at the same time, both countries also know that it may jeopardize their friendship with the US. It may result in severe economic crisis and penalties for being supportive to Iran. It is also not clear how much pressure Washington is willing to exert on both countries,[33] as the US also needs their support in the region for its own political and economic interests. Iran, however, has also looked into the possibility of China joining the Iran-Pakistan gas pipeline project.[34]

Future Prospects

The Asian Development Bank's feasibility report recommended IPI project over the TAPI gas pipeline. There are multi-faceted prospects of the projects. If India and Pakistan collaborate with each other only on single point agenda of energy needs, that includes gas pipeline transit issue and domestic power generation through hydro-projects with amicable solutions of disputes will begin a new prosperous chapter for the entire region and its development. Indian withdrawal from IPI was mainly because of bilateral disputes between India and Pakistan. If disputes are settled between India and Pakistan, the building of this inter-state gas pipeline or energy corridors will strengthen the regional integration and bring down conflict.

Political Impact

The IPI project could help in overcoming the trust deficit between India and Pakistan, and help these countries to move positively towards CBMs. This project could soften the hostility between both countries, and both can take jointly take a step towards stability of region by fighting against terrorism, poverty, economic crisis and emerging environmental challenges. In addition, the IP project can help overcome the differences within Iran and Pakistan over sectarian issues. Pakistan may also assure Iran to curb against terrorist groups like Jundullah, which Iran believes to be operating from Pakistan's Balochistan.

Economic Impact

The IPI project can be an economically feasible project for all the member countries. The population and economic growth requires India and Pakistan a high input of energy supply in the next few decades. India studied all the options to import gas, trading gas through deep waters directly either from Iran or Oman (agreements signed in 1993 & 1994 with both countries), India even proposed to ship LNG in tankers into India, but all options were economically not feasible. Finally, the cost assessment prompted India to drop all other options and accept the land route via Pakistan. Moreover, the companies involved are mostly internal, so employment opportunities will be provided to the local people.[35]

In addition, Pakistan will earn US $ 500-600 million per year through transit fees, which will help Pakistan to accrue US $ 14 billion in 30 years, including US $ 8 billion in transit fees, US $ 1 billion in taxes and US $ 5 billion in savings from IPI gas pipeline project. Pakistan should not lose any opportunity to exploit its geo-strategic

location, regardless of whether the pipeline emanates from the Middle East or from Central Asia or ends in India or China.

Environmental Impact

In recent years, there has been a strong link between energy and environment. The gas pipeline project more importantly carries environmental benefits. The usage of coal is common in South Asia, but it has great environmental repercussions, in contrast, the use of natural gas will lessen the pollution in the atmosphere and produce fewer greenhouse gases. The gas pipeline project is environmentally feasible too, as it will reduce carbon gas emission in big industrial cities like Karachi and Lahore (Pakistan) reducing the impact on global warming.[36]

Apart from clean air and fuel, another reason for the increasing demand for natural gas, is owing to its efficiency, abundance and existence as clean fuel for burning purpose. Presently, the largest consumer of natural gas is the power sector in global market, as well as in South Asia. More importantly its utility lies in it being more economical and efficient than other non-renewable sources. Table 1 provides a clear picture of the benefits of a natural gas plant in terms of its cost effectiveness, efficiency and the time in which it may be built when compared to either coal or oil fired plants.

Table-1: Comparison of Fuel, Oil, or Coal, Natural Gas: Economic and Utility Benefits

	Capital Cost/Unit Power Generation Capacity	**Thermal Efficiency in Terms of %**	**Construction Period in Terms of Years**
Natural Gas Plant	$ 650/kW	45 – 50	2 – 3
Coal-Fired Plant	$ 1,300/kW	30 – 35	5
Fuel-oil Fired Plant	$ 1,000/kW	30 – 35	4

Source: World Bank, 2000

The gas pipeline project will be as beneficial to Pakistan. Nearly 49% of Pakistan's energy consumption is allocated for residential purpose while only 33% is for the industrial sector. Oil is the most used for energy at 43.5 %, whereas natural gas accounts for only 38.3%. Hydro-electric also generates almost 40%, since all water streams are located in the high altitude region in the north of Pakistan it is more expensive to transport energy to the population down south.

Conclusion

The energy security and debates related to this theme have sped up the race between the haves and have-nots. Here haves mean those countries, which have sufficient energy resources and supply, and vice versa. Many developed countries are looking towards alternative energy resources, in order to reduce dependency over oil. The new energy resources would be more economically feasible and more environmental friendly. The case of Pakistan is not different as it is struggling to achieve better energy solutions so that it may fulfill domestic demands as well as boost their

economic activity. For instance, most of Pakistan's textile industry is shutting down due to the short fall of power supply.

The IP project will support Pakistan to produce 5,000 megawatt power. It is the greatest advantage for South Asian countries that they share borders with the Persian Gulf and Central Asia, considered as world's major natural and oil reserve regions. If India would be party of IP, this could help bring India and Pakistan closer to each other, thus the pipeline project could turn into a real source of peace in the region.

In the long run, the entire region can boom its economic growth as Asian Tigers set the examples in the last quarter of 20th Century. If India will join hands in IP, they should go for both IPI and TAPI project.[37] Pakistan will import only 20% of its energy requirement via the IP gas pipeline while in the times ahead the need is expected to be doubled. These rising energy demands are catalysts that prompt the member countries to seriously address issues of mutual interest and tackle international pressures of sanctions. This requires the effective role of leadership, political will and commitment to address these issues.

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