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PIPELINES OF INDIA'S ENERGY SECURITY

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A major development in India's energy import scenario took place on 13 December 2015 at Mary, Turkmenistan when leaders from four countries; India, Pakistan, Afghanistan and Turkmenistan got together for the ground breaking ceremony to launch the TAPI project. Turkmenistan-Afghanistan-Pakistan-India (TAPI) project was one of the three natural gas import projects pending for years due to various complications. The 1735 km over land gas pipeline is designed to supply 33 billion cubic meters of gas annually to the energy starved South Asian states. Indian Vice President Hamid Ansari, while taking part in the ceremony termed this project as 'first steps towards unification of the region'.[1]

Image 1: TAPI and IPI Pipelines

Source: TAPI and IPI: Pipelines for Good, http://outlookafghanistan.net/topics.php?post_id=2209 , 16 Oct 2011

The Turkmenistan-Afghanistan-Pakistan-India (TAPI) gas pipeline is expected to carry 90 million standard cubic metres a day (mmscmd) gas for the next 30 years and is planned to become

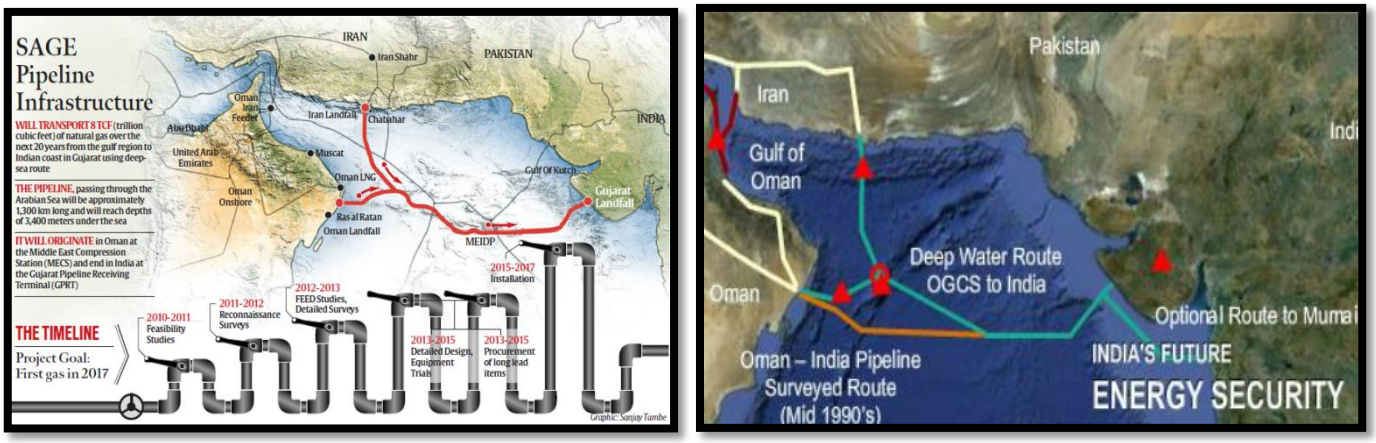
operational by December 2019. With India and Pakistan share of 38 mmscmd each (about 42%) this project will be able to meet about 15% of India's gas demand. The $8.7 billion project is being built by a consortium comprising TurkmenGaz (a national gas company of Turkmenistan) - the leader with 85% stake, Indian PSU GAIL with 5% stake, ISGS of Pakistan and Afghan Gas Enterprise (AGE) with 5 % stake each[2]. In addition, India and Pakistan will also have to pay transit fees for over land transit to respective countries. Earlier, it was heard that China might be interested in investment in this project as part of China Pakistan Economic Corridor (CPEC), which has been dismissed by the Indian side.

Although, it is remarkable to see countries like India and Pakistan, with diverse interests being brought under one umbrella by the Turkmenistan President, this project is expected to face serious challenges from the security point of view. With a major portion of the pipeline passing through the troubled Afghanistan and Pakistan; 773 km in Afghanistan and 827 km in Pakistan before hitting Fazilka, Punjab in India, the consortium along with the states will have lot of do a lot of thinking. Keeping in mind the deteriorating security situation in Afghanistan has committed to raise a 7000 member security force to guard the TAPI gas pipeline.[3] Apart from the Taliban that operates on both sides of the Af-Pak border, the threat from other militant groups in Pakistan also looms large. Notwithstanding the doubt and scepticism the stake holders are positive of overcoming the hurdles.

From India's perspective the deal has come at an appropriate time. India has been struggling for the past 20 years to get at least one pipeline project through to meet its energy requirements. The Iran-Pakistan-India (IPI) over land gas pipeline project was abandoned by India, citing security and commercial concerns. It is understood that the Pakistan portion of the project is underway with the financial assistance provided by China. In all probability, the IP pipeline will be extended to China's western province of Xinjiang as part its 'One Belt One Road (OBOR)' economic strategy towards Central Asia.

In another positive development, with the lifting of sanctions, Iran is all set to arrive at an agreement with India for initiating the dormant under sea pipeline project, known as the Middle East to India Deepwater Pipeline (MEIDP). This 1400 km gas pipeline project is being steered by an Indian company South Asia Gas Enterprise (SAGE). SAGE will lead an international consortium for laying the $4.5 billion pipeline from Chabahar port on the Iran coast and Ras-Al-Jafan on the Oman coast to Porbandar, India through the depths of Arabian Sea. As expected, its route will be kept outside the EEZ of Pakistan to transport about 31 million cubic meters of gas per day to India. Initially, Pakistan did object to the route of the proposed pipeline through its EEZ, which was later moved away to avoid any complications in future.

Image 2: Pipeline Infrastructure



Source: http://indianexpress.com/article/india/india-others/stuck-in-the-pipeline-a-4-billion-deep-sea-gas-project/ , 13 May 2015

The original Oman – India Pipeline (OIP) project was first mooted in 1999. The two sides signed an agreement for the supply of 56.6 million cubic meters of natural gas through the 1,130 km undersea pipeline across the Arabian Sea to be built at a cost of $5 billion. However, the project could not be started due to lack of technological capacity and non-availability of repair ships capable of undertaking work up to depths of 3500m.[4] With the improved deep-water design and pipe laying technology, it has become possible now to re initiate this project. Further, Iran was keen to join the project to export its produce from its South Pars gas fields and transport gas to India from Chabahar port. With India pulling out of the IPI project and undue delay in the TAPI project due to Pakistan's involvement; it was just appropriate for the Indian government to grab the deal.

From India's point of view, getting a reliable, long term and secure source of natural gas is the need of hour to meet the inescapable demands for power generation, fertilizer production and city gas distribution. India's natural gas demand is forecast to grow at an average of 6.8%/year from 242.66 million cu m/day in fiscal 2012-13 to more than double to 516.97 million cu m/day in fiscal 2021-22 and further to 746 million cu m/day in fiscal 2029-30.[5]It is expected that the country will be become the world's second largest energy consumer in the next 25-30 years. Together, these two import options will be able to meet about 35% of the gas demands of India. Availability of cheap natural gas from two different sources will also result in huge savings to the state as compared to the costlier LNG imports. In the long run, Iran, with its second-largest natural gas reserves may turn out to be an ideal partner. On the other hand, energy flow from Turkmenistan will provide India an access route to the Central Asian Region.

Looking at the deteriorating security situation in Afghanistan, the Taliban threat and the growing Islamic State activities, India will certainly be happier with the MEIDP project supplying gas

through underwater pipelines rather than over land pipeline passing through the disturbed areas. The biggest advantage of choosing MEIDP is that it bypasses Pakistan. Although, Afghanistan with its newly raised security force to guard the TAPI project, is putting all possible efforts to make this venture a success, there is no assurance that al-Qaeda, Taliban or other such groups will not interfere with the pipeline project.

Notwithstanding these apprehensions, India, to meet its growing demands, requires diverse sources of gas supply to avoid any contingency in future. As the TAPI project has already been formally launched, it will be best in India's interest if it is completed on schedule overcoming all hurdles. Meanwhile, necessary efforts must be made to ensure that the MEIDP project is also put on fast track to ensure long term energy security for the country.

Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

[1] Vivek katju, "Still in the Pipeline", *The Indian Express*, December 18, 2015, http://indianexpress.com/article/opinion/columns/still-in-the-pipeline/.

[2] http://economictimes.indiatimes.com/industry/energy/oil-gas/gail-to-take-5-stake-in-consortium-building-tapi-pipeline/articleshow/50339881.cms, 27 Dec 2015

[3] Dawn, 28 Dec 2015, http://www.dawn.com/news/1229154

[4] Dr Vijay Sakuja, The Oman Gas Pipeline, http://www.ipcs.org/article/india/the-oman-gas-pipeline-indias-underwater-energy-supply-chain-4421.html, 05 May 2014

[5] Vision 2030, Natural Gas Infrastructure in India, http://www.pngrb.gov.in/Hindi-Website/pdf/vision-NGPV-2030-06092013.pdf