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Wen Liu, 2005,7,A Research on the Statistical Index of College Graduates Employment Rate , Statistic and Forecasts

Wen Liu, 2006,4, An Investigation of Higher Education Investment & The Supply and Demand of Graduates,China Economy Publishing House

Study on the causes, shackles and strategic choices of Sino-India energy cooperation

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Abstract: With rapid economy development of China and India's, the energy problems become more and more prominent , which stands in their way for further economic development. The energy cooperation between the two countries in resolving their energy security issues and exploring overseas energy markets are beneficial for both sides. However, because of the complicated geo-political and international political factors between the two countries , there is still a great gap between the progress of bilateral energy cooperation and the potential for cooperation. In order to accelerate the process of energy cooperation between China and India , strategies should be taken in strengthening bilateral energy cooperation between the enterprises, promoting multilateral energy cooperation, expanding energy cooperation, promoting bilateral cultural exchanges.

Key words: Sino-India ; Energy -Cooperation ; Causes ; Strategies

1.Sino-India energy cooperation achieved initial success

In recent years, China and India energy cooperation achieved initial success. In Sudan, Chinese oil companies operated the largest oil field Neil there, the 25% stake of which was purchased by India's oil and gas company in 2002. Besides, China builded up a refinery in the Sudanese capital Khartoum, the refining good products of which were transported to a nearby port before export through an oil pipeline constructed by India. In Russia, after the Russian state oil company took the place of Yukos as China's largest oil suppliers, India planned to buy 15 percent to 20 percent of the shares of the company. In the purchase and exploitation of international oil and gas fields, the two sides shared out, quite harvest. December 21, 2005, China National Petroleum Corporation and India's national oil company jointly with the Canadian oil company signed an agreement, according to the ratio of 1:1 is jointly funded 576 million U.S. dollars to buy Canadian oil and gas assets in Syria. In August of 2006, jointly with India's national oil company Sinopec bought successfully 50% of the shares of a oil company in Colombia, each side holding 25 percent. Cooperation between the two countries also extends to the lower reaches of the energy industry. Such as the February 2005, India and China Gas Company gas company signed an agreement, that

India gas company would invest 243 million U.S. dollars to buy 9 percent of China Gas Company shares, which was the first cooperation in trade between the listed companies of China and India, and also the first “handshake” in lower reaches of the energy sector of the two countries. Early in 2007, India announced that the state-owned natural gas company joined hands with China Gas Holdings Limited to set up a joint venture company, which was China's first investment in India's oil and gas industry, each of the two sides holding 50 percent of the company.

2.The causes of Sino-India energy cooperation

2.1 Economy growth of China and India becomes the drivers of energy cooperation

Rapid economic growth of China and India lead them to be a big energy consuming country. China has become second only to the United States as world's fastest in the growth rate of oil consumption countries. According to the International Energy Agency (IEA) statistics, since 1990, the Asia-Pacific region accounts for oil demand growth in net global net increase of 76 percent, of which China from 1998 to 2003 the total net increase in demand for oil accounts for the Asia-Pacific region Growth rate of 64 percent. 2002-2008, the Asia-Pacific region oil demand growth of 2.3 percent in 2008-2015 to 2.4 percent. Over the same period, China's oil demand will average annual growth rate of 3.8% and 3.3%. In 2004 and 2005, China's dependence on oil imports, respectively 47.3 percent and 44.5 percent. China's oil supply and demand gap may also be further expanded in future.

At the same time, India as one of world's fastest-growing energy consumption country, conflicts between the energy supply and demand were also very obvious. India's oil consumption growth rate in the world ranked only after that of China, which was four times of the world's average level. During the year 1991-2001, India's oil consumption grew by 83.5 percent, with production grew by only 4.4 percent. Presently, India's daily oil consumption was as high as more than 200 million barrels, second only to China in the Asian region, while Japan's third-largest oil-consuming countries.

2.2 Rising of oil price becomes the direct factor to promote Sino-India energy cooperation

In recent years, international oil prices rose year by year, which caused serious impacts on the economy of both countries : the imported oil price per barrel changes one U.S. dollar , will affect Chinese imports by the 4.6 billion U.S. dollars, a direct result of fluctuations in GDP 0.043 percent. In 2005 ,China's spending on importing crude oil only was more than 10 billion U.S. dollars. As international crude oil prices rose, the Chinese oil imports reached 60 billion U.S. dollars, increased by 32 percent compared to that of 2004,

which was the first time to breakthrough 50 billion U.S. dollars in the oil trade deficit, represented 9.08 percent of the country's total import volume of trade. In 2003, India's spending on imported oil and gas reached 17.685 billion U.S. dollars, representing about 1 / 3 of total annual imports spending. The lack of oil exacerbated the vulnerability of the Indian economy, according to the Indian Ministry of Finance and the Central Reserve Bank's report that international oil prices rose five U.S. dollars per barrel, India's economic growth rate would decrease 0.5 percent and the inflation rate increased 1.4 percent. According to India's Oil Ministry statistics, due to the soaring of international oil prices since 2004, caused its annual economic losses of 180 billion rupees (43 rupees was as much as about one dollar) . Therefore, China and India energy cooperation is to safeguard the interests of security and vital interests of the economy.

2.3 Sino-India energy cooperation could be a rational choice to avoid loss of competitiveness

The two countries in energy development with regard to overseas interests overlap, if the two countries take the disorderly competition can only increase the cost to benefit both sides. As a big energy consuming country, to 2030, global energy consumption add nearly half from China and India, the two oil imports will exceed the United States and Japan, the current level. Therefore, the Chinese and Indian energy interests are related to each other, if they compete with each other, it will lead to the improvement of the cost of acquisition, strong financial resources makes the final Western oil giant won the oil project, with the result that "When the snipe and the clam grapple , the fisherman profits " .

2.4 China and India complement each other to overseas energy cooperation

For China, with relatively strong economic strength, it has greater advantages in capital and technology. And it enjoys good reputation and plays an important role in the world ,it also keeps harmonious relations with the oil-exporting countries, particularly with those in Africa; For India, it has the will and strength to explore overseas oil fields, and is one of the launched countries for the Non-Aligned Movement. Besides, it has millions of Indian descent in Africa and keeps close military ties with the Indian Ocean coast of the African countries. Moreover, the West community generally believes that India is the world's largest democratic country in the world, which makes it easy to gain the trust of oil and gas producing countries; finally, India is also the largest of the Indian Ocean countries. Control over oil transport routes from the Persian Gulf to the Indian Ocean, can provide a safe and convenient transport conditions for China's oil imports from the Middle East region.

2.5 The Host country's adoption of diversification of energy exports and

investment policies could promote Sino-India energy cooperation

Now the world's energy supply is generally pursuing an independent foreign policy, not willing to be too close with the same power, for fear that it would have big Influence on host's foreign policies. China and India are big countries with large energy needs, if they deal with energy-exporting countries separately may encounter obstacles. The two sides should jointly develop overseas energy resources, which is conducive to dispel the concerns of the host country and is also conducive to enhance the strength of the negotiations and to share investment risk.

3.The shackle of the energy cooperation between China and India**3.1 The lack of political mutual trust results from the circumscription tactic competition**

Because of the need of the circumscription tactic interest , India seems to be in a dilemma and sways obviously when it comes to the policies facing China. Though it wants to develop all kinds of cooperation with China, it also keeps China away and even be hostile to it . What matters most is that India treats China as a tactic rival or potential threaten. In China, however, many analysts also think that there are much circumscription tactic competition between China and India, and so that the abating between them just results from the motivation of short term policy demand , and the two countries are destined for a competitive relationship in Asia and Pacific area because of the competition for the hegemony of the third world, despite of the possibility that the boundary problem between them is solved finally. So there will be many difficulties for the two countries to cooperate more closely in energy field without highly political mutual trust.

3.2 All kinds of international factors make the two countries hold down each other

As the biggest collaborator of India, the United States looks it as its ally in nature but China potential rival. To maintain the favorable relationship with the U.S, India has to think about all kinds of American factors when develop the cooperation with China in energy domain. On the other hand, India is always keeping the wariness to the amity between China and Pakistan. It thinks that China is encouraging Pakistan to confront it ,although China is indeed making great efforts to improve the relationship between India and Pakistan. India is still critical of China despite of the efforts it makes.

3.3 Deficiency of technology, management and professionals makes the cooperation shoulder heavy responsibilities

The energy enterprises in the two countries all face many problems such as the deficiency of professionals, the lag of technology and management, and the

distemperedness of the invest system. There is a great gap between those western petroleum enterprises and them, and this makes it difficult to compete with the multinationals of developed countries even though the cooperation between the two countries can develop.

4.The tactic choice of the energy cooperation between China and India

4.1Enhance the cooperation between the enterprises from each country, promote the conformity of energy industry in the area

The two countries, India and China, are cooperating in the exploitation of energy beyond the sea, and there are possibilities that they can also cooperate in domestic in the gas and oil field. At the same time, they can found joint venture enterprises in energy exploitation and the upriver production,in the beforehand warn of earthquake and in prospecting for gas and oil. There are also potential to develop cooperation between the two countries in many fields such as the exploitation, the production and the market empolder of petrochemical, the transportation and the providing of gas,the oil pipeline field in both domestic and overseas,and so on.

4.2 Enhance multilateral energy sources cooperation, and enlarge the cooperation fields between the two countries

Multilateral energy cooperation is propitious to change other countries' opposed attitude, improve the cooperating complexion of the two countries themselves.And the cooperation with countries of strong energy strength is propitious to upgrade the energy exploitation ability of ourselves.

4.3Enhance the cooperation in the field of unconventional energy sources , to lay a foundation for the energy cooperation

India and China can also cooperate in many other fields, such as nuclear energy, waterpower, unconventional energy and reproducible energy. For example, the two countries can cooperate further to empolder the waterpower of Ganges and Brahmaputra ;in the nuclear energy field,the two countries both hold the technology strength and the cooperation in this field certainly has a nice prospect.

4.4Promote the communication of business trade,culture,and politics between the two countries so as to expedite the pace of energy sources cooperation

It is necessary to provide a favorable culture foundation for the energy cooperation between India and China by enhancing the communication of religion,morality and culture tradition; to gain the understanding and mutual trust of people from both countries by enhancing the communication of parties, parliaments, business circles, medias, academias

and all kinds of Non-Governmental Organizations. At the same time, both the two countries should stand at the stature of shared interest and dispose the historic problems appropriately to promote the relationship between the two countries.

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