

# Exploring the China-India Relationship

## Roundtable Report

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# **Exploring the China-India Relationship**

## **Roundtable Report**



## Executive Summary

With the 60<sup>th</sup> anniversary of the establishment of formal diplomatic ties between the People's Republic of China and the Republic of India taking place in the spring of 2010, the time was right to further explore the China-India relationship. On July 29, 2010, CNA China Studies hosted a half-day roundtable to discuss this important topic. Participants, who included analysts from various think-tanks in Washington, DC, were asked to address the following issues:

- India's perspective on the China-India relationship
- China's perspective on the China-India relationship
- Water issues and the China-India relationship.

This CNA report is based primarily on the presentations, findings, and discussions at the CNA roundtable. It does not represent a fully coordinated consensus of the roundtable participants.

### Key Themes

**Despite generally improving relations in recent years, China and India face challenges—such as the ongoing border dispute, the tensions over economic and foreign policy issues, and the Tibet question—that place limits on how close they can become.** China and India will likely continue to partner with one another on a pragmatic basis on issues of mutual interest; however, no broad consensus exists between the two countries.

**Likewise, on economic issues, China and India are likely to continue to cooperate where it is mutually beneficial, but trade-related frictions will continue to hamper the relationship.** In recent years, China and India have grown their annual trade volume to more than \$60 billion. Both countries have benefitted from this trade. However, a variety of challenges, including India's use of trade remedies, India's failure to declare China a market economy, and China's relentless focus on the purchase of raw materials, will put a strain on the China-India economic relationship.

**As both China and India expand their interests, activities, and presence in South and East Asia, they increasingly find themselves operating in one another's perceived zones of interest, increasing the possibility of competition and conflict.** China is concerned about India's increasing efforts to establish closer military ties with neighboring ASEAN countries and about the level of India's naval activity in the Indian Ocean, which it perceives as a possible challenge to China's sea lane access. India, on the other hand, sees China's increasing interest and activities in

the Indian Ocean and its growing relationships with India's neighboring states, such as Burma, as encroaching on its home territory.

**While India remains concerned about Pakistan in the near term, it is increasingly focused on the challenge of China.** As India re-conceptualizes its military doctrine, procures defense materiel, and frames its larger security strategy, China looms large. This evolutionary shift is due in part to a changing security environment, but also to India's desire to join greater strategic alliances that will position it as a more important international player.

**In the realm of non-traditional security, water issues will present challenges for China and India, both domestically and in their bilateral relationship.** India and China are the world's first and second largest consumers of fresh water, respectively. Each has made great strides in terms of development of water for drinking, sanitation, agriculture, and energy generation. The further development of hydropower presents the potential for internal challenges in both countries, due to unrest over population displacement and the environmental impact of major energy projects. In areas where China and India rely on the same rivers to generate electricity, questions over water management and usage rights could lead to friction. Climate change, which will eventually result in reduced water availability, is expected to exacerbate these issues.

# Exploring the China-India Relationship

## Background: The Historical Relationship

China and India have interacted with one another for thousands of years, especially in the areas of trade and religion. For centuries, however, the scope of their interaction was limited by the barrier of the Himalayan Mountains. When each country established a new government—India in 1947 and China in 1949—the relationship began to shift, and the two countries established formal diplomatic relations in 1950. The same year, China invaded Tibet, thus eliminating the geographic buffer between China and India.

The China-India relationship was further altered in 1962, when Indian troops moved to assert Indian territorial rights along the disputed Himalayan border with China. In response, China launched a counter-offensive and pushed the Indian troops back from the border. The People's Liberation Army (PLA) moved into India's northeastern state of Arunachal Pradesh and part of Kashmir, killing 3,000 Indian troops.<sup>1</sup> Since this clash, China and India have maintained the world's longest unresolved border dispute.

Following the conflict, formal diplomatic relations between China and India were downgraded, and bilateral trade was suspended. The two countries did not re-establish diplomatic ties until 1976. Since then, a variety of high-level visits in the 1990s and 2000s helped to improve relations. In 2003, each country appointed special envoys in hopes of finally negotiating an end to the border dispute. A preliminary deal was reached in 2005, but the final settlement never came to fruition. Tensions once again rose, and neither country appears ready to compromise.<sup>2</sup>

In spite of these border tensions, China and India have, in recent years especially, built a robust trade relationship. This economic relationship is likely to continue to grow, but old political-military tensions may mar economic advances. As two rising powers with both common and diverging interests, it is likely that China and India will continue to encounter situations that offer opportunities for pragmatic cooperation but also entail the potential risk of increased tensions.

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<sup>1</sup> "A Himalayan Rivalry," *The Economist*, August 21, 2010, vol. 396, no. 8696, p. 17.

<sup>2</sup> *Ibid.*, p. 19; U.S. Department of State Bureau of South and Central Asian Affairs, "Background Note: India," July 14, 2010. Available online at: <http://www.state.gov/r/pa/ei/bgn/3454.htm> (accessed September 2010).

## **The View From China**

### ***The China-India Economic Relationship***

A roundtable participant stated that the economic relationship between China and India has been largely positive to date, noting that China is currently India's largest trade-in-goods partner. In recent years, the two countries have been growing their economic relationship, with trade increasing from \$270 million in 1990 to an excess of \$60 billion in 2010.<sup>3</sup> As each country builds equities in the other's economies, a participant asserted, tension is reduced as is the chance for strategic miscalculation.

However, discussion among participants revealed that China and India's trade relations have not been without tensions. According to one participant, China is very concerned about India's use of trade protection measures. Compared to other World Trade Organization (WTO) members, India has been one of the largest users of trade protection measures. In fact, a participant noted that India has used anti-dumping measures against China more than the United States has. Additionally, India has not declared China a market economy. A participant pointed out that this particularly disturbs China, because achieving market economy status is something that China has been especially focused on. Participants concluded that, despite the overall positive tone of the economic relationship, if trade friction continues, it could become a source of major contention.

One participant wondered whether Chinese cooperation with India at the Doha round of global trade negotiations indicated a China-India alignment that is adversarial to the United States. In response, another participant expressed the opinion that these actions should be perceived as China and India working together to develop their own economies over the objections of the multilateral system. He cautioned that, while their interests came into alignment in Doha, this should be viewed as pragmatic, issue-specific cooperation rather than a general alignment. In fact, he noted, the various frictions discussed above make a broad consensus between the two countries unlikely.

### ***Where India Fits in China's Foreign Policy***

A participant pointed out that China has a very structured hierarchical view of its diplomatic relationships, placing them in the following priority order: first, relationships of greatest importance; second, relationships with neighboring countries; third, ties with European countries; and, finally, relations with other countries. India falls into the "neighbor" category, making relations with India of

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<sup>3</sup> "A Himalayan Rivalry," p. 17.



lesser importance to China than relations with the United States, for example, but still significant.

China's foreign policy, according to a participant, is an offshoot of its domestic development policy. The Chinese diplomatic approach is largely to conduct bilateral and multilateral relations with a view toward preserving a stable international environment and creating opportunities for growth. A participant asserted that Chinese relations with India fall into this framework. China recognizes the value of partnering with India on a pragmatic basis on issues of mutual interest. As such, the Chinese Foreign Ministry has made an effort to accentuate the positive in China's relations with India and to focus on trade and investment opportunities. This participant contended that when the two sides come together on a Track-2 basis, the Chinese try to gloss over differences, while India appears more willing to hash out issues.

According to one participant, the Chinese foreign policy approach toward India is fraught with difficulty because the issues between China and India are significant. This participant noted that, on the strategic, economic, cultural, and normative levels, the two countries have less in common than they have potential for conflict. This participant also suggested that the border dispute will continue to be a significant challenge to China's relations with India. Following the recent uprisings in Xinjiang Province and the Tibetan Autonomous Region, the PLA gained more autonomy and control over policy in those areas. According to this participant, the result has been a shift away from China's approach of accentuating the positive areas of the China-India relationship. This participant speculated that the PLA is likely to continue to push back against perceived Indian exercises and activities, resulting in increasing tensions.

### **India as a Rival?**

According to a participant, most Chinese do not view India as a rival. They see it as too chaotic and believe that its internal contradictions—including ethnic, religious, linguistic, and cultural differences—will keep it from succeeding in the way China has. A participant asserted that, even if some Chinese think that India's rise is inevitable, they believe that India is incapable of reaching the heights that China has. Moreover, China sees India as a regional power that can be hedged against via relations with Pakistan and through other efforts.

### ***Issues of Concern to China***

Participants identified a range of issues that China perceives as challenges with respect to relations with India:

As mentioned above, participants identified India's use of trade remedies and India's failure to declare China a market economy as issues that concern China.

Participants felt that if these economic frictions are unresolved, they may result in increased tensions between the two countries.

China also remains concerned about the unresolved border issue. According to a participant, Indian military exercises and activities in and around contested territories trouble China and have led it to be more outspoken in some of its claims. The lack of border resolution with India stands in contrast to the progress China has made with other neighboring states to resolve land border disputes.

India's increasing interests, activities, and presence in the Indian Ocean have raised concerns in Beijing. According to one participant, China has accused India of being a hegemon. India's patrol of the Seychelles and its increasing interests and activities in the Maldives, for example, worry China. A related issue is China's need to secure its energy supplies from the Persian Gulf. This participant pointed out that China increasingly feels it needs to preserve sea lines of communication (SLOCs) from the Persian Gulf, through the Indian Ocean, and on to China, in order to ensure the security of energy supply shipments. India's increased naval activity in the Indian Ocean presents a possible challenge to China's ability to preserve important SLOCs.

Another issue identified by panelists as one of concern to China is India's interest in developing closer military ties with ASEAN countries. For example, a participant pointed out that recently China has expressed increasing concern over India's efforts to further develop relations with Vietnam.

China is also concerned about India's recent long-range missile and anti-missile tests. According to a participant, China is worried about the tests themselves, as well as India's statements that its missiles are capable of reaching Beijing. The Chinese perceive these tests as being directed at them.

India's relationship with the Dalai Lama and the Tibetan government in exile continues to trouble China. While India has assured China that Tibetans in India are forbidden from participating in political activities, a participant remarked that China views the presence and acceptance of the Dalai Lama in India as a continuous source of tension. According to a participant, many in China expect that the death of the Dalai Lama will provide an opportunity for China to exert greater influence over Tibetan affairs, beginning with the selection of the new Dalai Lama. On the other hand, there are also fears in China that the Dalai Lama's death could radicalize Tibetans and create additional issues between India and China. Specifically, a participant noted, China fears that if radicalized, Tibetans could conduct terrorist activities against China from India.

A final issue identified by participants is China's continuing attention to the possibility of future Indian aggression. A participant argued that China has always perceived its relationship with Pakistan to be a hedge against such aggression. The

recent nuclear deal between the United States and India has further cemented Chinese views on the importance of preserving the China-Pakistan relationship as a hedge. According to this participant, this trend is likely to continue.

## **The View From India**

### ***A Strategic Baseline***

A participant stated that Indian strategists debate what India's grand strategic tradition is, and whether India even has one. This participant favored the argument that India does have a grand strategic tradition—one that is rooted in the British Raj. According to this participant, independent India inherited from Britain a tradition of thinking strategically about its broad zone of political and cultural interest and of going out into this zone to secure its position and interests. The participant noted that, to India, this zone includes the Persian Gulf, the sea lanes and islands of the Indian Ocean, and Southeast Asia. India's first prime minister, Jawaharlal Nehru, embraced this kind of outward-looking vision of India's national interest and its zone of operation.

A participant pointed out that, from 1947 to 1962, Nehru and others in India spoke of hopes for a post-colonial Indian-Chinese brotherhood. This was not directed against the West, but rather was based on the hope that two great civilizations that had emerged from foreign rule could reshape the global order together. However, the participant noted, this vision was shattered by the 1962 border conflict described above.

In the 1970s and 1980s, India largely pursued a non-aligned strategy. However, a participant noted that, at this time, India maintained strong ties with Russia in an effort to balance China and, in particular, China's support of Pakistan.

### ***A Strategic Shift***

A participant stated that India has always identified Pakistan as its primary rival. This is due largely to the two countries' geographic proximity, Pakistan's nuclear and missile capabilities, and Pakistan's export of terrorism into India.

While India remains concerned about Pakistan in the near term, a participant asserted that an evolutionary shift has occurred over the last few years, as many Indian strategists have increasingly begun to focus on the challenge of China. As India re-conceptualizes its military doctrine, procures defense materiel, and frames its larger security strategy, China looms large.

A participant argued that this shift is due partially to a changing security environment. However, he argued, the Indian shift toward viewing China as a

primary threat is also a result of India's larger global ambitions. China, by virtue of its participation in international councils and organizations, is seen as a top-tier world power. India arguably hopes to replicate its rise in power. According to the participant, by defining China as a peer competitor, India hopes to involve itself in larger strategic alliances, fall into strategic alignment with such countries as the United States, increase its involvement in East Asia, and become a greater international player.

Another shift in Indian strategy identified by participants is India's recent focus on improving the quality of its existing strategic relationships with certain countries and securing relationships with others. In the past five to ten years, noted one participant, India has focused on improving its relations with the United States, Japan, Southeast Asia, and Korea. India also has a newly intensified focus on securing relations with the islands of the Indian Ocean. As part of this effort, Indian vessels now patrol the Seychelles' territorial waters to fill a gap in the Seychelles' capabilities. Additionally, India has established a defense arrangement with the Maldives. A participant remarked that this became increasingly important to India once it learned that China was interested in port access and facilities in the island nation. According to one participant, the China-India dynamic has encouraged a new level of Indian outreach and engagement with its neighbors, which should be seen as a good thing.

Finally, participants asserted that Indians (especially naval strategy personnel) are thinking more aggressively about widening their country's horizons. India is therefore investing in power-projection assets, with a significant focus on the maritime domain. A participant stated that India anticipates having three carrier battle groups operational by 2025—one each in the Bay of Bengal, the Arabian Sea, and the Indian Ocean. In the next year, India will also procure approximately \$10 billion of advanced combat aircraft. These will all serve to expand India's reach and make it a player of growing consequence.

### ***Issues of Concern to India***

Participants identified a range of issues that India perceives as challenges with respect to relations with China:

The first issue participants noted was the ongoing border dispute between the two countries. According to one participant, India is concerned by China's increased outspokenness about its claims to parts of Indian territory bordering Tibet, including Arunachal Pradesh and Tawang—an enclave that contains one of the holiest monasteries in Tibetan Buddhism. A participant pointed out that India was recently angered when China refused to grant a visa to an Indian general from the contested area of Kashmir.

Participants also discussed India's frustration over its position in the world relative to China's. Specifically, a participant noted that, while China is one of the five permanent members of the United Nations (UN) Security Council, India was never considered for a similar position. Additionally, China conducted nuclear tests in 1964, which made it an established nuclear power before the Nuclear Non-Proliferation Treaty (NPT) took effect in 1970. According to a participant, in India's view, this put China in the "big boys club" and left India behind, since India had not decided to pursue a nuclear weapons program at that time.

China's increasing interests and activities in South Asia, including its military assistance to India's neighbors, greatly concern India. A participant pointed out that Pakistan, Burma, Bangladesh, and Nepal are all chief recipients of Chinese military assistance. For example, the participant noted that China directly sponsored Pakistan's nuclear weapons program during the 1980s. According to this participant, there is arguably no other instance of a direct transfer of nuclear materials and nuclear warhead designs from one established nuclear power in the NPT (not to mention a great power and member of the UN Security Council) to another country. India sees China's assistance to Pakistan as clearly designed to counter India. As an additional example, the participant remarked that China's increased support of the military government in Burma troubles India.

A related concern for India is China's increasing naval activities and presence in the Indian Ocean, which India has historically viewed as its home waters. One participant noted that India is particularly sensitive to Chinese incursions, such as military ship visits and port construction, all along the rim of the Indian Ocean, including in Bangladesh, Burma, Cambodia, Gwadar (Pakistan), Sri Lanka, the Maldives, and other Indian Ocean islands. The participant stated that India is very disturbed by the Chinese blue-water naval vessels that are conducting, and will increasingly conduct, activities in the region with the support of local states.

Like China, India also has concerns over the questions of Tibet and the Dalai Lama. Participants concurred that tensions may come to a head when the next Dalai Lama is chosen. One participant noted that India will support Tibetans in conducting an independent process to select the next Dalai Lama, while China will attempt to control the process. A participant pointed out that the issue of the Dalai Lama's succession may have a negative impact on the border conflict.

Finally, a participant pointed out that India is cautiously observing China's activities in Africa. While participants generally felt that India is comfortable with its own footprint in Africa and sees China as a relative newcomer to the continent, they noted that India is beginning to realize that it may face some competition from Chinese companies there. In particular, a participant remarked that India has noticed the way that China throws money around in the developing world to gain the upper hand in investment deals. Because of this, the participant asserted, India

believes it must harness the power and money of the state behind both state-owned and private companies in order to better compete with China in Africa.

## **Focus Area: Water and the China-India Relationship**

The organizers of the roundtable believe that water issues are likely to place new demands on the China-India relationship, and chose this non-traditional security topic to highlight a major functional area of concern to the two countries.

### ***Water Development***

Both China and India have a major interest in further developing their water resources to meet the water and sanitation needs of their large populations. Although both countries have made great strides in making safe water available, a participant cautioned that much work remains to be done.

India and China are the world's first and second largest consumers of fresh water, respectively. However, within each country, there are vast regional disparities when it comes to water access. Many people, particularly in the more rural areas of both countries, lack access to improved drinking water and improved sanitation.<sup>4</sup> According to a participant, while 88 percent of Indians and 89 percent of Chinese have access to improved water sources, only about 31 percent of Indians and 55 percent of Chinese have improved sanitation in their homes. These figures represent a major improvement over the past; however, 140 million Indians and 147 million Chinese still lack access to safe drinking water, while 815 million Indians and 600 million Chinese lack access to improved sanitation. One participant put this figure in a global perspective: worldwide, one-third of all people who lack safe drinking water and one-sixth of all people who lack improved sanitation are Indian or Chinese.

According to a panelist, this underdevelopment of water resources has enormous human and economic tolls. In India, for example, about one-fifth of all communicable diseases are related to unsafe drinking water and 535,000 children each year die from diseases caused by unsafe drinking water. In terms of economic costs, a participant noted that the World Bank estimates the cost of water scarcity and pollution in China as 2.3 percent of China's GDP each year. Therefore,

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<sup>4</sup> According to the World Health Organization (WHO) and UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation, improved sources of drinking water include: piped water into a dwelling; piped water into a yard or plot; a public tap or standpipe; a tubewell or borehole; a protected dug well; a protected spring; and rainwater. Improved sanitation refers to: flush toilets; piped sewer systems; septic tanks; flush or pour flush to a pit latrine; ventilated improved pit latrines; pit latrines with slab; and composting toilets. See: JMP, "Types of drinking-water sources and sanitation," March 16, 2010. Available online at: <http://www.wssinfo.org/definitions/infrastructure.html> (accessed September 2010).

continued water development remains an absolute imperative for both China and India.

### ***Water and Agriculture***

One of the main reasons that China and India are consuming so much water is agriculture. A panelist noted that ensuring the sustained growth of agriculture is important for each country's economic, food security, and internal security strategies.

With regard to Indian and Chinese economic strategies, a participant pointed out that agriculture is a key focus since it makes up 18 percent of GDP in India and 11 percent of GDP in China. In both countries, most of the population works in agriculture. To sustain agricultural growth, according to a participant, 90 percent of water use in India and 66 percent of water use in China goes toward agriculture. India's use of water for agriculture totals more than any other country's use of water for any purpose. In fact, a panelist noted, India uses more water on agriculture than China, the United States, and Brazil together.

A related issue is that of food security. A panelist briefly noted that the "green revolution," which has resulted in high-yield crops and high-intensity farming, demands increased amounts of water for irrigation. India depends on these high-yield crops, and the water used to grow them, to be self-sufficient in terms of food production.

Finally, discussion focused on the continued sustainability of the agricultural sector as key to each country's internal security strategy. Both China and India face the critical issue of rural-to-urban migration. Should water scarcity become a problem in the rural areas of either country, it could exacerbate this migration and result in a political problem. Because of this, the panelist noted, leaders in both countries are concerned.

### ***Water and Energy***

One participant pointed out that water is key to China and India's energy sectors, and therefore, both countries are interested in furthering their development of hydropower. This presents the possibility of internal conflicts over population displacement and the environmental impact of dams and other projects. It also presents possible challenges to bilateral relations, as China and India share access to some of the same hydropower-rich rivers. Global climate change, noted several participants, is likely to exacerbate problems related to water and energy. Finally, both countries face a projected major gap between the amount of water needed and the amount available.

## Hydropower

Both China and India have great ambitions to further their development of hydropower. According to one participant, the two countries see hydropower as a key resource for responding to the energy shortages that pose an economic risk and act as an impediment to economic growth. In fact, a participant noted, China hopes that by 2015 it will get about 30 percent of its energy from hydropower. India's current ratio of hydropower to thermal power is about two to five. It would like to shift this ratio to about four to six, and this participant noted that it appears to be on track to meet this goal.

However, a participant cautioned that, despite being a boon to economic growth, hydropower development in China and India raises a host of domestic challenges, including population displacements and objections to the environmental impact of energy projects. While both countries have historically embraced large dam projects and irrigation schemes, the flooding that has resulted from these projects has displaced large populations. There have been revolts in India over both population displacements and environmental issues related to hydropower. Similarly, a participant pointed out, in China, water-related protests have reportedly increased from 15,000 in 1985, to 95,000 in recent years.

## Water, Energy, and the Issue of Shared Borders and Resources

In addition to the internal tensions that energy issues may cause within each country, a participant remarked that the shared border between China and India may result in confrontation over water use, particularly when it comes to shared rivers and contested geographic areas.

A participant noted that the Tibetan Plateau, where China's and India's borders intersect, is often called "The Third Pole" or "Asia's Water Tower" due to the amount of water contained in its glaciers. Ten major rivers in the Asian continent flow out of the Tibetan Plateau. These rivers help fill the energy needs—as well as the agricultural and food security needs—for both India and China. A participant suggested that competition over the use of some of these rivers may present a challenge to the bilateral relationship.

The most likely emerging flashpoint for confrontation between China and India, asserted one participant, is the Brahmaputra River.<sup>5</sup> This river originates in Nepal, flows through Tibet, and then bends down into northeastern India. The bend in the Brahmaputra River before it enters India is one of the richest hydropower areas in the world due to a significant drop in altitude. In Tibet, this river has the potential to supply approximately 110,000 megawatts of hydropower if it is developed by China.

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<sup>5</sup> The Brahmaputra River is also known as the Yarlung Tsangpo River in Tibet.



A participant pointed out that China has assured India that the Chinese development projects underway on the Brahmaputra River are “run of the river” projects that do not impede the flow of the river. In such projects, water theoretically flows through the turbines at the same rate that it flowed previously. That said, the participant noted that by having a dam in place, China could withhold water from India downstream if it chose to do so. In many cases, the participant continued, it would make sense for China to do so in order to build up a reservoir behind the dam. Such a reservoir could be used to keep turbines running throughout the year, regardless of precipitation or the amount of water feeding into the river. Such practices will become increasingly appealing as global climate change becomes more pronounced.<sup>6</sup> If China were to withhold water from India, it could cause major tensions, as India depends on the same water for its own hydroelectric and irrigation projects.

Another area where tension is possible between China and India over water and energy issues is Arunachal Pradesh. A participant noted that India gets about 30 percent of its hydropower from this long-disputed area. Moreover, an additional 45,000 megawatts of power could be developed in this region by whichever country controls the territory.

### **The Challenges of Climate Change**

Climate change presents several challenges related to water and energy for both China and India—including increased floods and droughts, the eventual reduction of available water in rivers, and the effects of increased water temperature on the ability to cool thermal power plants.

First, according to a participant, climate change will affect the flow of every populated river basin in the world by 2050, resulting in an increased likelihood of both floods and droughts. If dams aren’t built to withstand new flood levels, they will break, releasing water downstream in an uncontrolled and dangerous fashion, creating the possibility for tension between China and India.

Over time, noted this participant, climate change will actually reduce the amount of water flowing in the region’s rivers. As global temperatures rise, the glaciers of the Tibetan Plateau will melt. Water flow will increase at first; then, as the glaciers recede, the amount of water available will be reduced by up to 25 percent. Water planners are aware of this and thus have an incentive to build reservoir dams to maintain a safety reserve to keep the turbines running. In the case of the Brahmaputra River, discussed above, Chinese water planners will become more likely to withhold water from India to fill Chinese reservoirs, which could result in friction.

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<sup>6</sup> This will be discussed further in the next section.

Finally, discussion highlighted that another effect of climate change will be to raise the temperature of water used to cool thermal plants. Thus, the water may no longer function as a cooling agent. To illustrate this point, the participant used the example of Europe's 2003 heat wave. During the heat wave, France had to shut down some of its nuclear power plants because the temperature of the river water used to cool the power plants rose to the point that it no longer served its role as a cooling agent. This issue is likely of concern to both China and India.

### ***The Looming Water Gap***

A participant noted that both China and India are both facing a major future water gap. This gap could be closed through a variety of strategies, some of which would pay for themselves. That said, the participant acknowledged that political challenges in both countries might present a barrier to change.

According to projections from a 2009 McKinsey report, by 2030 India will face a 50-percent gap and China will face a 25-percent gap between consumptive water needs and available, sustainable, renewable water resources.<sup>7</sup> Therefore, a participant stated, both countries need to take measures to combat the growing gap. The stresses of this gap will be difficult to deal with; however, the participant argued that such difficulties will not necessarily sabotage economic growth.

A participant asserted that the water gap could be largely closed by reducing the tremendous amount of water that is wasted or lost in each country's system. The McKinsey report offered a number of strategies for recovering water, including increasing irrigation efficiency and reducing loss from urban water systems. The study found that India's water gap could be completely closed without any reliance on large water development projects.

According to one participant, although India and China could close the water gap in a variety of ways, internal political challenges and policies are a major impediment to both countries in doing so. For example, every year, China loses \$30 billion by not adopting water efficiency strategies that would pay for themselves; however, political difficulties have thus far presented too large a barrier to the change such strategies would require.

Because the water gap could be closed with a concerted effort from each country, a panelist judged that there is no need for either country to panic. However, he also noted that both countries should be seriously looking at strategies for

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<sup>7</sup> For more information and the full text of this report, see Lee Addams, Giulio Boccaletti, Mike Kerlin, and Martin Stuchtey, *Charting our Water Future: Economic Frameworks to Inform Decision-Making*, McKinsey and Company, 2009. Available online at: [http://www.mckinsey.com/App\\_Media/Reports/Water/Charting\\_Our\\_Water\\_Future\\_Full\\_Report\\_001.pdf](http://www.mckinsey.com/App_Media/Reports/Water/Charting_Our_Water_Future_Full_Report_001.pdf) (accessed September 2010).

effectively enacting such efforts and for overcoming the political barriers to doing so.

## **Concluding Thoughts**

China and India have a long history of interaction. At times, their relationship has been punctuated by pragmatic cooperation, but it has also been marked by friction over a variety of issues. The many challenges that exist between the two countries—including, but not limited to border disputes, economic tensions, relationships with third-party countries, and water use rights—not only preclude the possibility of a unified, aligned “Chindia,” but may also lead to a greater possibility of conflict if not carefully managed.

China and India have both become major players in the world. As such, the nature of their relationship has implications for other countries, including the United States. Further study of the nuances of this relationship will be needed as the China-India relationship continues to develop.

## Appendix A: Agenda of the CNA Roundtable Discussion



### CNA Roundtable Discussion

Exploring the China-India Relationship

July 29, 2010

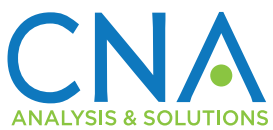
#### *Agenda*

- 10:45 – 11:00** Registration at The City Club
- 11:00 – 11:15** Welcoming remarks
- 11:15 – 12:30** Panel presentation
- **Kerry Dumbaugh**, China Analyst, CNA (Washington, DC)  
*Moderator*
  - **Daniel Twining**, Senior Fellow for Asia, the German Marshall Fund of the United States (Washington, DC)  
*Topic: India-China relations: The India perspective, and implications for the United States*
  - **David Michel**, Senior Associate, Stimson Center (Washington, DC)  
*Topic: The question of water: New demands on the India-China relationship*
  - **Charles Freeman III**, Freeman Chair in China Studies, Center for Strategic and International Studies (Washington, DC)  
*Topic: The Chinese perspective*



**Cover photo:** REUTERS/B. Mathur  
Chinese Premier Wen Jiabao (L) shakes hands with Indian Prime Minister Manmohan Singh after the two countries signed agreements in New Delhi April 11, 2005.

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