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YARLUNG TSANGPO-BRAHMAPUTRA RIVER IN CHINA-INDIA RELATIONS: A CASE OF ASYMMETRIC INTERDEPENDENCE*

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Introduction

After the Cold War, importance of traditional security issues in international studies is declining in comparison with non-traditional or human security issues.[1] Trans-border rivers issue has become an important area of non-traditional security research. A trans-border river is a river flowing through or shared between two or more countries. In academic studies and policy statements many synonyms are simultaneously used for trans-border rivers, including: shared river, international river, international watercourse, and cross-border river.[2] The main focus of this paper is the rivers flowing between China and India. Both governments use the term "trans-border rivers" in the official documents; therefore, this paper uses the same nomenclature for consistency.

Trans-border rivers between China and India mainly consist of three systems: the Yarlung Tsangpo-Brahmaputra River, upstream rivers of the River Indus,[3] and upstream rivers of the Ganges River. According to statistics from the Department of Water Resources of Tibet, China, there are 16 trans-border rivers between China and India.[4] Among the three river systems mentioned above, the Yarlung Tsangpo-Brahmaputra River is the largest in terms of basin area and

stream flow. The Brahmaputra River is also India's largest river in terms of stream flow and hydropower generation capacity. Therefore, the Yarlung Tsangpo-Brahmaputra River is the most significant in current trans-border rivers between China and India. With its origin in Tibet, China, the upstream segment of the Yarlung Tsangpo-Brahmaputra River is called the Maquan River. After passing through Saga County in Tibet, it is renamed as Yarlung Tsangpo. Across the border in Indian territory, the river is called the Brahmaputra River. After convergence with the River Ganges in Bangladesh it finally flows into the Bay of Bengal with confluence of the Meghna River. Total length of the mainstream of the Yarlung Tsangpo is 1905 kilometres, and the length of the Brahmaputra River is about 740 kilometres.

This paper takes a national interest-based realist approach to the analysis of the Yarlung Tsangpo-Brahmaputra River. After examining the gaps in the existing analyses on the subject, it outlines the national interests of both countries with respect to the Yarlung Tsangpo-Brahmaputra River. On the basis of the differences in interests as well as vulnerabilities of the two countries, this paper puts forward three proposals on trans-border rivers negotiation.

Gaps in existing body of knowledge on the subject

Various studies have been authored by Chinese scholars on Sino-Indian trans-border rivers, which can be generally divided into three categories:

The first category focuses on the study of the relationship between the trans-border rivers and Sino-Indian relations. These studies try to find out how trans-border rivers affect Sino-Indian relations mainly from the point of view of international relations, and analyse the impact of trans-border rivers upon patterns of cooperation and conflict in the Sino-Indian relations from the perspective of foreign policy.[5] These works also put forward dispute settlement proposals for trans-border rivers from the perspectives of game theory, public goods, etc.

The second category focuses on the development and utilization of water resources of trans-border rivers. Research of this kind tries to find out reasonable ways of utilizing the trans-border rivers in Tibet. Some of them also try to justify the necessity of developing river resources in Tibet area. Works like "Management and Coordination of Use of Water Resources in International Rivers" by He Daming, and "Economic Strategy of Tibet's Water Resources Development" by Han Junyu can be included in this category.[6] In addition, Li Ling's famous fiction work "Tibet's Water Rescues China"[7] advocated Grand West Line of Water Diversion Project, which also had a great influence at home and abroad.[8] Some scholars have also studied the ecological and environmental problems that arise from the use of trans-border rivers from the perspective of ecology and sustainable development such as "Ecological Hydraulic Engineering of Brahmaputra Hydropower Development" by Wu Peipeng.[9]

China and its trans-border river issues with neighbouring countries also attracted many scholars to explore the issue from the perspective of international law in recent years. Those works can be classified into the third category of scholarship on the subject. These studies involve research on basic principles

and applicability of the international rivers law with respect to trans-border rivers. Most of the scholars in this category focus on the study of how to use the international law to protect China's rights of usage of the international river. The papers in this category mainly include: "Basis of International Law for Solving the Problem of International River Water Allocation" by Yang Shu, and "International Rivers Conflict in International Law" by Jin Jing.[10]

This research paper can be categorized in the first type, that is, trans-border rivers and Sino-Indian relations, and tries to address some of the inadequacies in the existing body of research on the subject. There are three basic inadequacies in current research when we talk about the trans-border rivers and Sino-Indian relations:

1. Overestimation of the possibility of trans-border river issues causing inter-state conflicts;
2. Neglect of differences in interests between upper and lower riparian states; and
3. Lack of focus on internal differences within the states concerning trans-border river issues.

Let us take a look at these inadequacies in the existing body of knowledge in a little greater detail:

**Potential of trans-border river issues
to cause inter-state conflict**

A lot of studies on trans-border river issues point out that this issue has become one of the major sources for triggering international conflicts in order to emphasize its importance. Former Vice President of World Bank Ismail Serageldin's prophecy "Many of the wars this century were about oil, but those of the next century will be over water" is widely cited in many papers to prove possibilities of conflict caused by water resources.[11] However, statistics show that the probability of trans-border river disputes leading to conflicts is very low, and most of the disputes arising out of trans-border river issues are resolved in peaceful ways. According to a research report released in 2003 by the United Nations Educational, Scientific and Cultural Organization's (UNESCO) World Water Assessment Project (WWAP), there were 1,831 events related to trans-border rivers globally from 1948 to 1999, among them 1,228 events were cooperation events accounting for 67.1 per cent, and 507 were events of conflict accounting for 27.7 per cent of the total. Only 37 events of the total 507 events of conflict involved violence out of which 32 occurred in the Middle East. Thus violent conflicts have accounted for only 2% of the total events related to trans-border river issues and have remained concentrated primarily in one region of the world.[12] With the help of this statistical data, therefore, we can argue that incidence of violent conflicts caused by trans-border river issues is very low.

**Understanding differences of interest between
upper and lower riparian states**

Most of the studies concerning trans-border river issues will inevitably study the relationship between the upper and lower riparian states. Such studies — based on the hope of avoiding conflict and promoting cooperation and joint utilization — propose suggestions such as river basin centralized management, and development of international law to promote cooperation between the upper and lower riparian states. Cooperation without common interests between countries or without some give and take is generally difficult to achieve under current international regimes though. Hence, we need to understand the national interests of upper and lower riparian states before contemplating models for cooperation.

Generally speaking, national interests of the upper and lower riparian states concerning trans-border rivers are different because of differences of natural and geographical conditions, which is especially the case with respect to China and India. In the case of Yarlung Tsangpo-Brahmaputra River, China is the upper riparian and India the lower riparian. The two countries are totally different along the drainage basin in terms of natural and social conditions (see Table 1). In China, the river flows through Tibet, which is a mountainous high altitude area with fragile ecosystem and low population density. Agricultural and industrial development is relatively backward because of harsh natural environment in the area, which is also the reason for difficulties in utilization of the river resources. The main recourse for utilizing the river resources in Tibet is power generation as the river is located in the mountains and river drop is relatively steep, while irrigation and water diversion for industrial and agricultural use is relatively low.

Table 1

**Comparison of geographical and social conditions between
Yarlung Tsangpo and Brahmaputra Rivers**

River	Length (km)	Drainage Area (km²)	Average Annual Runoff (100 million m³)	River Drop (m)	Energy Reserve (10 Thousand KW)	Population (10 Thousand)	Population Density (person/km²)	Arable Land (km²)
Yarlung Tsangpo River	1,905	345,083	1,654	8,435	11,350	237	6.9	1,225
Brahmaputra River	740	125,312	2,000	—	3,000	3,184	254.1	33,521

Source: World Rivers Database <http://www.chinawater.net.cn/riverdata> and Sun Jing, Gu Shaofeng, Li Aifeng: "Information Extraction and Analysis of the Himalayan International Rivers", *South-to-North Water Diversion and Water Science & Technology*, Vol.9, No.3, (June 2011): 33-38.

On the other hand, when the Yarlung Tsangpo River enters India and becomes the Brahmaputra River, its condition completely changes in terms of natural and social environment. The basin of the Brahmaputra River consists of plains and river valleys with lower altitude and huge population density, actually 37 times larger than population density in the upstream region in China (see Table 1). Industrial and agricultural production in the Brahmaputra basin in India is relatively well developed due to the favourable natural environment. The area is easy to utilize the river water and also has a long history of river utilization. The main methods of development and utilization of the Brahmaputra River are: irrigation, provision of drinking water for population, water diversion, industrial production, and shipping. With economic development and increase of population in the Chinese upper Yarlung Tsangpo region as well as technological progress, the necessity for development of water resources will increase inevitably. It will be deemed by India as erosion of its rights in the river utilization since India started using the river earlier than China and has heavy dependence on it. Thus any increase of water utilization in upstream in China will be regarded by downstream India as a threat to its rights of river usage. Therefore, it is fair to say that the development of river utilization will inevitably lead to conflicts of interest between upper and lower riparian states.

Internal differences within states

A common mistake on the part of scholars studying trans-border rivers between China and India is ignoring the diversity of views and existing proposals concerning the issue within the two states. Observers on the Indian side accuse China of bringing about a water crisis in India by establishing power stations and river diversion projects along the Yarlung Tsangpo River. Such

accusations of cutting off India's "water tap" are based on the proposals of some semi-officials and scholars in China.[13] However, significant disagreements exist within the Chinese government circles as well as academia on how to develop and even whether to develop the Yarlung Tsangpo River resources. The "Grand West Line of Water Diversion Project," which is cited by Indian observers to accuse China, has been a controversial topic in China since it was proposed.[14] Many officials and scholars hold strong opinions against the feasibility and necessity of the project, which is the reason for its non-inclusion in any official planning.[15]

On the other hand, Chinese scholars also hold a negative view on the Indian official "National River-Linking Project" (NRLP),[16] which, they believe, would reduce future Chinese utilization of Brahmaputra water resources and give India advantage in negotiations. The fact that it has faced many objections in India and has made little progress since its launch has usually gone unnoticed by the Chinese scholars. Although the Supreme Court of India issued a verdict in 2002 asking the Indian government to complete the project by 2016 in public interest, it does not look likely to be completed before 2016 according to the current progress, as most of it is still in the feasibility stage.[17]

National interests of China and India concerning trans-border rivers

National interests are pursuit of the main benefits of the nation-state; these are the needs of its citizens and various interest groups.[18] Because of the complexity of national interests, nation-states usually classify them based on their importance as follows: vital interests, extremely important interests, important interests, and less important or secondary interests.[19]

At the heart of the trans-border issues in Sino-Indian relations are the national interests of both the countries. If both countries have common or similar interests on the same issue, possibility to cooperate in the field for the two countries is relatively high but it does not necessarily lead to cooperation between them.[20] The respective national interests of China and India on the issue of trans-border rivers are the basis for studying their relations in the context of the Yarlung Tsangpo-Brahmaputra River.

China's national interests concerning Yarlung Tsangpo-Brahmaputra River

We need to know how China defines its core interests in order to study China's national interest in connection with the Yarlung Tsangpo-Brahmaputra River. The White Paper, *China's Peaceful Development* issued in 2011 by Chinese government explains China's core interests for the first time in the following words, "China's core interests include: national sovereignty, national security, territorial integrity, national unity, Chinese political system established by the constitution, social stability, and the basic safeguards of sustainable economic and social development."[21] These core interests can be applied to the case of Yarlung Tsangpo- Brahmaputra River as follows:

First, any management of the trans-border river systems will have to be beneficial to or bring no harm to China's national sovereignty and territorial integrity. The Yarlung Tsangpo-Brahmaputra River is not only a trans-border river but also inextricably interwoven with territorial disputes between China and India, which makes it particularly complicated. In the Yarlung Tsangpo-Brahmaputra River basin, there is more than 90,000 square kilometres area that is disputed between China and India. South Tibet (called Arunachal Pradesh in India) is under Indian control. From the perspective of China's core interests, any form of utilization of the Yarlung Tsangpo-Brahmaputra River must neither endanger Chinese sovereignty of South Tibet nor exacerbate the difficulty of China's reclamation of the area. Therefore, any utilization of the Yarlung Tsangpo-Brahmaputra River, which might strengthen the actual occupation and control of South Tibet by India, should give rise to China's opposition.

Second, development and utilization of hydropower along the Yarlung Tsangpo-Brahmaputra River is in line with China's core national interests. According to the Twelfth Five-Year Plan (2010-2015) of China Energy Development, the average annual growth of the China's installed power capacity is approximately 9 per cent from 2010 to 2015. Thermal power accounts for 68 percent of China's power supply (see Table 2).

Table 2
China's plan of installed capacity of electricity during the Twelfth Five-Year Plan

Item	Unit	2010		2015		Annual Growth Rate （%）
		Amount	Percentage	Amount	Percentage	
Installed Capacity of Electricity	100 million KW	9.7	100.00	14.9	100.00	9.0
Including：Coal Power	100 million KW	6.6	68.04	9.6	64.43	7.8
Hydropower	100 million KW	2.2	22.68	2.9	19.46	5.7
Nuclear Power	100 million KW	1,082	1.12	4,000	2.68	29.9
Gas Power	10 thousand KW	2,642	2.72	5,600	3.76	16.2
Wind Power	10 thousand KW	3,100	3.20	10,000	6.71	26.4
Solar Power	10 thousand KW	86	0.09	2,100	1.41	89.5

Source: *The Twelfth Five-Year Plan of China Energy Development* (Document No: No.2, 2013), see <http://www.gov.cn/zwgk/2013-01/23/content_2318554.htm>.

As coal resource is non-renewable and brings enormous pollution, reducing reliance on thermal power is a necessary requirement for the development of China's power industry. The share of thermal power in electricity supply structure will reduce from 68.04 per cent of 2010 to 64.43 per cent in 2015 (see Table 2). To meet the demand for electricity in China's

development, China's growth of power generation will rely mainly on hydropower and other environment-friendly sources.

According to the National Hydropower Census in 2003 the hydropower reserve of the Yarlung Tsangpo is 11,389 million KW. It is the second largest in China, only lower than that of the Yangtze River. The hydropower reserve of the Yarlung Tsangpo River accounts for 56.56 per cent of total hydropower reserve of Tibet. The Yarlung Tsangpo River is also endowed with technological development capacity of 56.45 million KW.[22] A 2.155 million KW installed capacity in Yarlung Tsangpo River has already been developed, which accounts for only 3.8 per cent of its technological development capacity. The Yarlung Tsangpo River is lowest in terms of the river hydropower utilization rate and is largest in terms of hydropower development potential in all major rivers in China. With the technological progress in hydropower generation and exhaustion of hydropower potential in other major rivers in China, the Yarlung Tsangpo River will become the only river in the country containing huge untapped hydropower resources, and will become China's only source for increasing hydropower supply. China's Twelfth Five-Year Plan (2010-2015) envisaged construction of three hydropower stations over the mainstream of the Yarlung Tsangpo River. The first hydropower station, called the Zangmu Station, has been finished in November 2014, and the remaining two are still in the stage of study. More hydropower projects will most probably be launched in the basin in future.

Third, promotion of Tibet's regional development by utilizing resources of the Yarlung Tsangpo River is also in line with core national interests of China, as it is a relatively less developed part of the country. Tibet's GDP accounted only for 0.14 per cent of the total GDP of China in 2014, and GDP per capita in Tibet is only 63 per cent of the national average. Disposable income of urban residents per capita in Tibet is 76 per cent of the national average, while the net income of the farmers per capita in Tibet is 70 per cent of the national average (see Table 3). Seventeen per cent of the population of Tibet did not have access to electricity by the end of 2010.[23] Economic development and improvement of the local people's living standards is not only the demand of the people of Tibet but also essential for safeguarding national unity and stability. Given Tibet's energy endowments and geographical features, hydropower will be the pillar industry to meet the power supply demands in Tibet and to promote Tibet's economic development in the near future. Tibet will "develop renewable energy resources while hydropower is the main component of renewable energy to solve the problem of power shortage" and Tibet will "actively develop hydropower stations, try to be one of the energy bases for sending electricity from the west to the east region of China and forge hydropower industry to become one of the pillar industries in Tibet" during the Twelfth Five-Year Plan from 2010 to 2015.[24]

Table 3

**Comparison of economic indicators of Tibet with the national
average of China in 2014**

Region	GDP (100 Million Yuan)	GDP per capita (Ten thousand Yuan)	Disposable Income of Urban Residents per capita (Yuan)	Net Income of the Farmers per capita (Yuan)
China	636,138.7.	4.66	28,843	10,488
Tibet	920.83	2.93	22,016	7,359

Source: Statistical Database of Development & Research Center of Central Government of China.

Fourth, environmental degradation is a big problem in the Yarlung Tsangpo basin. Environmental protection is essential to ensuring sustainable development and sustainable use of the river, which is also one of China's national interests. Economic and social benefits and ecological costs of the river utilization will be measured carefully and will be one of the core factors for China's decision on river utilization.

Fifth, water diversion from Yarlung Tsangpo River — if necessary and feasible — is also in the national interest of China. China suffers from severe freshwater scarcity. Per capita freshwater consumption in China is only a quarter of the world average. China's freshwater is also extremely uneven in spatial and temporal distribution. Although a variety of water diversion proposals have been suggested by non-government persons and agencies, Beijing still does not have any official plan of water diversion from the Yarlung Tsangpo River. The under-construction South-to-North Water Diversion project in China aims at transferring water mainly from the Yangtze River to the Yellow River and the Haihe River basin. Currently, China is undertaking the South-to-North Water Diversion Project to solve the problem of freshwater scarcity in the northern part of the country, especially in the Bohai region. If the freshwater scarcity is further aggravated and water diversion from Tibet is feasible in terms of technology and finance, it could be an option for solving freshwater scarcity in China. Qinghai-Tibet Plateau is an area with the most abundant freshwater and very few inhabitants.

India's national interests concerning Yarlung Tsangpo-Brahmaputra River

Former Indian Defence Minister Shekhar Dutt pointed out in 2007 that "India's primary strategic objective is the improvement of the socio-economic conditions and opportunities within a secular democratic framework for its one billion people; to defend the country's borders as defined by law and enshrined in the constitution; and protecting the lives and properties of its citizens against terrorism and insurgencies."[25] Starting from this definition, we can deduce India's national interests concerning the Yarlung Tsangpo-Brahmaputra River as follows:

First, ensuring safety of drinking water and flood control in the basin areas could be considered a core interest of India with respect to the Yarlung Tsangpo-Brahmaputra River. Generally India is a water-scarce country. The per

capita freshwater availability in India was 1,603 cubic meters in 2009, one-fifth of the world average. If the Brahmaputra River water is excluded, the per capita freshwater availability would drop to 1,101 cubic meters as per the 2009 figures.[26] The Brahmaputra River is the largest river in India in terms of water runoff; its annual runoff is 585.6 billion cubic meters accounting for nearly one-third of India's total water runoff. There are 31.84 million people living along Brahmaputra basin in India, and the primary use of the river is to provide drinking water for the people living in the basin area while at the same time the Indian government is also concerned about avoiding the threat of flooding for them in the rainy season.

Second, India can also use the river to protect its presumed "territorial integrity." The Brahmaputra River flows through China's South Tibet region (called "Arunachal Pradesh" in India), which is currently under Indian occupation. India naturally expects that any utilization of the river should not weaken its actual control of South Tibet. Therefore, water allocation negotiations over the Yarlung Tsangpo-Brahmaputra River between China and India are interwoven with territorial claims, which cannot be solved separately. This is one of the main reasons for the little progress on trans-border river negotiations recently.

Third, the Brahmaputra River is the main source of water supply for irrigation and industrial production in these areas. The river runoff can provide not only the water supply for industrial and agricultural usage in the basin areas of India but also water supply for living and production in the downstream basin of Bangladesh under normal circumstances.

Fourth, the river is also instrumental in development of hydropower generation for India. Hydropower reserve of the Brahmaputra River is 66.065 million KW, accounting for 44.42 per cent of India's hydropower reserves. Around 68 per cent of the hydropower reserve of Brahmaputra River is located in South Tibet, which accounts for 30 per cent of Indian hydropower reserves.[27] India has built eight hydropower stations on the Brahmaputra River, two of which are located in South Tibet. Another 19 hydropower stations are under construction in India, 14 of them located in South Tibet.[28] The total installed hydropower capacity on Brahmaputra River is 29.725 million KW, accounting for 45 per cent of the total hydropower reserves of the river.[29] India is still suffering from power shortage and its demand for electricity will further increase with the development of the economy. India has the third largest coal reserves in the world; therefore, power generation currently relies heavily on coal power. Since India is lacking in availability of domestic oil and gas reserves, increase in power generation capacity of India will mainly rely on hydropower in case of the exhaustion of coal reserves or decrease in reliance on them because of their association with environmental pollution. Thus, hydropower generation in Brahmaputra River is inevitable given the energy structure of India.

Fifth, India is suffering from extremely uneven spatial and temporal distribution of freshwater. North-eastern region of India enjoys high precipitation, huge river runoffs, and abundant freshwater resources. On the

other hand, north-western region of India has little precipitation and is facing serious threat of droughts and water shortage. India has put forward ambitious National Rriver-Linking Project (NRLP) to conduct water diversion. The project plans to build 30 canals, and 3,000 water reservoirs to link 37 rivers in the Himalayan region and Indian peninsula. The project is expected to add 35 million acres of irrigated land in India. The estimated investment amount of the Project in 2002 was about US $ 123 billion.[30] It consists of two major parts: the Himalayan Water Diversion Project and the Peninsular Water Diversion Project. The Himalayan Water Diversion Project plans to transfer 33 billion cubic meters of water annually from the Brahmaputra and Ganges Rivers to the northwest India. If the project is completed, the quantity of water transferred will reach 178 billion cubic meters.[31] NRLP has made little progress in recent years though, despite the fact that the Supreme Court of India declared a verdict in 2002 instructing the Indian government to finish the project before 2016.[32] The launch of NRLP, nevertheless, increases the importance of Brahmaputra River for India.

Sixth, in addition to providing water for people's living and production in basin areas, the Brahmaputra River is also a major shipping channel. Cargoes can go upward from the Bay of Bengal to Assam in India which connects north-eastern part of India with Indian Ocean directly. In addition, India also hopes to protect the environment and realize sustainable utilization of the river.

From the above analysis, we can say that some of the national interests of China and India concerning Yarlung Tsangpo-Brahmaputra River are compatible with each other, such as: hydropower development, environmental protection, and shipping development. In other and more important cases, however, the national interests of two countries are in obvious conflict with one another, such as: sovereignty, territorial integrity, and water diversion. Compatible and incompatible interests of India and China on the issue of trans-border rivers have led to a complex interdependence, which plays a unique role in the Sino-Indian relationship.

Importance of trans-border rivers in the Sino-Indian relations and interdependence

The importance of trans-border rivers as an issue affecting Sino-Indian relations is recognized differently in India and China. Both officials and public in India put much emphasis on the trans-border rivers issue, and it is a very hot topic for the press in India as well. On the other hand, Beijing does not give as much importance to it and prefers to address it from the perspective of the so-called "bigger picture of Sino-Indian relations." Chinese public does not pay much attention to this issue either with the exception of the Chinese scholars who do research on Sino-Indian relations. Since China is the upper riparian in trans-border rivers between the two countries, it has a more advantageous position in river negotiations. Trans-border rivers have actual effects on core national interests of India, such as: water supply, flood control, and even survival of population in the river basin. Thus India considers trans-border rivers issue very important in Sino-Indian relations. It is fair to say that trans-border

rivers issue is one of the few issues that draw significant attention from both the government and public in India. Indian officials raise trans-border rivers issue almost in every government-to-government interaction between China and India and it is always one of the top agenda items for India during China-India negotiations.

In addition, since trans-border rivers issue closely connects with the territorial dispute between China and India, one issue is the premise for solving the other and vice versa. The issue of the territorial dispute is related to the core interests of the two countries, therefore, trans-border rivers issue between China and India will become one of the most difficult problems in Sino-Indian relations. Complexity of trans-border rivers issue between China and India requires Beijing to rethink its current policies.

Interdependence among countries in world politics is defined as situations characterized by reciprocal effects among countries or among actors in different countries.[33] China and India, in trans-border rivers issue, are clearly influenced by each other, and one party's actions will have certain impact on the other party. This interdependence, however, is asymmetric. Vulnerability and sensitivity are two dimensions to measure the asymmetrical interdependence between two countries. Sensitivity involves degrees of responsiveness within a policy framework, that is, how quickly do changes in one country bring costly changes in another and how great are the costly effects.[34] Vulnerability refers to liability to costly effects imposed from outside before policies are altered to change the situation. Vulnerability can also extend to an actor's liability to suffer costs imposed by external events even after policies have been altered.[35]

If both China and India take a cooperative strategy on the Yarlung Tsangpo-Brahmaputra River issues and try to resolve them by non-violent and peaceful means, their respective vulnerabilities would be quite different.

First, in terms of national interest of territorial integrity, the vulnerability of Chinese side is greater than that of the Indian side. Since the South Tibet region — an area the Yarlung Tsangpo-Brahmaputra River traverses — is under the actual control of India, India can strengthen it by increasing river utilization; whereas the alternative of taking over South Tibet through a violent conflict is too costly for China in comparison with cooperation. Since territorial integrity is a core national interest for both China and India, once violence breaks out the danger of its intensification will most probably be the case. Violence as an alternative to cooperation and negotiation for resolving the territorial dispute will be too costly to implement. Thus vulnerability of China on territorial integrity is greater than that of India.

Second, in terms of national interest of utilization of water resources, flood control, water diversion, and ecological protection, the vulnerability of Chinese side is smaller than that of India. As China is the upper riparian state in the case of Yarlung Tsangpo-Brahmaputra River, it is capable of taking unilateral action to conduct utilization of water resources, water diversion, and power generation by itself with or without India's cooperation. On the other hand, India will face great risks in flood control, water diversion, and hydropower generation without the cooperation of China.

Besides, as an alternative strategy of river utilization, China can also choose not to utilize river for power generation and water diversion, because population in the Yarlung Tsangpo-Brahmaputra River basin in China is scarce and costs of power generation and water diversion are high due to unfavourable natural conditions. The urgency of the river utilization in China, thus, is debatable. In other words, the option of not utilizing the Yarlung Tsangpo-Brahmaputra River temporarily is also acceptable for China. For India, being in the more populous downstream area of the Yarlung Tsangpo-Brahmaputra River, utilization of the river for irrigation, power generation, and water diversion is less costly and technologically easy. The Brahmaputra River is the largest river in terms of water runoff in India, and it is also the major source for water diversion; therefore, non-utilization of the Brahmaputra River as a policy option for India is a high cost one.

What should be China's strategy on the issue of Sino-Indian trans-border river?

Asymmetric interdependence and difference of vulnerability is one of the sources for bringing in the factor of state power. India and China have different vulnerabilities on the issue of trans-border rivers, which should be the basis for China's policy on the issue.

Application of Linkage Strategy

Linkage Strategy in international negotiations refers to combining different issues in negotiations to establish leverage. In terms of territorial integrity in South Tibet, the vulnerability of Chinese side is bigger than that of the Indian side and in terms of utilization of water resources in the Yarlung Tsangpo-Brahmaputra River, the vulnerability of Chinese side is smaller than that of India. China should combine the territory issue and trans-border river issue for negotiations to create favourable conditions for China.

China and India are currently negotiating these two issues separately under two parallel negotiation mechanisms. Both sides have established Expert-level Negotiation Mechanism on Trans-border Rivers in 2006.[36] Eight rounds of talks have been held until the end of 2014 which were led by ministries of water resources of China and India leading to signing of several Memoranda of Understanding (MoUs) on provision of hydrological data to India by China. Despite repeated denials of the Yarlung Tsangpo River water diversion plan from the Chinese side, any move by China on the Yarlung Tsangpo River always caused strong protests and criticism in India. The Special Representatives Negotiation Mechanism on Border Issues between China and India was established in 2003. 18 rounds of talks under the mechanism have taken place until 2015 which were led by State Councillor on the Chinese side and National Security Adviser on the Indian side. Nothing has been achieved from the bilateral border negotiation other than the maintenance of the status quo. Given India's actual control of the South Tibet, status quo is actually detrimental to China. Border negotiation is a typical zero-sum game, while

negotiation on trans-border rivers is non-zero-sum game, so these two issues should be linked together for negotiations and for progress of negotiations.

**Combining the share of hydrological data with utilization
of river resources in trans-border river negotiation**

As a result of the agreement reached in bilateral Expert-level Negotiation Mechanism on Trans-border Rivers between China and India, China provides hydrological data to India on trans-border rivers.[37] The next step for further negotiation should focus on mutual sharing of hydrological data between China and India and negotiation should also include utilization of river resources. In order to settle the issue, China must unequivocally protest any water diversion and hydropower generation project in the South Tibet before the settlement of final status of the region since it strengthens India's actual occupation of the region and increases the difficulties of resolving the primary dispute.

Utilization of Yarlung Tsangpo River resources

Utilization of the Yarlung Tsangpo River resources including power station construction is necessary for economic development in Tibet and improvement of the living standards of the Tibetan people. It is also in line with the basic principles of international river law, which includes the principle of "equitable and reasonable utilization."[38] Upper riparian states' maintenance of the original state of the river will be ideal for lower riparian states, but it is neither fair nor reasonable for an upper riparian state to give up its rights of utilization of river without proper compensation given by the lower riparian state. Principles of international river law and international practice emphasize on ecological and environmental protection while they require that "utilization of water resource for upstream countries do not cause significant harm for downstream countries."[39] Therefore, China should continue to promote the development and utilization of water resources in the Yarlung Tsangpo River on the basis of ecological and environmental protection.

Trans-border rivers issue is closely related with territorial disputes between China and India. The relative vulnerabilities of China and India on the two issues are quite different though, and their successful settlement relies on the realistic attitude of both the countries. China and India are in an asymmetric interdependence on both issues, which sets up the policy foundation for the two countries.

Notes and References

[1]   Non-traditional security emerged as a concept with the development of globalization. It breaks through the traditional concept of security which focuses on the study of nation-state security, and its maintenance by military means. Non-traditional security goes beyond this state-centric security paradigm to a human-centric security paradigm. It

includes economic security, environmental security, cultural security, energy security, and water security. Threats to non-traditional security include threats of terrorism, piracy, ethnic and religious conflicts, water shortage, weapons proliferation, human trafficking, drug smuggling, illegal immigration, money laundering, maritime security, etc.

2   The explanation of these terms can be found in detail in: Wang Zhijian, Xin Hongfei, "On the Law of International Rivers," *Journal of Hohai University* (Social Science Edition), Vol.10, No.3 (Oct. 2008), pp.92-116.

3   The upstream rivers of Indus flow into the disputed territory of Indian-Held Kashmir. Since the area is under actual control of India, they are included in trans-border rivers between China and India.

4   The Department of Water Resources of Tibet of China, <http://www.tinetinfor.com.cn>, cited in Zhang Jincui, "Sino-India Strategy Game on Water Resource Dispute," *South Asian Studies Quarterly*, No.4, 2010, p.15.

5   Studies of this kind include Lan Jianxue, "Water Security and Sino-Indian Relations," *South Asia Studies*, No.2, 2008, pp.21-26; Lan Jianxue, "Water Security Cooperation and Sino-Indian Interaction," *International Studies*, No.6, 2009, pp.37-43; and Zhang Jincui, "Sino-India Strategy Game on Water Resource Dispute", *South Asian Studies Quarterly*, No.4, 2010, pp.15-21.

6   He Daming and Feng Yan, *Management and Coordination of Use of Water Resources in International Rivers*, Beijing: Science Press, 2006; and Han Junyu, "Economic Strategy of Tibet's Water Resources Development," *Journal of Shanghai University*(Social Sciences), Vol.18, No.1, 2011, pp. 102-114.

7   Li Ling, *Tibet's Water Rescues China*, Beijing: Sino-Culture Press, 2010.

8   West line of Water Diversion Project is proposed by Guo Kai, and there are several different versions on this proposal. Proposal of Guo Kai suggested water diversion along the 3600 ~ 3400 meter, it plans to connect the Yarlung Tsangpo River, Nu River, Lancang River, Jinsha River, Ralong River and Dadu River to transfer water to Yellow River. Detailed in Yang Hongren, Li Mingsheng, "Water Diversion and Usage of Three Rivers in Southwest," *Journal of Three Gorges University*, No.4, 2001, pp.32-36.

9   Wu Peipeng, "Ecological Hydraulic Engineering of Brahmaputra Hydropower Development," *Tibet Science and Technology*, Vol.238, No.1, 2013, pp.59-61.

[10]   Yang Shu, Sheng Xiaochen, "Basis of International Law for Solving the Problem of International River Water Allocation," *Journal of Lanzhou University*(Social Sciences), Vol.37, No.4, 2009, pp.8-14; Jin Jing, "International Rivers Conflict in International Law," *Journal of PLA Nanjing Institute of Politics*, Vol.25, No.2, 2009, pp.77-80.

[11]   Papers of this kind include: Jiang Wenlai: "China's Water Security Strategy in 21st Century," *China Water Resources*, No.8 (Aug 2000), pp. 12-23; Lan Jianxue: "Water Resources Security and Sino-India Relations," *South Asia Studies*, No.2, (April. 2008), pp .21-26; Liu Dengwei: "Trends of International Rivers Development and Management," *Water Resources Development Research*, No.5, (Oct.2010), pp. 35-40.

[12]   See Aaron T. Wolf, Shira B. Yoffe and Mark Glordano, "International Waters: Indicators for Identifying Basins at Risk," UNESCO, IHP&WWAP PCCP Series, No.20, 2003, pp7-8. <http://unesdoc.unesco.org/images/0013/001333/133306e.pdf>.

[13]   There are different version of such comments in India but the core accusation is that China is taking advantage of its location and will divert water to other places which would make India suffer from drought or China will cut the river altogether. Latest reports and comments include: Sudha Ramachandran, "Water Wars: China, India and the Great Dam Rush," *The Diplomat,* <http://thediplomat.com/2015/04/water-wars-china-india-and-the-great-dam-rush/> (accessed on 5 May 2015); R N Bhaskar, "What Chinese dam on Brahmaputra means to India," *DNAINDIA*, <http://www.dnaindia.com/money/report-what-chinese-dam-on-brahmaputra-means-to-india-2038737> (accessed on 5 May 2015); IANS, "China Pushes India to the Wall on Brahmaputra," *The New Indian Express*, <http://www.newindianexpress.com/nation/China-Pushes-India-to-the-Wall-on-Brahmaputra/2015/08/08/article2964128.ece> (last accessed on 10 Aug 2015).

[14]   Detailed introduction can be found in Xiao Huozhi: "Retired General and Water Diversion," *Zhong Guancun*, No.8, (Aug 2009), pp.106-109.

[15]   Former Minster for Water Resource (1998-2007) Wang Sucheng has stated several times very clearly that the project is unnecessary and unrealistic see <http://www.nsbd.gov.cn/zx/rdht/201107/t20110701_187339.html> (last accessed on 10 Aug 2013); Huo Youguang, "Why Grand West Line of Water Diversion Project is Unrealistic," *Advances in Science and Technology of Water Resources,* No.6, 2008.

[16]   NRLP was put forward in the 1980s and it plans to connect rivers to transfer water from north to south India and from east to west of India.

[17]   Tushaar Shah, Upali Amrasinghe and Peter McCornick, "India's River Linking Project: The State of the Debate," Paper Prepared for A Book Volume of the RFF Press, Water Policy Series, p.2. <http://nrlp.iwmi.org/PDocs/DReports/Phase_02/01.%20India's%20River%20Linking%20Project%20-%20State%20of%20the%20debate-%20Shah%20et%20al.pdf>. Swati Bansal, "National River Linking Project: Dream or disaster?", India Waterportal, <http://www.indiawaterportal.org/articles/national-river-linking-project-dream-or-disaster> (last accessed on 10 September 2015).

[18]   Wang Yizhou: "Rethinking National Interests," *Social Sciences in China*, No.2, (Feb 2002), p.161.

[19]   This classification on National Interests can be found in Ellsworth, Robert, Andrew Goodpaster and Rita Hauser, "America's National Interests: A Report from The Commission on America's National Interests 2000"? Washington, D.C., Report for Commission on America's National Interests, July 2000, pp.2-3. <http://belfercenter.ksg.harvard.edu/files/amernatinter.pdf>.

[20]   For detailed explanation please refer to Kenneth A. Oye, ed. *Cooperation Under Anarchy*, Princeton: Princeton University Press, 1986.

[21]   The State Council Information Office of the People's Republic of China: *White Papers China's Peaceful Development*, <http://www.gov.cn/jrzg/ 2011-09/06/content_1941204.htm>.

[22]   Hu Xiangyang, He Zhijie, "Prospects of Hydropower Development in Tibet," *Yangtze River*, Vol.40, No. 16, (Aug 2009), p.3.

[23]   People's Government of Tibet Autonomous Region: *The Twelfth Five-Year Plan of Energy Development of Tibet Autonomous Region (2010-2015),* p.5.

[24]   People's Government of Tibet Autonomous Region: *The Twelfth Five-Year Plan of Energy Development of Tibet Autonomous Region (2010-2015),* pp.13-14.

[25]   Inaugural Speech by Shri Shekhar Dutt at a seminar on "Defence, Security, Diplomacy: India's National Interests," on 24 February 2007, <http://www.associationdiplomats.org/specialevents/Annual Seminars/200607/20070224DefenceSecurityDiplomacy/20070224DefenceSecspeech.htm>.

[26]   Zhong Huaping, Wang Jiansheng, Du Chaoyang, "Water Resources and Water Use in India," *South-to-North Water Diversion and Water Science & Technology*, Vol.9, No.1, (Jan 2011), p.152.

27   Muhammad Mizanur Rahaman and Olli Varis, "Integrated Water Management of Brahmaputra Basin: Perspectives and Hope for Regional Development", <http://www.worldwatercongress2008.org/ resource/authors/abs659_article.pdf>.

28   Fan Jicang, Li Bin, Zhao Ming, Li Junfeng, "India's Projects on Brahmaputra and Its Transboundary Effects," *World Regional Studies*, Vol.19, No.4, (April 2010), p.85.

29   Ibid.

30   Upali A. Amarasinghe and Bharat R. Sharma, "Strategic Analyses of the National River Linking Project (NRLP) of India, Series 2: Himalayan component Peninsular component Proceedings of the Workshop on Analyses of Hydrological, Social and Ecological Issues of the NRLP," pp.7-8, <http://www.iwmi.cgiar.org/Publications/ Other/PDF/NRLP%   20Proceeding-2%20Prelims%20&%20overview. pdf>.

31   Ibid.

32   Li Xiangyun, "India's National Water Policy and its National River-Linking Project," *Water Resources Development Research*, No.4, (April 2009), p.67.

33   Robert O. Keohane, Joseph S. Nye, *Power and Interdependence* (3rd ed.), Beijing: Peking University Press, 2004, p.9.

34   Ibid. 9-13.

35   Ibid.

36   *China and India's Joint Statement*, see <http://www.gov.cn/ gongbao/ content/2007/content_487047.htm>.

37   China provides Hydrological Data to India on the Yarlung Tsangpo River and Langqin Zangbu.

38   International Commission on Large Dame, ed., *Principles and Practices of Development of International Share Watercourse* (Translated by Jia Jinsheng, etc.), Beijing: China Water Press, 2007, pp.10-20.

39   Please see He Daming and Feng Yan, *Water Usage and Coordinative Management in International River*, Beijing: Science Press, 2006, pp. 83-102.

BANGLADESH TIES WITH INDIA'S NORTH-EASTERN STATES: CHALLENGES OF CONNECTIVITY

ABUL KALAM[∗]

Introduction

Relations at all human levels — within, between, and among nations — are currently faced with multiple challenges; the most testing in onward journey of civilizations is to cope with the challenges of the age of universal connectivity.[1] Connectivity is a multifaceted concept, which brings along a new set of challenges. It conveys the state of being connected, interconnected, or connecting parts; implicitly it may also indicate disconnect in relations. It has been in wide-ranging use as a generic term for analytical and/or research purposes in fields like accounting, mathematical graphs, and telecommunications. Of late, its use in information technology is well-known. It also faces challenges of multiple orders, such as: security, communications, culture, matters of life and living, and so on.[2] Connectivity, as a theoretical construct, entails a systematic symmetric formulation to minimize the challenges of asymmetric ordering of relations in adjacent or neighbouring environments. The theory is subject to variational principles (a geometric notion implying general methods to find functions, minimizing or maximizing the functional value of quantities),[3] but as conceptualized for social science analysis, is directed towards meeting specific problems by choosing appropriate values or needs for general solutions or advancing adjacent relations between and among sub-regional entities. This paper applies the theory to explore the extent of developing connectivities between Bangladesh and the adjacent Indian north-eastern states (NES) to identify the needs for general solutions of the up-and-

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coming challenges. The paper also suggests measures on how to advance the neighbourly relations between and among regional and sub-regional entities. Thus, the basic question that it strives to address is: How a construct, as advanced above, may be relevant to ordering relations between Bangladesh and the neighbouring NES in terms of connectivity?

The aforementioned framework of connectivities is used in the paper to analyse connecting and disconnecting elements of relations between Bangladesh and the neighbouring NES. Such connectivities are manifested in geographic, ecological, ethnic, and historical continuities as well as cultural ties of all sorts, despite disconnecting elements that surfaced both during the colonial times and post-colonial partition of India. The relational asymmetries resulting out of colonial and post-colonial experiences have disrupted adjacent neighbourliness and impeded the relational concord that existed between the two sides. The spontaneity of Indian support to Bengalis fleeing from the then East Pakistan to the neighbouring states of India during the Bangladesh Liberation War, however, resonated once again into their commonalities or symmetrical connection. The more recent bilateral accords, including exchange of enclaves and re-opening parts of past connectivities, serve as cases in point on how to overcome the past pattern of asymmetric barriers and help create a psychological milieu for reincarnation of connectivities between the two sides. Yet numerous challenges of connectivity stay on, arising from hierarchical fear, co-existential situations, mutual antipathy, and variation of perception. These can be overcome with sustained loyalties to symmetrical bonding of relations, balancing of mutual interests, and nurturing of ties that will draw them still closer together.

Conceptualizing connectivity: Analytical framework

It is imperative, first of all, to offer a fuller appraisal of the concept of connectivity, keeping in view the contextual aspects. The current age of connectivity is connecting humans, ecosystems, and societies across the globe. Connectivity links habitats in space and time. It is a key process that facilitates many life-histories, and functions of myriad species in a variety of contexts over a wide range of scales. Perhaps its most obvious application is to the multifaceted linkages among the diverse surroundings comprising habitats and ecosystems. Connectivity thus looks like a pervasive and multifaceted process affecting and enabling the living beings in structuring biological populations, communities, and assemblages, and in energizing the biological processes that support them.[4]

Connectivity has become a global 'buzzword.' It found its more recent expression with innovations in information technology. Nowadays, it has swept into everybody's finger tips, private lounges, and public offices, affecting the whole spectrum of human relations. Individuals and businesses, capitals and cities, towns and villages, communities and societies, and states and non-state actors across the global community are experiencing connectivity greater in magnitude than ever before. All national and international players are resorting to connectivity for marketing their respective ideas and policies, or enhancing

their objective strategies. These emerging connectivities cut across terrain and sub-terrain, sea and subsea, and air and outer space to captivate human mind.

Notionally, connectivity entails capacity-building for interconnection of communication platforms, systems, and applications. It also puts across the art or act of joining ideas, terms, and issues together in order for them to be in synchronizing bonds with each other. It creates network points and enabling environments between and among the partakers to make and maintain connections towards augmenting and fastening relationships. Operationally it points to measures for concatenated adjacency, that is, linking together the number of ways in which points and/or surrounding units are connected in an order of symmetrical harmony to each other, or as is meant in Microsoft terms 'to combine' or 'join together' whereby a function allows two or more strings jointed together.[5]

Connectivity has its classical theoretical roots, which include topological and graph-theoretic notions; but more recently the theory of connectivity has been applied to construct a systematic or perhaps symmetrical formulation of boundary element methods with a view to provide for, or overcome, problems of connecting solutions in adjacent surroundings or neighbourhood environments. The theory is thus conceptualized in terms of its social science analytical purposes,[6] that is, to apply the suggested boundary element or border line following the methodological approaches of the natural/physical sciences, to construct solutions suited to address specific relational problems. This paper applies the concept to the state-based boundary values of general solutions to entities such as known in sub-regions like Bangladesh and the NES, which could be applied to other relevant socio-political entities as well.[7]

The notion of an inclusive connectivity condition has to keep in view the 'variational principles' in the interest of ordering the inter-state relations in non-hierarchical fashion, to overcome the challenges arising from asymmetric structure of connectivity. In the wider South Asian contexts, the key may be to minimize the challenges arising from restrictive diffraction problems or relational wave barriers that are likely to crop up from the higher layer of wave or relational structure. As in natural sciences, the solution in such a scenario would be to lessen the challenges through superlenses or focusing on super-resolution techniques that operate beyond the diffraction limit.[8] The variational principles more generally are thus applicable in South Asian contexts. The problem of connecting solutions defined in different scientific fields is basic to finite element formulations, as is done through finite element analysis (FEA) and product optimization in many branches of science, technology, and engineering for product improvement, design, and performance. In social science context of inter-state and/or intra-state relations, however, an application of potential theory to suit a general class of policy or boundary integral equations on a prioritized basis can be quite challenging,[9] because such matters stake higher levels of sovereign policy concerns, or bring in the wider contexts of regional and international relations. Formally symmetric operators occur in many branches of science, technology, and engineering. Applications of potential theory are

required to be so prioritized not to touch upon the wave propagation, elasticity, and a general class of boundary integral equations,[10] that is, stake higher levels of sovereign concerns, or bring in the wider contexts of regional and international relations.

Thus connectivity as is conceptualized above may sound a bit abstract or elusive; yet it is highly subject to fixation of focus. One has to keep in view the decision-making apparatus in India hindering connectivities in the smaller environment, such as between Bangladesh and its north-eastern states that arise from the asymmetric policy operators in the superstructure of wider contexts of South Asian relations. This, in essence, requires the parties (Bangladesh and the NES in this case) seeking connectivities not to look for readymade solutions, or associate them in simple equations or blame-game that may cause feelings of distrust, misgivings, and trust deficit with the result of impeding complete connectivity conditions in the sub-region. In a systemic context, when applied or referred to in physical or natural sciences to matters such as functioning of the physical body, connectivity can be seen as brain-oriented. It means that the functioning of the physical body is focused on or is connected to the brain; otherwise both may become dysfunctional or disconnected. As used in mathematics, connectivity refers to various properties meaning, in some sense, pieces tied together or connected. When each piece is functionally linked, each is usually termed as a component: connected component of a system or subsystem like organic system or brain subsystem.[11] In the objective context of Bangladesh-NES connectivities the key challenge seems to arise from New Delhi, the asymmetric policy operator. Therefore, the point in this case is to lessen the weight of this key challenge. It would naturally seem to be through superlenses of statesmanship, such as, display of largesse, coupled with a focus on super-resolution techniques or application of the art of management that can help facilitate or expedite the process of connectivity.

The objective approach to the use of connectivity in social science research, proposed in the current paper for analyzing relations between and among political entities requires, first, an appraisal of the empirical nature of an ever-increasing connectivity across the international system; second, a deeper understanding of both the historical and emerging nature of relationships in the subsystem of Bangladesh and the NES. An effort will then be made to situate the focus of policy decisions or current decision-making in the sub-region involving Bangladesh and the NES. To be more specific, for identifying the sub-regional relations between Bangladesh and the NES, the contextual terms of their mutual relations need to be apprised in the wider context of Bangladesh-India connectivities, keeping in view whether Bangladesh-NES have become or are becoming connected components of a functional system of connectivity with a shift of decision making gravity.

Developing connectivities worldwide

Connectivity, as stated earlier, has its currency internationally; it has been gaining ground and has attained momentum and speed worldwide. In many instances connectivity has been shaping into 'national urban hierarchies' and

building even further to transform the world into a 'global village.' There is also the developing 'world city connectivity.' Many of the known cities worldwide are now inter-connected; perhaps EU cities are generally more connected into the world city network than their corresponding Asian and US cities or urban metropoles.[12]
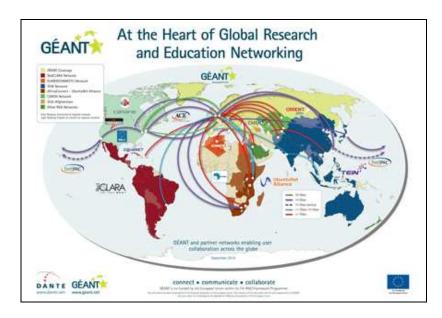
Similarly, over the last few decades regions and sub-regions of the world are being connected into blocs and there are also developing inter-bloc connectivities such as between Association of Southeast Asian Nations (ASEAN) and the European Union (EU), the EU and the United States, the EU and Africa, the World Trade Organization (WTO), and many more ongoing bilateral, trilateral, and multilateral connectivities the world over. Many of these connectivities focus on trade liberalization, business innovation, investment promotion, technology transfer, conservation of environment, overcoming the ecological hazards, climate change, and so on.

Another developing futuristic area of connectivity, as commercially projected in European context, is focused on dedicated efforts towards creation of research and educational communities, ensuring defined and predictable speeds and quality of service delivery in the areas of education, research, and learning. Emphasis is placed on greater speeds, timely delivery, and very high levels of resilience, which would enable researchers, teachers, and learners to benefit fully from advanced data-sharing techniques and collaboration tools. The motto is better collaboration and integration within and between geographically distributed research and education communities. Networks are to be dedicated to meet the needs of the academic and research communities, and no charges would be payable for usage once an institution is connected. A key to the move is to reshape trading landscape and help change trading-business connectivity, that is, promoting regulations towards electronic trading and enabling clients to adopt new ways to do business and trade.[13]

A movement has also been underway to set up global research and educational connectivities in which 40 European countries are expected to connect to each other for research and education purposes as a community, adding further 65 countries outside Europe in regions as diverse as North America, Latin America, the Caribbean, North Africa and the Middle East, Sub-Saharan Africa, the South Caucasus, Central Asia, and the Asia-Pacific region. The focus is on technological tie-ups, networks, and bandwidths with better collaboration and integration within and between geographically distributed research and education communities. The objective is to ensure reliable, high-bandwidth connectivity for research and education communities, with defined and predictable speeds and quality of service.[14] See Figure 1 below for the Model of Global Research and Education Networking.

Figure 1
Global Connectivity Map: Connecting Research & Education Communities Across the World (GÉANT)[15]

Bangladesh and the NES connectivity contexts

The NES may be viewed as a sub-region or region (used interchangeably) within the Indian federal union of 29 states. It consists of the contiguous 'Seven Sister States' — Arunachal Pradesh,[**] Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura, plus the Himalayan state of Sikkim (see Figure 2 below). Location of these territories suggests a typical nature of their visual isolation from the heartland of India (see Figure 2). Indeed, the NES is the eastern-most region of India, connected to the Indian mainland via the narrow Siliguri Corridor ('chicken neck,' with a width of 20 to 40 kilometres or 13 to 25 miles) squeezed between independent nations of Bhutan, Nepal and Bangladesh. China's Tibet region is located further to the northeast. Besides proximity, Bangladesh and the NES are bound by the same ecosystem: both are covered by the mighty Brahmaputra-Barak river systems and their tributaries; both are located at the confluence of Indo-Malayan, Indo-Chinese, and Indian bio-geographical realms; and both have a largely humid sub-tropical climate with hot, humid summers, severe monsoons, and mild winters, except for Arunachal Pradesh and Sikkim which have a montane climate with cold snowy winters, and mild summers. This subregion has some of the subcontinent's last remaining rainforests, which support diverse flora and fauna and several crop species.[16] Generally in India's rapidly growing economy, the NES is considered as a backward territory. It is seen as one of the most challenging regions of India to govern. Strategically, however, it is an important region of India sharing more than 4,500 kilometres (2,800 miles) of international border (about 90 per cent of its entire border area) with China in the north,

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[**]Arunachal Pradesh is actually under Indian control, but claimed by China as its territory (South Tibet).

Myanmar in the east, Bangladesh in the south-west, and Bhutan to the north-west.[17]

Map of Bangladesh and the NES and: Geography and Proximity

Historical connectivities between Bangladesh and NES/India

The connectivities between Bangladesh and the adjacent NES are inextricably linked to the historical relations with neighbouring India, which are rooted in their physiographic proximity and contiguity, historic and linguistic ties, common civilization and culture, as well as geopolitics, geophysics, and geo-economy. Both also have a common passion for art, music, and literature. These commonalities and historical connectivities were blurred later during and after the exit of the British *Raj*, which led to the division of the subcontinent into independent states of India and Pakistan. However, both Bangladesh and India undeniably carry a bond of blood as both worked jointly and sacrificed incalculable lives during the Liberation War of Bangladesh. Indeed the story of the 1971 exodus of the Bengali refugees to the adjacent Indian territories, their reception, shared struggle, and eventual return — the largest repatriation operation after the Second World War — is a telling one. The historical tale of the Liberation War of Bangladesh forms part of a wider narrative that brings to

life a shadowy chapter of history, division of the subcontinent, and then, dismemberment of Pakistan, and the birth of Bangladesh.[18]

The common Bangladesh-India historical and cultural connectivities also reflected their common dedication to certain ideals and a cultural-poetic bonding, as Nazrul's revolutionary hymns and Tagore's romantic lyrics had driven the struggling Bengali *Mukti Bahini* in their liberation uprisings. Their common and somewhat euphoric dedication to common ideals is also reflected in their choice of Tagore's poems as their respective national anthems, a distinctive rarity in world history that shows their common cultural belonging. Currently both Bangladesh and India belong to common entities such as: the South Asian Association for Regional Cooperation (SAARC), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), the Bangladesh-China-India-Myanmar Forum for Regional Cooperation (BCIM), the Indian Ocean Rim Association (IORA), and the Commonwealth. The historical-cultural bonds, particularly, between Bangladesh and the Bengali-speaking East Indian states of West Bengal and Tripura, are naturally noticeable as they exhibit commonalities in their cuisine and eating habits, dress and manners, life and living style etc.[19] Therefore, whenever the subject of connectivity between Bangladesh and the NES is taken up for consideration, the issue of connectivities across Bangladesh borders in the north, east, and west feature importantly.

Manifestation of disconnecting elements

Despite the shared legacies of history, culture, and a common heritage, the relationships between Bangladesh and India carry colonial legacies of asymmetric order, as their commonalities were brutally interrupted due to the nature of colonial governance and post-colonial division of contiguous geophysical bounds of British India. The relations between India and Pakistan, states that were created following the exit of the British *Raj*, led to wide-ranging discontinuities and discord in mutual relations due to the earlier seeds of conflict and diverging legacies the colonial regime had left behind. The birth of Bangladesh after more than two decades of internal discord through a brutal War of Liberation in 1971, in which India itself was seen as an ally of the Bengalis, had raised euphoric emotions; yet both Bangladeshi and Indian leaderships were later haunted by the legacies and mindsets of the past. Some hangover issues of the colonial era or post-colonial perceptual divide, and some new issues emerging under new-fangled contexts of politics vitiated mutual relations almost into a frosty state.

While for long both sides routinely projected their mutual relations as friendly neighbours, perceptual gap did develop largely due to mutual trust deficit. The facets of power asymmetry existing between them and the past hangovers resurfaced with time, which detracted both sides and overturned development of harmony, constraining mutual policies for a long time. The issues in contention include the following:

1.   India's inability or apparent unwillingness to implement the old bilateral treaties (Firoz Khan Noon-Jawaharlal Nehru, 1947, and Sheikh Mujibur Rahman-Indira Gandhi, 1974) on mutual transfer of enclaves/territories in adverse possessions to Bangladesh;

2.   A failure on the part of India to have prior consultations with Bangladesh and ensure its water and eco-security on a variety of issues, such as, the building of Farakka Barrage and other dams, including a hydroelectric dam over Tipaimukh;

3.   Contentious claims of both states over coastal islands and failure to demarcate respective maritime zones;

4.   India's persistence with the planned Link Canal to divert water from common rivers in the interest of the Upper Riparian India, to the detriment of lower riparian Bangladesh;

5.   Alleged support to insurgencies by both sides to rebellious elements which stymied mutual harmony;

6.   A continuing trade imbalance (grossly unfavourable to Bangladesh) arising from lack of congenial policy facilitation and/or imposition of tariff/non-tariff trade barriers;

7.   Alleged illegal migration from Bangladesh to India;

8.   'Shoot to kill' policy of the Indian Border Security Forces (BSF) along the borders resulting in deaths of Bangladeshi civilians;

9.   Following from all above, a developing psychological barrier and trust deficit in relations between the two neighbouring countries;

10.   Illegal arms and drug trafficking affecting health/human security of people on both sides; and

11.   Illegal human trafficking endangering lives of women and children across the borders.

12.

Beyond the foregoing bilateral contentious issues, there have been disconnecting geophysical challenges for the NES, comprising a vast area of 270,000 square kilometres almost snapped from the Indian mainland since the partition of the subcontinent in 1947. The disconnects facing the NES are remarkable, and its leadership has voiced its connecting needs through Bangladesh in the following areas: [20]

- Transit and trans-shipment facilities including road, rail, and waterways connectivity through Bangladesh to the landlocked NES;

- Multi-modal transportation of goods through Bangladesh with Ashuganj as the port of call, including a related infrastructure boost;

- Access to waterways for communication through Bangladesh; and

- Access to Bangladesh seaports for meeting their export/import needs.

Renewed connectivities between Bangladesh and the NES

A measured change in the bilateral relations between Bangladesh and India has been taking place since the mid-1990s. However, the mutual ties have been on an upswing following Awami League's return to power in 2009. The Indian side, in consideration of its strategic interests, also made an effort to reciprocate. Thus the last six years saw a major change in their relationship, enabling both sides to enhance their bilateral connectivities, particularly in meeting the challenging needs of the NES. A reduction in trade barriers, increased cooperation on regional security, and a concrete vision for the development of Bangladesh as a critical linkage for South Asia to the broader continent have all improved the atmospherics for an improved bilateral partnership.[21] Consequently, the prospects for further connectivities in future appear immense. A mutual pledge to this end has the potential to turn the entire region as an economic growth zone, with cultural harmony and better security.

While the process of improved bilateral connectivities started in the mid-1990s, Narendra Modi's two-day maiden visit to Dhaka (2-4 June 2015) prompted both sides to be very vocal on connectivity: both sides have pledged to increase multilevel connectivities in wide-ranging areas. These include implementation of historical accords on land boundary, rail and road connectivity, economic engagement, expanded security cooperation, and greater people-to-people contacts. All these are meant to connect Bangladesh to the NES and wider regions, including East Asia and Southeast Asia. The accords on connectivities include the following:

1. **Reconnecting History:** The past impasse over border line was broken by operationalization of the 1974 pact, the land boundary agreement (LBA), paving the way for expeditious exchange of the 161 enclaves and lands under adverse possessions between the two countries, with due protection of the rights of all citizens and extension of facilities to the residents of the enclaves.

2. **Road Connectivity:** Both sides agreed to expand the existing road connectivities between Dhaka and Kolkata (operational since June 1999) as well as the Dhaka-Agartala bus services (operational since September 2003). On 6 June 2015 both sides jointly inaugurated the Dhaka-Shillong-Guwahati and Kolkata-Dhaka-Agartala bus services and agreed to introduce the second *Maitree* Express between Khulna and Kolkata. As they flagged-off the bus service between Kolkata and Agartala via Dhaka and the Dhaka-Shillong-Guwahati bus service, both also agreed to consider introducing new bus services linking Khulna-Kolkata and Jessore-Kolkata route.

3. **Rail Connectivity:** In addition to the existing Dhaka-Kolkata train services, both sides agreed to bolster the ongoing cooperation in the

railways sector, and revive the old railway connectivity that was snapped in 1965, including the Akhaura-Agartala railway link.[22]

4.   **Trade and Trans-shipment Connectivity:** Bangladesh agreed to let the NES use its Chittagong and Mongla ports for goods traffic to the NES, which would include new trade routes between Bangladesh and India's Mizoram and Tripura states.[23]

5.   **Coastal Shipping Connectivity:** As per the signed 'Coastal Shipping Agreement,' Bangladesh agreed to facilitate sailing of small vessels from India to various ports in Bangladesh, thus opening up newer avenues of cooperation in the areas of bilateral and regional trade and connectivity.

6.   **Power and Energy Sector Connectivity:** Both sides agreed to "further enhance cooperation" in the energy sector, identified as a priority area of "growing cooperation," particularly in renewable energy and civil nuclear energy, especially training for technical personnel. The two sides also decided to initiate an annual bilateral energy dialogue involving Secretary Petroleum of India and Secretary Power Division of Bangladesh with a view to undertake comprehensive energy sector cooperation including in areas of coal, natural gas, liquefied natural gas (LNG), supply of petroleum products in the sub-region, renewable energy, and oil and gas pipelines etc.[24]

7.   **Border *haats* (markets):** Border *haats* were inaugurated at Kamalasagar in the state of Tripura and new land ports were set up;

8.   **Connectivity in Security Matters:** As Bangladesh already cracked down on NES insurgent groups operating out of its territory and facilitated their handover to Indian authorities, both sides signed memoranda of understanding (MoUs) in the following areas:

   •   Sharing of information on security related issues, reaffirming their "unequivocal and uncompromising position against extremism and terrorism in all forms and manifestations;"

   •   Prevention of smuggling of fake currency notes, cooperation between coast guards, and prevention of human trafficking;

   •   Prevention of cross-border criminal activities, irregular movement, incidents of violence, and tragic loss of lives;

   •   Finalization of standard operating procedures (SOPs) for allowing usage of Indian border roads for construction and maintenance of border outposts of Border Guard Bangladesh as well as use of Indian medical facilities in difficult areas in the border area by Bangladeshi personnel, who are deployed in vicinity;

   •   Reiteration of bringing down the number of deaths at the border to zero and issuance of directives to the concerned authorities and border guarding forces to work to that effect.[25]

Challenges to connectivity: Threat potentials

Bangladesh-India joint bilateral declaration set forth the vision of connectivity in a document titled '*Notun Projonmo — Nayi Disha*' (New Generation, New Direction). A major shift has conceivably occurred in the overall bilateral relations since Indian Prime Minister Narendra Modi's Dhaka visit (2-4 June 2015), as he spoke of "emotional attachment with Bangladesh;" yet he was candid about the need for "a detailed post-mortem" on India-Bangladesh ties. When stressing that "India and Bangladesh were not just *'pass pass'* but *'saath saath'* (not mere neighbours but together)," or that with his visit "the *yatra* (in bilateral ties) had just begun," the Indian prime minister apparently seemed committed to meet the challenges facing the bilateral togetherness.

The outstanding challenges that have the potential to constrain mutual relations are as follows:

1. **The eco-security concerns**: Seal and operationalize the accords required for preservation of the ecosystem, including natural flow of water on Barak, Teesta, and Feni Rivers, and Link Canal as planned by India, which many suspect to be placed on the backburner.[26]

2. **Development of the Ganges Barrage:** A joint development of the Ganges Barrage on the River Padma in Bangladesh, as Bangladesh proposed, which India agreed to examine.[27]

3. **Bilateral Trade:** Balancing of bilateral trade is still grossly tilted towards India, which remains a major irritant in bilateral relations. Psychological barrier or trust deficit that still prevails, as often Bangladesh (with major Chinese investment in its infrastructure at present) is suspected to be inching toward Beijing. Although perceived in New Delhi as its adversary, China is partnering with India in forums such as BCIM and Asian Infrastructure Development Bank (AIIB).[28]

4. **Cost-Benefit Issues:** Making cross-border connectivity may make commercial sense for Bangladesh for its long-term interest, but it has to be perceptibly measurable or publicly marketable in terms of cost-benefit.[29]

5. **Third Party Association:** India wishes to involve a number of Indian companies in setting up of ports in Bangladesh, whereas Bangladesh might want to explore alternative feasible or financially viable options.

6. **Mutual Investment Facilities:** Efforts to spur Indian investment in Bangladesh and the desire of Bangladeshi entrepreneurs to get direct access to invest in the NES and fully benefit from the NES market.[30]

7. **External Market Links:** Acting on reciprocity and mutuality, while Bangladesh would serve as an important conduit for India's Act East Policy (for accessing the Southeast Asian

markets), Bangladesh is equally entitled to seek market access to Southeast Asian and Chinese markets via India.[31]

8. **Social Development:** Aspirations of the growing middle class on either side to reap the dividends of better connectivity and relationship need to be taken into account.[32]

9. **Infrastructure Development**: Financial infrastructure, transport network, and service facilities are currently insufficient to meet the rapidly expanding joint facility needs. Expansion of further land routes through road-train connectivities, especially linking eastern and northern Bangladesh (a key missing link is between Sylhet and Shillong) and adding air connectivity between Bangladesh and the NES is critically important for connecting the hilly terrain of NES with steep roads and multiple hairpin bends.

The numerous challenges, mentioned above, are both substantial and weighty in nature; hence they require serious policy reflection and effort. No doubt, the mutual signing of the agreements to materialize the vision of connectivity between the two prime ministers represents a commitment on the part of both the countries to reverse the earlier misperceived course of history of bilateral relations and open a new chapter of connectivities. Both the top dignitaries did appear sincere to implement the bilateral accords they signed, and both seemed keen to develop and widen the connectivities between the two neighbours. The development could advance the mutual interests and open up newer avenues of cooperation in the areas of bilateral and regional trade and connectivity. Yet all these accords need to be sincerely implemented across their borders and within their respective territories, which require commitment and dedication from their respective officials and an unwavering devotion to the vision by all people concerned of both the countries, who are likely to benefit from them.

This means that the motto of connectivities has to be taken from the top-level policymaking to the people-to-people level: to the likely beneficiaries, whose enduring interest must be served and whose sustained support would be needed for its fuller implementation. It is good indeed that both sides agreed on some of the modalities on how to carry the accords forward, such as the need for dredging of the Bangladesh-India inland water protocol on routes to utilize for their improved services. A critical need of the hour for both the countries, however, is to make major joint efforts to improve infrastructure along their border and within Bangladesh itself, to ensure that an enhanced connectivity gains momentum for conserving the ecosystem. Without it, the connectivities contemplated might become irrelevant or counter-productive, as the two countries could be drawn into another round of mutual blame game, as happened in the case of many of the previous accords and understandings, whether on land boundary, Farakka water flow, Teesta and Feni Rivers, bilateral trade balance, or border security.

The challenges to connectivities identified above are indeed real, *not* hypothetical, and should be appropriately met with due consideration to their impacts upon people's perceptions and their ramifications on the ecosystem on either side of Bangladesh-India/NES boundary. For all the recent mutual mapping of connectivities to happen in a sustained manner, the theoretical underpinnings of connectivity have to be kept in view for concretizing the empirical vision. India is a major world power, its power position and global ranking in comparison with Bangladesh is asymmetric; but the theory of connectivity prerequisites a symmetric ordering of the functional links for their effectiveness. This is the way connectivity works whether in information networks or in mathematical graphs. The same mode of symmetric order has to be applicable in cross-boundary or adjacent neighbourhood connectivity between the adjacent territories like Bangladesh and the NES, the latter controlled by New Delhi, the centre of gravity regulating their boundary relationship. For India, it might not be easy to make its way for facilitating a symmetric order of relations between Bangladesh and the NES, given its asymmetric power ranking vis-à-vis Bangladesh. It is not impossible, however, should New India place a higher priority on the empirical vision of connectivity needs of the NES, enabling it to harmonize its requirements with Bangladesh, which has its own aspirations or mutuality of needs to pursue with the former.

To meet such empirical prerogatives, *first*, India has to exhibit an ability to get out of the past black-box image of the neighbouring nations. It has to explore innovative modes of engagement, looking at the relationships beyond simply a bilateral perspective, or even through a SAARC lens. For instance, apart from building stronger educational links, one area needing urgent attention is the visa regime, which needs to be relaxed not just for the children or for the 65-past elderly; even Bangladeshi academics face hassles when attending conferences in India. Indeed, Indian visa issues obstruct interaction between members of civil society and the business community.[33]

Second, the role of the NES in Bangladesh-India ties needs to be recast from post-colonial past. It is time that Bangladesh-NES relations are built not only on strong economic basis, but also to ensure greater cultural and educational connectivities. Apart from more border *haats* — something the adjacent border-states have already called for — the two sides should explore the possibility of multilevel connectivities such as sectoral (urban, rural, educational, cultural) bonding to enable promotion of more people-to-people interaction and multifaceted connectivities. Both India and Bangladesh have so much in common that no other two neighbours have. They represent one of the most important relationships in South Asia and, for India, a vital element in New Delhi's strategic 'Act East Policy.'[34] An enhanced level of connectivities between the two sides would not only be mutually advantageous but would also promote wider Bangladesh-India connectivities.

Third, while talking of Bangladesh-NES and Bangladesh-India connectivities, it is equally urgent to keep in view the still wider scenarios. With respect to Intra-regional trade, the South Asian countries are among the least economically integrated regions in the world, currently contributing lower than

5% of their total trade, despite the showcasing of a regional organization over the last three decades. They have much to gain from expanding regional cross-border connectivities encompassing infrastructure, communication, transport, trade, investment, energy, ecology, and environment.[35] A successful pursuit of connectivity in the eastern sub-region of South Asia is bound to motivate and hearten other key stakeholders to work towards harmonization of their connectivity needs with India.

Fourth, within and beyond South Asia there are critical concerns about ecosystem where wider regional relations feature and have ramifications on Bangladesh-India mutual connectivities such as the preservation of natural habitat and conservation of the ecosystem. The two countries need to enable common rivers to nurture relationships, not become a source of discord, to rephrase what Narendra Modi has said. Like Tipaimukh and similar other Indian dams, an emerging test-case is China's efforts for accessing energy and water that may endanger life and living in the entire neighbourhood.[36] Such a case of endangered ecosystem makes it pertinent for both Bangladesh and India to coalesce their joint efforts to bring some sense upon their northern colossus. Such a context also makes it imperative to keep in view how players in the wider Asian region inclusive of India, China, and other South Asian countries can best cooperate on preserving natural ecosystem connectivity without any ramifications on bilateral and mutual relations in their forward journey.[37]

Returning to Bangladesh-NES connectivity, two issues need to be addressed on a priority basis. First is trade facilitation and capacity-building. For enhancing regional trade connectivity — inclusive of meeting the pressing needs of the NES for access through Bangladesh — a major challenge for Bangladesh is trade facilitation through effective service facility or capacity-building of its existing ports for shipping load and cargo-handling. It is well known that the nearest port to the NES is Chittagong, which suffers from incapacities of various sorts, including coastal shallowness, causing cargo-congestions due to which it is unable to cope with Bangladesh's own trading needs let alone cater to those of the NES. In the interest of meeting pressing trans-shipment needs of the NES, however, some options for a deep sea port at a nearer location must be kept in perspective, as Bangladesh's prime minister has repeatedly indicated.

Related to the subject of trade connectivity is also the opt-repeated issue of trade imbalance. Consistent with the even development of mutual connectivities, Bangladesh and India need to have a fairer and unhampered trade deal. This long-standing problem is likely to create a major trust deficit. To overcome such a discrepancy in bilateral business connectivity, India ought to operationalize its commitment to safeguarding the fairer trade balancing needs of Bangladesh. Both the countries must synchronize facilitating infrastructures and supportive service networks for enhanced connectivities which would involve huge resource allocation and technological input.

Conclusions

The theory of connectivity by its very nature and content implies horizontal, rather than vertical relationship. It conveys a connecting framework

of relationships based on symmetric bonding, rather than asymmetric ordering. For both the academia and decision-makers, it is critical to offer reflections on how relationships or connectivities can be promoted on the basis of mutual respect and understanding instead of being vertically imposed. In other words, how a natural ecosystem can be conserved and enhanced? It hardly needs emphasizing that much of the woes in contemporary international, regional, or sub-regional relations arise from attempted asymmetric intrusions or vertical ordering of relations by an imposition of the wish of the powerful upon the ones who do not hold proportional power or equilibrium of authorities to counteract them.[38] Palestine, Vietnam, Afghanistan, Iraq, Syria are all cases in point.

        In light of the foregoing backdrop let us first touch on the nature of relations between the role-players and determine the framework of their decision-making. The NES are not sovereign entities like Bangladesh. Therefore, in meeting the challenges of connectivities of the NES, Bangladesh has to cope with a broad spectrum of challenges of perceptual divide existing in the overall Bangladesh-India relations. It has not been an easy voyage for a country like Bangladesh. Despite being a homogenous entity by and large, it went through a gruesome liberation war and has been experiencing vicissitudes of a tortuous course of internal development for over four-and-a-half decades of its existence. It continues to confront a multitude of issues internally in consolidating democracy and pursuing a steady course of development, while externally it remains under strain in situations where it may not have a direct hand. In this connection, it is pertinent to keep in perspective the nature of Bangladesh-India relations, which in essence are of asymmetric order. Such an order of relations between the two countries has consequently led to asymmetrical perception or perceptual divide in the process of sorting out mutually advantageous decisions impeding policymaking on either side. In this overall conceptual backdrop one can observe the variational shift that occurred in policy in New Delhi over the last five years, enabling Dhaka to respond positively towards meeting some of the key challenges standing in the way of a smooth progress in Bangladesh-NES cross-border connectivities.

        Nevertheless, in these policy fluctuations one cannot but keep in view the constraints of multi-party Indian democracy, the way it functions and hinders mutual connectivities. Political decision-making on balance represents a mixture of idealism and realism, but the key issue is policy delivery, while beating the constraints imposed by power asymmetry. With this backdrop, credit must go to the superlenses of leadership traits shown by Indian Prime Minister Narendra Modi who reversed his earlier articulated stance on Bangladesh, but later exhibited a political dynamism in using a delivery technique that his predecessors had failed to employ: the delivery technique he displayed in getting a rare unanimity on the LBA in Indian Parliament, an issue that had stifled Bangladesh-India ties into a moribund state for so long.[39] That very act of redesigning India's asymmetric power position brought into a singular display the superlenses of statesmanship, which was fittingly reciprocated in a spirit of symmetrical warmth and harmony by his Bangladesh counterpart, and both acted

in earnest towards meeting some of the crucial challenges in bilateral connectivities.

Yet, the process of bilateral harmonizing is yet unfinished and the mutual connectivities need to be taken further along promptly in keeping with the spirit of symmetrical congruence in cementing bilateral connective relations. Otherwise the trust deficit is likely to widen, impeding a smooth evolution of relations with the NES as well as with India. Consistent with the critical requirements of connectivity is the conservation of the sub-regional/regional ecosystem that may have serious ramifications for Bangladesh. These include desisting from any project that may unbalance or have disturbing input into the flow of water, with disquieting effects on eco-order. The instances of Link Canal, Tipaimukh Dam or withdrawal of water from the Barak or Feni River — all come under this category.

Some observations are due on the mileage policymakers wish to gain from negative politics and its repulsive ramifications on mutual connectivities. Quite often politicians resort to acts or rhetoric for personal gains or for gamble of internal power politics, often indicative of ideological bias, but their public utterances or expressions also prop up ill-feelings or serve as upshots in foreign relations. Some examples may help clarify. When Narendra Modi spoke during his visit to Dhaka (2-4 June 2015) of his particular attachment with Bangladesh projecting the two neighbours in '*sathe, sathe*' for building communion with full range of connectivities, it bode quite well for harmonization of bilateral and inter-communal relations, and enhanced mutual connectivities. On the other hand, however, Modi is often also perceived with the rising culture of communal bigotry and intolerance in India more than any other top-rank Indian leader. Even in the course of electioneering in the neighbouring Assam, he sounded stirring the Hindu minorities from the neighbouring countries, including those from Bangladesh (whose number is already dwindling) to migrate to India — presumably a 'homeland for the Hindus' — and get Indian citizenship under the BJP government.[40] In Bangladesh Prime Minister Sheikh Hasina, like her charismatic father — the nation's Founding Father — has an impeccable record of articulating and advancing inter-communal concord; yet that did not deflect a senior cabinet minister, a close relative of the prime minister, and some ruling party MPs from seeking material gains from minority property-owners by grabbing their lands, drawing major media headlines.[41] Instances like these can barely add credence to whatever the leaderships of the two countries officially say in favour of truly ushering in '*sathe, sathe*' for creating the psychological milieu required for enduring bond of connectivities between the two close neighbours.

Nonetheless, the current momentum towards rebuilding connectivities must not be permitted to be stymied; both sides must dispel all phobias, and the vision of moving on to wider connectivities must not lapse by any disconcerting currents of politics on either side. India, a major trading nation and a technology giant, is steadily emerging as one of the top regional as well as global players. It has to take giant steps to reach out to its neighbours like Bangladesh, and show its largesse to consolidate relations in its vital immediate neighbourhood to take

it along in its search for a secure international role. Bangladesh, in its turn, should see itself as a 'bridge of common prosperity' in a win-win situation and ought to make sustained endeavours in its adherence to the mutually advantageous connectivities and work in close harmony with the adjacent Indian states.

However, the milieu in the regional and subregional environments makes it imperative for the region's public opinion mobilizers such as civil society, academics, media, and researchers to play a role for furtherance of connectivities, and help overcome some of the socio-geopolinomic malaise.[42] The academia must act as agents for social change, as is being marketed in Europe. Their use of 'soft power diplomacy' — so much articulated these days as a source of retracting the customary mindsets, pulling in 'heart-ware,' and bringing about a change in the existing perceptual divide — could help improve awareness of the policymakers and that of the man-on-the-street on both sides about the developing connectivities.[43] Narendra Modi, credited with the use of superlenses in cozying up to Bangladesh in a charming style, also carries the stigma of 'a divisive manipulator.'[44] Therefore, the intelligentsia must remain vigilant, and make strident efforts to carry forward the dream of deeper connectivities and vision of harmonization in the subregion and beyond. The modalities as enshrined in connectivities are already set in the global age. The litterateurs and scholars must contribute their share through research and writings, classrooms and lecture theatres, social media contacts and reporting, and public articulation and expressions to create a forward-looking future for all the people in the sub-region and the region as a whole. They could also provide positive inputs for multilevel connectivity working with multilateral institutions, think-tanks, the private sector, and others throughout the region to address the existing challenges such as: inadequate infrastructure, cost-sharing issues, insecurity concerns, and regulatory barriers.

Bangladesh, the NES, and India as a whole, have enormous potential for social progress and development, but they also suffer from severe crisis of governance. This is evident in a multiplicity of indices, including their poor ranking in development performance, competitiveness, perception of corruption, continuing poverty, and lack of social progress. Both Bangladesh and India have large underbellies of neglect, polarized people, divisive politics, and a mounting spectre of social dissonance and intolerance. All these lend easily to acts of provocation, violence, and terror, which continue to engulf the region and vitiate relationships at all levels.[45]

The enlightened civil society must connect in tie-ups and offer progressive ideas for steady socioeconomic changes needed. As for the politicians and policymakers on both sides, they must see the challenges in positive light, look backward and forward before anything they say or do to ensure that their utterances or decisions in no way handicap constructive evolution of sub-regional and wider regional connectivities linking Bangladesh and the NES. Both the academia and the policymakers may combine efforts to cross-connect, enhancing fraternal communion or building networks of sororities, for instance, 'sister' cities, charities, campuses etc. to promote

connectivities between and among centres of education and research. All this would facilitate exchange of students and faculties between institutions of learning, epitomize the true role models, share knowledge, and exchange experiences to serve as catalysts for augmenting mutually connected fraternal relations.

Connectivity across borders provides the means to an end; it is the vehicle for deeper engagement of adjacent neighbourliness. Both Bangladesh-NES/India as adjoining neighbours do have the prospect to move on in a win-win situation towards seamless connectivities that extend from land to space. Both being bound by the threads of history, kinship, language, and cultural and mystical ties must join in as fellow travellers on the road to development. Connectivities by road, rail, river, coast, sea, transmission lines, and digital links have now unveiled some of the pathways to this progressive future; but the fuller potentials have to be taken in so that the connectivities in Bangladesh-NES relations could serve as a replicable model for reinventing the adjacent connectivities of India's northwest with Pakistan.

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THE US DRONE POLICY
UNDER INTERNATIONAL LAW

CHOLPON OROZOBEKOVA[∗]

Introduction

Unmanned aerial vehicles (UAVs)[1] or simply drones[2] are increasingly present in the modern battlefield. Although they are heralded by US President Barack Obama as one of the most effective methods of fighting terrorism[3] and as weapon of the future,[4] their deployment nonetheless raises questions in the international community, including legal and moral ones.

The United States, in the framework of the "War on Terror," adopted by the Bush administration in 2001, began conducting drone strikes in the territories of other states such as Pakistan, Yemen, and Somalia.[5] After the terrorist attacks of 11 September 2001 (commonly referred to as 9/11), the Central Intelligence Agency (CIA) and Joint Special Operations Command reportedly began targeted killing programmes aimed at eliminating leaders and high-value members of Al-Qaeda, the Taliban, and their associated forces.[6]

After the 9/11 attacks, which left the US in acute shock, former US President George Bush launched the war on terror, making it clear that the US's war on terror begins with Al-Qaeda but it does not stop there. "It will not stop until every terrorist group of global reach has been found, stopped, and defeated," he said.[7]

For the first time ever, terrorism became the major threat to US national security and thus from year to year Al-Qaeda and its associated forces have remained the primary object of national security efforts. The US National Security Strategy 2010 includes a special section on how to disrupt, dismantle,

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and defeat Al-Qaeda, and adds that the United States is waging a global campaign against Al-Qaeda and its terrorist affiliates."[8]

The UAVs or drones have become "a weapon of choice" for the United States.[9] Armed drones were first used by the US in the Iraq and Afghanistan wars, and later the Bush administration launched drone operations as a part of its counterterrorism strategy to eliminate suspected terrorists based in fragile states such as Yemen, Pakistan, and Somalia, conducting the first drone strike in 2002.[10]

According to investigation by The Bureau of Investigative Journalism (BIJ), "President Bush ordered a single drone strike in Yemen, killing six people in 2002. Under Obama, the CIA and the Pentagon have launched at least 58 drone strikes in Yemen killing more than 281 people, including at least 24 reported civilians."[11] If the Bush administration had started using drones for targeted killing, during the Obama administration "it has been expanded into a major policy,"[12] and its compliance with international law has been debated over 10 years among international lawyers.

Drones cross the borders of foreign countries and kill people, both alleged terrorists and innocent civilians. There is increasing international concern surrounding the issue in the context of international law. Moreover, the lack of transparency around civilian casualties and lack of accountability are causing tension among the populations of those countries on the soils of which drone attacks have been conducted.

In the last 10 years, US drone strikes have become a controversial issue, demanding transparency, accountability, and clarifications from the US authorities. UN high-level experts, namely two UN Special Rapporteurs, and international human rights organizations such as: Human Rights Watch, and Amnesty International have harshly criticized drone strikes.

Ben Emmerson, the UN Special Rapporteur on human rights and counter-terrorism underlined the need for legal clarification: "The problem is the lack of clarity under which it is lawful to deploy lethal force by drone. Despite the proliferation of this technology, there remains a lack of consensus among international lawyers and between states on the core legal principles."[13]

Another UN Special Rapporteur Christof Heyns stated, "If armed drones are to be used, states must adhere to international humanitarian law, and should disclose the legal basis for their operational responsibility and criteria for targeting."[14]

Drones previously had been used only in non-combat roles such as: surveillance, reconnaissance, and guarding entrances and national borders. Whereas a few decades ago the world could not have imagined that robots would be actively involved in the battlefield, since 9/11 we have entered a new era of warfare with armed drones. Discussion of the proper application of the international legal framework has led many scholars and UN experts to question the lawfulness of these drone operations.[15]

On March 2014, the UN Human Rights Council adopted a resolution drafted by Pakistan and co-sponsored by Yemen and Switzerland urging UN member states using drones to ensure that "the use of armed drones comply with

their obligations under international law, including the UN Charter, human rights law and international humanitarian law (IHL), in particular the principles of distinction and proportionality."[16] The resolution called for convening an interactive panel discussion of experts on legal questions pertaining to this issue. The panel discussion took place at the 27th session of the Human Rights Council in Geneva in September 2014.

Although the resolution did not name the US, six states including the United States, Britain, and France voted against it, 14 states abstained and 27 states voted in favour. Pakistan's former Ambassador Zamir Akram told the UN Human Rights Council that these drone strikes, which have resulted in civilian deaths, also infringe on its sovereignty. "The purpose of this resolution is not to shame or name anyone, as we are against this approach. It is about supporting a principle."[17]

This research paper aims to analyse the legal questions related to these drone strikes with respect to *jus ad bellum*[18] and *jus in bello*,[19] two main pillars of international law. First, by conducting drone strikes the US has been attacking a sovereign state that they are not engaged in a state of war with. So does this constitute a violation of Pakistan's sovereignty? The second issue is that drone strikes are causing collateral damage on a large scale which is unacceptable under international law.[20] The civilian casualties raise the issue of legality in the context of the law of war. Conventional IHL and customary IHL stipulate a series of principles to be adhered to when using force against individuals, such as: distinction, proportionality, precaution, and prohibition of indiscriminate attacks.

The main research question addressed in this paper is: Are US drone attacks lawful according to international law? In order to answer this main question, answers are sought for two auxiliary research questions:

- How are American drone attacks officially justified by the Obama administration?
- Are the Unites States' official justifications of drone attacks compliant with international law?

The paper contends that the US drone operations fail to fulfil both *jus ad bellum* and *jus in bello* norms of the international law. Although a consensus among scholars and lawyers on the issue has not yet evolved, the majority of international lawyers question the compliance of the US drone attacks with international law.

The US and drone warfare

Emergence of drones and their growing importance for the US

According to Konstantinous Dalamagkidis, the first drones were invented during the First World War and were developed to gather intelligence and conduct surveillance and reconnaissance. "In Britain, experiments with unmanned aircraft took place throughout the 1920s with the RAE 1921 Target. In 1933, the Royal Navy used the Queen Bee target drone for the first time. It

was a modified version of the Havilland Tiger Moth biplane and was successfully employed for gunnery practice."[21]

Soon after Second World War interest in reconnaissance missions increased, and by the 1950s many states began to develop remote controlled aircraft. The United States used drones in the Vietnam War and also during the Gulf War for reconnaissance. However, in 2001 the US began using combatant drones and invented the Predator, the world's first armed drone.[22] Peter Singer describes the Predator as "the ugly little drone," which has quickly become a valuable asset for the US. In a period of just one year from June 2005 to June 2006, "Predators carried out 2,073 missions, flew 33,833 hours, surveyed 18,490 targets, and participated in 242 separate raids."[23]

The United States currently deploys several types of drones, but the most well-known armed drones are "the MQ-1 Reaper and the MQ-9 Predator, both may carry 500-pound bombs."[24]

According to the Unmanned Systems Integrated Roadmap, the US has been spending $6 billion annually on the research, development, procurement, and maintenance of unmanned systems for war.[25] In 2003 alone, $4 billion of the newly-formed Department of Homeland Security's budget went to technology research programmes.[26] The US Department of Defence says that "unmanned systems can help in countering threats by reducing risk to human life and increasing standoff from hazardous areas."[27]

The US authorities define armed drones as a precise and effective weapon, and some experts agree with that. Joshua Foust, the Asymmetric Operations Fellow at the American Security Project, admits that drones are extremely precise. "In terms of precision, they do hit the targets we give them very consistently, we just don't always know who that target is."[28] Both the CIA and the Pentagon, when talk about drones, like to mention cases that have been successful to highlight the effectiveness and precision of drone attacks. Former US Defense Secretary Leon Panetta has called drones "the only game in town,"[29] while former US Secretary of State Hillary Clinton has said, "dozens of highly skilled and senior Al-Qaeda commanders, trainers, bomb makers, and operatives have been taken off the battlefield by drone attacks."[30]

There are indeed successful cases when drone strikes killed "high-value" targets. In August 2009, the CIA killed the leader of Tehrik-i-Taliban Pakistan (TTP) Baitullah Mehsud in a drone strike, who was more notorious in Pakistan than Osama bin Laden. "His death also marked a stunning strike for America's hi-tech, low-risk war in Pakistan's tribal belt," wrote *The Guardian* following Mehsud's death.[31] Since drone operators can survey a target for hours or days, and can identify terrorists more accurately than ground troops or conventional pilots, there is some rationale in using armed drones. As of 2013, the drones have killed about 58 known militant leaders in Pakistan and 35 in Yemen.[32]

One of the fundamental advantages of armed drones is that they can be a cost-effective way of achieving national security objectives as drones are cheap, but soldiers are not.[33] For instance, each US soldier deployed in Afghanistan in 2012 cost the government US$2.1 million. Whereas, the

American Security Project's reports show that the MQ-9 Reaper drone used for attacks in Pakistan has a single unit cost of US$6.48 million and an operational cost of close to US$3 million.[34]

After 9/11 the world entered "the era of robots at war,"[35] says Peter Singer. In his article "Do drones undermine democracy," Singer set forth the critical evolution of drone attacks:

> Just 10 years ago, the idea of using armed robots in war was the stuff of Hollywood fantasy. Today, the United States military has more than 7,000 unmanned aerial systems, popularly called drones. There are 12,000 more on the ground. Last year, they carried out hundreds of strikes — both covert and overt — in six countries, transforming the way our democracy deliberates and engages in what we used to think of as war.[36]

According to another source, since 2004 the Pentagon's drone flights have tripled from about 170,000 hours to more than 570,000 hours in 2011.[37] Metin Gurcan's analysis of the US's annual budget for drones shows that it has grown from $1.9 billion in 2006 to $4.8 billion in 2010. During this same period, the drones' numbers in the US Military have gone from under 3,100 to more than 6,500.[38]

The next concern about drones is their rapid proliferation. Currently, about 87 countries in the world possess different types of UAVs.[39] As Guy Taylor states, the US, Britain, and Israel are the only states to have fired missiles from UAVs. China uses drones to spy on Japan near disputed islands, while Turkey uses them to eyeball Kurdish activities in northern Iraq.[40]

In light of proliferation concerns, some states may wish to use armed drones in operations against organized crime, for crowd control in demonstrations, and even to attack the territory of another state. What if other states start using armed drones in unacceptable ways? As UN Special Rapporteur Christof Heyns indicated in his report to the General Assembly, "drones can be expected to become more sophisticated and available in compact form, also to become less expensive and therefore more accessible."[41] As it is clear that many states are keen to develop and increase the use of drones, the international community needs to come to greater consensus on how to use them further.

Case study: Pakistan

There are several reasons why the drone strikes carried out in Pakistan by the CIA were chosen as the focus for this research. First, the US conducted the largest number of drone strikes in Pakistan compared to Yemen and Somalia. If the Bush administration carried out about 45 to 55 drone strikes in Pakistan, the Obama administration conducted six times that number in its first term alone.[42] According to data from BIJ, the total number of drone strikes conducted by the US in Pakistani territory is 381, out of which 330 were under the Obama administration.

The second reason for this paper's research focus on Pakistan is that the US has conducted drone strikes in Pakistani territory despite the fact that Pakistan is not in an armed conflict with the US. Pakistan's Prime Minister Mian Muhammad Nawaz Sharif has repeatedly urged an end to the strikes. He has stated that the use of drones is not only a violation of Pakistan's territorial integrity, but also detrimental to the country's resolve and efforts to eliminate terrorism.[43] It is also important to mention that on 9 May 2013, the Peshawar High Court issued a verdict against drone strikes by CIA-operated spy planes, saying, "the drone attacks are illegal, inhumane, and violate the UN Charter on human rights and constitute a war crime."[44]

Most drone attacks occur in the north-western region of Pakistan, which borders Afghanistan. The main target is the Federally Administered Tribal Areas (FATA), a border region governed by Pakistan's federal government but not effectively controlled because of its mountains and lack of roads, which makes it easier for terrorist groups to cross the border from Afghanistan and use it as a safe haven.

Every attack in Pakistan causing large-scale civilian casualties puts the reputation of the US at stake in the international arena, especially in the Muslim world. It is stated in a BIJ report that of all drone attack victims since 2004 only 1.5 per cent have been high-profile targets, that is, leaders or high value members of Al-Qaeda or the Taliban.[45]

BIJ obtained a secret Pakistani document with data on 330 CIA drone strikes, which showed all drone strikes and the number of people killed, sometimes also identifying the number of civilians among them. As per the report, the US drone strike on 30 October 2006 targeting a religious seminary in Chinagai in the Bajaur tribal region of Pakistan killed 81 people, 80 of them children.[46]

Lack of transparency has further complicated the issue, as it is not possible to obtain exact data on civilian casualties. The numbers coming from different sources vary from 2,000 to 4,000. According to US Senator Lindsay Graham, the US had killed a total of 4,700 people using drone aircraft as of early 2013.[47] "Sometimes you hit innocent people, and I hate that, but we're at war, and we've taken out some very senior members of Al-Qaeda," said Mr Graham. It is not clear, however, whether this figure is based on official sources and whether it includes all countries where the US is conducting drone strikes.

A study conducted by the Counter-terrorism Strategy Initiative states, "the true civilian fatality rate since 2004 according to our analysis is approximately 32 percent."[48] According to the report, 114 reported drone strikes in north-western Pakistan from 2004 to 2010 have killed between 830 and 1,210 individuals, of whom around 550 to 850 were described as militants in reliable press accounts, about two-thirds of the total on average.

Human Rights Watch and the International Human Rights Clinic published their joint report on drone operations titled "Losing Humanity" in 2012, where the two organizations stated that drones create a "responsibility gap," and urged that the military commanders who deploy such weapons should be held responsible for civilian casualties.[49] In this report, human rights

organizations remind that accountability serves at least two functions: it deters future harm to civilians, and provides the victims a sense of retribution.

Amnesty International has also published a report on drone strikes in Pakistan. The report refers to drone strikes as "unlawful killings:"

> Amnesty International is seriously concerned that these and other strikes have resulted in unlawful killings that may constitute extrajudicial executions or war crimes. The prevailing secrecy surrounding drone strikes, restrictions on access to drone-affected areas, and the refusal of the US administration to explain the international legal basis for individual attacks raise concerns that other strikes in FATA might have also violated human rights.[50]

In the report, Amnesty International has gathered information from various sources on how many people have been killed by drone strikes conducted in Pakistan (see Annex 1). What is striking about civilian casualties is that the CIA carries out secondary attacks to kill rescuers who come to help the injured after the drone attack. Amnesty International expressed its deep concern about follow-up rescuer attacks saying, "deliberately attacking civilians rescuing the wounded or the wounded themselves is a war crime."[51]

One of the concerns of the international community is the drastic increase in the number of strikes under the Obama administration. The graphics drawn by Long War Journal (see Annex 2) help understand the rise and decline of drone strikes in Pakistan and Yemen. As the graphic shows, the peak was in 2010 during the Obama administration when the US conducted 117 drone strikes in Pakistan. But the information about strikes is variable, as they are conducted by the CIA, which complicates the issue with its secrecy, and the US does not show any sign of willingness to declassify all information related to the drone strikes.

Legal analysis

How are the drone attacks officially justified by the Obama administration?

As there is no consensus among international lawyers and the issue is very controversial, this paper aims first to clarify the official stance of the Obama administration on justifying drone strikes under international law.

There is no comprehensive official document on how the US describes the legal framework which it applies to drone attacks. To understand how the US legally justifies its drone operations we will analyze the post-9/11 US National Security Strategy, official statements including speeches of US President and other officials, and the White Paper issued by US Department of Justice, which gives the official view of the Obama administration.

President Obama delivered his first major speech on drones at the National Defence University in May 2013. Obama described the war against terrorism as a different kind of war saying, "On September 11, 2001, we were shaken out of complacency. Thousands were taken from us, as clouds of fire and

metal and ash descended upon a sun-filled morning. This was a different kind of war. No armies came to our shores, and our military was not the principal target. Instead, a group of terrorists came to kill as many civilians as they could."[52]

President Obama said that the United States does not order drone strikes when it has the ability to capture terrorists. But according to *The New York Times* analyst Mark Mazzetti, "both the Bush and Obama administrations have determined that Pakistan's tribal areas are areas where capture is not possible. Not only are Pakistanis opposed to American 'boots on the ground,' but the writ of the Pakistani government does not extend to the Federally Administered Tribal Areas, or FATA. As a result, there have been hundreds of drone strikes in Pakistan and only a very small number of capture operations."[53] President Obama describes the US drone operations as lawful:

> We were attacked on 9/11. Within a week, Congress overwhelmingly authorized the use of force. Under domestic law, and international law, the United States is at war with Al-Qaeda, the Taliban, and their associated forces. We are at war with an organization that right now would kill as many Americans as they could if we did not stop them first. So this is a just war — a war waged proportionally, in last resort, and in self-defense.[54]

In this speech, President Obama also said, "America cannot take strikes wherever we choose; actions are to be bounded by consultations with partners, and respect for state sovereignty."[55]

Harold Hongju Koh, former Legal Adviser of the US Department of State, in his speech at the annual meeting of the American Society of International Law in March 2010 stated, "The Obama Administration is firmly committed to complying with all applicable law, including the laws of war, in all aspects of these ongoing armed conflicts."[56] Koh argued that Al-Qaeda has not abandoned its intent to attack the United States, and that there is an armed conflict with Al-Qaeda:

> The United States is in an armed conflict with Al-Qaeda, as well as the Taliban and associated forces, in response to the horrific 9/11 attacks, and may use force consistent with its inherent right to self-defense under international law.[57]

As a matter of domestic law, Koh emphasized the US Congress's authorization for the use of all necessary and appropriate force through the 2001 Authorization for Use of Military Force (AUMF). Koh argued that the very use of advanced weapons systems such as unmanned aerial vehicles for lethal operations is consistent with the applicable laws of war. He said, "There is no prohibition under the laws of war on the use of technologically advanced weapons systems in armed conflict."

John Brennan, who is serving as CIA Director since March 2013, has publicly defended drone strikes on several occasions. In his speech "The Efficacy and Ethics of US Counterterrorism Strategy" delivered in the Wilson

Center, he said that as a matter of domestic law, the US constitution empowers the US President to protect the nation from any imminent threat of attack and the US can use force consistent with its inherent right to national self-defence. "There is nothing in international law that bans the use of remotely piloted aircraft for this purpose or that prohibits us from using lethal force against our enemies outside of an active battlefield, at least when the country involved consents or is unable or unwilling to take action against the threat,"[58] said John Brennan in his speech in the Wilson Center.

In February 2013 the National Broadcasting Company (NBC) published the confidential White Paper titled "Lawfulness of a lethal operation directed against a US citizen who is a senior operational leader of Al-Qaeda or an associated force," produced by the US Department of Justice in 2011 for internal use. This is the first official document publicly released ever to explain the Obama administration's position on the legal basis for conducting lethal attacks by unmanned aircrafts to target US citizens who allegedly are linked to Al-Qaeda and its associate forces.

The document says that the US President "has authority to respond to the imminent threat posed by al-Qa'ida and its associated forces, arising from his constitutional responsibility to protect the country, the inherent right of the United States to national self-defense under international law."[59] The US Department of Justice, referring in this paper to Common Article 3 of the Geneva Convention, says that conflict between a nation and a transnational actor, occurring outside the nation's territory, is a non-international armed conflict as it is not a conflict between states. The paper argues that since the US Congress has authorized the use of all necessary and appropriate military force against the enemy, it is in an armed conflict with Al-Qaeda under international law. Any US operation would be part of this non-international armed conflict, even if it were to take place away from the zone of active hostilities, according to the White Paper.[60]

On the legality of targeted killing, the White Paper states, "targeting a member of an enemy force who is posing an imminent threat of violent attack to the United States is not unlawful; it is a lawful act of national self-defense." The White Paper concludes that the use of force could be legally authorized if the following three conditions are met:

1.   An informed, high-level official of the US government has determined that the targeted individual poses an imminent threat of violent attack against the United States;
2.   Capture is not feasible, and the United States continues to monitor whether capture becomes feasible; and
3.   The operation would be conducted in a manner consistent with applicable law of war principles.[61]

The US Department of Justice states in the end of the paper that there is no prohibition under the laws of war on the use of technologically advanced weapon systems in armed conflicts — such as pilotless aircraft or so-called

smart bombs — as long as they are deployed in conformity with applicable laws of war.

The US justifies its drone attacks in the territory of other states as national self-defence against an imminent threat. The US says that it is in non-international armed conflict with Al-Qaeda and its affiliate forces. However, there remains a very significant question: whether the US use of force in Pakistan violates Pakistan's sovereignty in contravention of the UN Charter.

Jus ad bellum: Can the US use force in the territory of Pakistan?

This section provides analysis of *jus ad bellum*, the body of international law concerning the use of interstate force. It addresses the questions such as: Whether the US drone strikes, regarded as the use of force against Pakistan, are lawful under international law; whether they violate Pakistan's sovereignty; and whether they adhere to at least one of the exceptions to the prohibition of the use of force under international law. The rules of international law on the use of force are to be found in the UN Charter and in customary international law.[62]

Any use of force within the sovereign territory of another state is prohibited by international law. Article 2(4) of the UN Charter prohibits the threat or use of force by one state against another. The UN Charter says, "All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state."[63] Despite the fact that Pakistan, Yemen, and Somalia are fragile states,[64] each of them is still sovereign and no other state can violate their sovereignty.

The argument that US drone strikes are directed only against Taliban and Al-Qaeda hideouts in the territory of Pakistan is debatable and raises many legal questions under the UN Charter. As Nils Melzer states, "any use of a robotic weapon by one State within the sphere of sovereignty of another comes under the prohibition of interstate force expressed in Article 2(4) of the UN Charter."[65] Sending armed drones into Pakistani territory to conduct airstrikes which cause civilian casualties is "a prima facie violation of State's territorial integrity and, therefore, sovereignty."[66]

There are only three exceptions to the prohibition of the use of force in international law: the first is if a state seeks authorization by the UN Security Council; the second is an inherent right to self-defence if an armed attack occurs; and the third is if consent is given by the territorial state in question.

The first exception comes within the central role of the UN Security Council.[67] In Chapter VII, the Security Council is given authority to act in cases of threats to peace, breaches of peace, and acts of aggression. The Council authorizes the use of force in order to maintain or restore peace.[68] Any state that wishes to resort to the use of force has to seek authorization from the UN Security Council. Drone strikes during NATO's operations in Libya occurred under UN Security Council authorization by resolution 1973 adopted on 17 March 2011.[69] However, neither the Bush administration nor the Obama

administration has sought UN Security Council authorization in order to conduct drone operations in Pakistani territory.

As laid out in the previous section, the official justification given by the Obama administration refers to the inherent right to self-defence. Under the UN Charter, without the authorization of the UN Security Council, the second exception to the prohibition of the use of force in international law is self-defence. Article 51 of the UN Charter says, "Nothing in the present Charter shall impair the inherent right of collective or individual self-defence if an armed attack occurs against a member of the United Nations."

The US argument is that by adopting resolutions 1368 and 1373 in 2001, the UN Security Council supported the invocation of self-defence. Former Legal Adviser of US Department of State John Bellinger said, "The UN Security Council recognized the right of the United States to act in self-defence in response to the September 11th attacks, as NATO did by invoking, for the first time in its history, the provisions of collective self-defense in the North Atlantic Treaty."[70] Although the resolution mentions an inherent right to individual or collective self-defence, it does not authorize drone strikes in the territory of any specific state, either Pakistan or Yemen.[71]

Some scholars argue that the Security Council was manipulated by the US. Carsten Stahn states, "the UN Security Council was not bypassed in the aftermath of 9/11 attack, but at the same time the Council was manipulated to meet the US interests for greatest possible operational independence."[72]

However, the notion of self-defence might be interpreted in light of contemporary asymmetric conflicts and non-effective control of territory by fragile states. Nils Melzer argues that after 9/11 some states may have to tolerate such self-defence action within their territories under certain circumstances:

> Since 9/11 attacks, however, there is emerging acceptance within the international community of the view: (a) that self-defence action is permissible also against non-state actors, and (b) that a State's right of territorial inviolability must be understood in light of its corresponding duty to protect the legitimate interests of third States within its sphere of sovereignty. Accordingly, a State unable or unwilling to prevent the use of territory as a base for hostile activities against third States may have to tolerate necessary and proportionate self-defensive action within its sovereign territory.[73]

The United States has confidently put forward this argument that Pakistan is not effectively controlling its own territory and is allowing terrorists to use it as a safe haven. Former Legal Adviser to the US Department of State John Bellinger said, "As a practical matter, [...] a state must prevent terrorists from using its territory as a base for launching attacks. As a legal matter, where a state is unwilling or unable to do so, it may be lawful for the targeted state to use military force in self-defense to address that threat."[74] FATA has been described also as "the most ungoverned, combustible region in the world."[75] As General David Petraeus, the former head of US Central Command, in a meeting

with Pakistani officials, defended drone strikes saying, "We are helping you also by hitting your bad guys."[76]

Former United States Secretary of Homeland Security, Michael Chertoff also insisted, "international law must begin to recognize that part of the responsibility of sovereignty is the responsibility to make sure that your own country does not become a platform for attacking other countries… There are areas of the world that are ungoverned or ungovernable but nevertheless technically within the sovereignty of boundaries. Does that mean we simply have to allow terrorists to operate there, in kind of bad lands...?"[77]

Some scholars support the position of the US officials cited above. One such opinion is that state sovereignty should be "earned." This means that "a state has to demonstrate its ability of self-governance."[78] Theresa Reinold argues, "sovereign states have a responsibility to protect — within their own territory — the rights and fundamental security interests of other states." She further argues that a lack of effective control of territory is not the only reason behind the emergence of safe havens around the world; some fragile states such as Pakistan have been showing "not only inability, but rather its unwillingness, to prevent irregular activity on its territory."[79]

Despite the arguments given by some scholars, the fact that fragile states do not effectively control their territories or their alleged unwillingness to protect the security interests of other states, does not justify drone attacks in Pakistani territory within the framework of *jus ad bellum*. The International Court of Justice's (ICJ) decision on Congo and Uganda is of relevance here. The ICJ found unlawful Uganda's use of force in the territory of Congo as the latter is not responsible for the armed groups. The court stated that even Congo's failure to take actions against these armed groups did not justify Uganda's use of force.[80] Here it is also relevant to mention the Nicaragua case where the ICJ opined, "not all measures that involve a use of force are sufficiently grave to qualify as an armed conflict."[81] There is also growing hesitation among scholars and lawyers to accept self-defence as justification for the drone attacks arguing that there is an absence of such an armed attack. "Uses of force by terrorist actors may not necessarily constitute "armed attacks" and justify the use of self-defence under Article 51 of the UN Charter," says Allen Weiner.[82]

In general, the fact that Al-Qaeda is a non-state actor does not bar the US from invoking its right to self-defence though. Article 51 of the UN Charter says only "if an armed attack occurs against a Member of the United Nations" and it does not mention whether an armed attack may be launched by another state or other actors. To support the view that self-defence may be exercised in response to terrorist attacks, some scholars put forward the 1837 Caroline case, an incident when the British Military used force against non-state actors on US territory.[83]

The third exception to the use of force in international law is consent given by the territorial state. This consent should be given by a very high authority of the territorial state, and there are no official documents to prove such consent given by Pakistan for US drone attacks on its soil. Moreover, the United States' official stance – including the Department of Justice White Paper

and speeches on the legality of drone attacks given by President Obama and other officials – never mentions consent given by a territorial state.

However, *The Washington Post* and *The New York Times* published several articles trying to give some evidence of how the Pakistani government has given consent for drone strikes in its own territory. *The New York Times* on 25 February 2010 published an article titled "CIA and Pakistan work together" which reported:

> Successful missions sometimes end with American and Pakistani spies toasting one another with Johnnie Walker Blue Label whisky, a gift from the CIA. The CIA's drone campaign in Pakistan is well known, which is striking given that this is a covert war. But these on-the-ground activities have been shrouded in secrecy because the Pakistani government has feared the public backlash against the close relationship with the Americans.[84]

Following this article, the Washington Post published secret memos between the CIA and Pakistan's top officials which reveal Pakistan's agreement to the use of drone strikes. According to top CIA documents and Pakistani memos obtained by the *Washington Post*, "top officials in Pakistan's government have for years secretly endorsed the program and routinely received classified briefings on strikes and casualty counts."[85] On 1 December 2010, a Pakistani daily *The Express Tribune* quoted a WikiLeaks' reference to Pakistan's former prime minister Yousaf Raza Gillani saying, "I don't care if they do as long as they get the right people. We will protest in the National Assembly and then ignore it."[86] Although Pakistan publicly denies such consent and publicly condemns drone strikes, and the US has never mentioned whether Pakistan agreed to drone strikes or not, the media articles revealing Pakistan's tacit agreement indicate towards close coordination between Pakistan and the CIA to carry out drone strikes, including detailed maps, and before-and-after photos of US drone targets.

However, these newspaper articles cannot be accepted as official proof that Pakistan has given consent for drone attacks. The first reason to question this is that consent should be given by a very high authority of the territorial state. There is no official evidence that the prime minister of Pakistan has given such consent. To the contrary, the Pakistani government has harshly criticized the drone strikes. Moreover, questions and doubts arise whether this exception could apply "when consent is tacit or there are conflicting statements relating to consent."[87]

The main conclusion of the *jus ad bellum* analysis is that US drone attacks in Pakistan fail to meet international norms on the prohibition of the use of force. Drone attacks are a form of military force and constitute a military attack, causing dozens of casualties including civilians. Pakistan itself is not responsible for the 9/11 attacks or other terrorist attacks, and the United States is acting unlawfully in resorting to military force against Pakistan.

Jus in bello: Applying targeting principles to drones

This section analyses *jus in bello*, which addresses the questions of when and which individuals may lawfully be targeted under international law. *Jus in bello* can be found in Conventional IHL or Customary IHL, both of them address the restrictions and rules on how to wage war and how to use force against a specific individual; and both of them aim to minimize the harmful effects of armed conflict on both sides.

As drones are completely new weapons, they are not specifically mentioned in any part of the law of an armed conflict. However, "the use of any weapon system including armed drones in armed conflict is clearly subject to the rules of international humanitarian law."[88]

Conventional IHL principles can be found in Additional Protocol I (AP I) to the 1949 Geneva Convention. For example, Article 43 (2) of AP I distinguishes combatants which are members of the armed forces.[89] According to Article 48 of AP I, "In order to ensure respect for and protection of civilian population and civilian objects, the Parties shall direct their operations only against combatants and military objects."[90] However, Conventional IHL applies only when an international armed conflict occurs between states. The US drone attacks cannot constitute an armed conflict between states and are subject only to Customary IHL, which has the same rules as Conventional IHL.

As elaborated in this paper, the US has claimed that it is in a non-international armed conflict with Al-Qaeda and that drone strikes comply with the principles of law of war. This section will analyze whether drone strikes in Pakistan comply with the targeting principles of the Customary IHL.

The Customary IHL principles can be found in the International Committee of the Red Cross (ICRC) Customary IHL database. This section aims to analyze the three main principles, which are: distinction between civilians and combatants, proportionality in attack, and precautions in attack.[91]

Rule 1 of Customary IHL is the principle of distinction, which requires that "the parties to the conflict must at all times distinguish between civilians and combatants. Attacks may only be directed against combatants. Attacks must not be directed against civilians."[92] The main purpose of the distinction principle is to protect civilians; accordingly "civilian population must be spared and protected against the effects of hostilities."[93] In the case of the Nuclear Weapons Opinion, ICJ concluded that the IHL principles, including the principle of distinction, are fundamental and cardinally important for "elementary considerations of humanity."[94]

However, there are many examples in Pakistan of US drone strikes killing families, children, and relatives of the target militants as well as other civilians who appeared to be nearby accidently.[95] As stated in this paper, if some sources indicate that the true civilian fatality rate since 2004 is approximately 32 per cent, others state that only about 2 per cent of those killed were militants.

Moreover, the signature strikes[96] and secondary strikes are causing large scale civilian casualties which constitute a war crime.[97] The CIA carries out secondary attacks to kill rescuers who come to help the injured after a drone attack. Amnesty International expressed its deep concern about follow-up

rescuer attacks stating, "Deliberately attacking civilians rescuing the wounded or the wounded themselves is a war crime."[98] As stated above, the US drone strike on 30 October 2006 at a religious seminary in Chinagai in the Bajaur tribal region of Pakistan killed 81 people, 80 of them were children.[99]

Another example took place in June 2009, when the US hit a compound in South Waziristan. Local villagers and neighbours rushed to the scene hit by the drone attack to rescue survivors, but the CIA then launched more missiles at them, leaving a total of 13 dead. The next day, when people gathered for the funeral of those killed, the CIA again launched a drone attack and 70 of the mourners were killed.

The next main principle of Customary IHL for lawful targeting is proportionality. The proportionality principle stipulated in the Customary IHL states, "Launching an attack which may be expected to cause incidental loss of civilian lives, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated, is prohibited."[100] In order to kill one high value member of Al-Qaeda, the US has been killing dozens of civilians including women and children. "If the expected harm to civilians is excessive in comparison to the military advantage to be gained from the attack,"[101] it will be a violation of the proportionality principle.

The principle of precautions in attack of customary IHL is stipulated in Rule 15, which says, "In the conduct of military operations, constant care must be taken to spare the civilian population, civilians and civilian objects. All feasible precautions must be taken to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects."[102]

Even if the targeted person is a terrorist and a high value member of Al-Qaeda whom the United States deems militarily necessary to target, the CIA should comply with the principles of distinction, proportionality, and precaution. The latter requires that all operations must be planned very carefully, and organized and controlled strictly. The CIA, while targeting Al-Qaeda members, should also ensure that drone strikes do not kill other innocent civilians, which is why the precaution principle demands constant attention towards avoiding incidental loss of civilian lives.

The US has failed to meet the precautionary principle through its reported practice of signature strikes and follow-up strikes causing large-scale collateral damage. Moreover, the reported practice of considering all "males of fighting age" who were present in the vicinity of the drone attack to be terrorists violates both the proportionality principle and the precautionary principle.[103] Nils Melzer calls signature strikes and double strikes "alarming approaches."[104] They are indeed not only alarming but constitute war crimes and stand in stark contrast to US government officials' statements about compliance with international law.

To sum up, the US has failed to meet the principles of distinction, precaution, and proportionality of Customary IHL. The US's claims that the

drone strikes comply with the principles of law of war do not have any legal standing.

Conclusion

The US drone attacks fail to meet norms of international law; especially considering the fact that two UN Special Rapporteurs and human rights organizations have stated in their reports that drone strikes with large-scale civilian casualties constitute a war crime. The legal standing of US's claims that drone strikes comply with the principles of law of war is unfounded. Drone attacks are a form of military force and constitute a military attack. The US drone attacks in Pakistan fail to meet international norms on the prohibition of the use of force. The US has also failed to meet the principles of distinction, precaution, and proportionality of Customary IHL.

The issue of drone strikes has become a controversial and alarming issue, raising not only legal questions, but also moral ones. The lack of transparency and accountability are the main obstacles in addressing the issue, which was emphasized in the resolution adopted by the UN Human Rights Council on 28 March 2014. Thus the main challenge faced during this research was the fact that there is no official data on drone strikes. Referring to national security, the United States has never declassified information on matters such as civilian casualties, the CIA's rules of engagement, the airbases used for drone strikes, etc.

The world has entered a new era of warfare, and no one can exclude the possibility that drone strikes might be exercised by states or non-state actors in unacceptable ways. At this stage it is truly crucial that the international community demands transparency around drone operations from the US.

It is essential to examine the issue of how the international community can prevent the use of armed drones in unacceptable ways. Do states need special international treaties or other legislative regulations on armed drones? These vital issues need to be further explored.
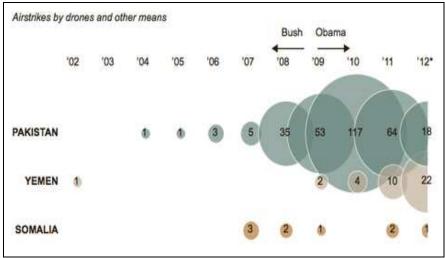
__Annexes__

Annex 1

Number of people killed and civilian casualties

	Number of drone strikes	**Total killed**	**Civilians killed**	**Total injured**
Pakistani government	330	2,200	400-600	600
Long War Journal/New American Foundation	348-374	2,065-3,613	153-926	1,117-1,505
US government	classified	4,700 (it is unclear on what sources the Senator is relying)	classified	classified

Source: "Will I be next? US drone strikes in Pakistan," Report by *Amnesty International,* September 2013, available at <https://www.amnesty.org/en/library/ asset/ASA33/013/2013/ en/041c08cb-fb54-47b3-b3fe-a72c9169e487/ asa330132013en.pdf>, (accessed 28 February 2014).

Annex 2

Drone attacks from 2002 to 2012

Published by *The New York Times*; Source: Long War Journal.

Notes and References

[1]   In this paper I will use terms UAVs and drone interchangeably, as both are simple and familiar. But scholars and experts on the issue also use other terms such as Unmanned Aircraft System (UAS), Unmanned Airborne Vessel (UAV) and Remotely Piloted Aircrafts (RPA).

[2]   See Joint Chiefs of Staff, Joint Pubb. 1–02, Department of Defence Dictionary of Military and Associated Terms 571 (2009) where the US Department of Defense gives the definition to UAVs or drones as following: "[a] powered, aerial vehicle that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, can be expendable or recoverable, and can carry a lethal or nonlethal payload. Ballistic or semi ballistic vehicles, cruise missiles, and artillery projectiles are not considered unmanned aerial vehicles."

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[14]   Yemen: UN experts condemn drone strikes on mistaken wedding processions, *UN News Centre*, 26 December 2013, available at <http://www.un.org/apps/news/story.asp/story.asp?NewsID=46831&Cr= yemen&Cr1=#.UwZQjc4grdk>, (last accessed 2 March 2014).

[15]   See Ben Emmerson, UN Special Rapporteur on human rights and counterterrorism, Civilian impacts of remotely piloted aircrafts, Report to UN Human Rights Council (UN Document A/HRC/25/59, 10 March 2014). See also Christof Heyns, UN Special Rapporteur on Extrajudicial, summary and arbitrary executions, Armed drones and the Right to Life, Report to UN General Assembly (UN Document A/68/382, 13 September 2013).

[16]   "UN Human Rights Council adopts Pakistan sponsored resolution on drones," *WN.com*, available at <http://article.wn.com/view/2014/ 03/29/UN_Human_Rights_Council_adopts_Pakistan_sponsored_ resolution/>, (last accessed 16 April 2014).

[17]   Ibid.

[18]   *Jus ad Bellum* is the Latin term which means the law governing the use of force against another state.

[19]   *Jus in bello* is a Latin term which means "the law in waging war." It is an aspect of the international law of war which addresses the practices forbidden to belligerents during a war and defines standards by which a country can conduct war and the actions during the war should be just and fair.

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[22]   Ibid, p.17.

[23]   Singer, op.cit, p.35.

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[27]   Ibid.

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[40]   Ibid.

[41]   Heyns, Report on Armed Drones and the Right to Life, op.cit., p.4.

[42]   See Benjamin Medea, *Drone Warfare: Killing by Remote Control* (New York, Verso Books, 2013): p.117.

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THE EMERGENCE OF ISLAMIC STATE: IMPLICATIONS FOR PAKISTAN AND AFGHANISTAN

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Introduction

The emergence of Islamic State (IS) in Iraq and Syria would have far reaching implications for global peace and security. The quick rise of IS in Iraq and Syria not only jeopardized peace in both the states but also endangered the security and territorial integrity of other regional countries. The agenda of IS militants is not confined to the borders of Iraq and Syria; they want to capture areas once under Muslim empire to ultimately establish a global caliphate according to their own strict version of Islam.

The spill-over of the IS to South Asia would have a wide range of implications for Pakistan and its neighbouring states. The IS militants would get support of the likeminded militant organizations in Pakistan that may help them to establish their foothold. It would not be easy for the organisation though. Since 2002, Pakistan's military has carried out numerous operations against different transnational militant groups to dismantle their sanctuaries, including: the Tehrik-i-Taliban Pakistan (TTP), the Islamic Movement of Uzbekistan (IMU), Al-Qaeda, East Turkestan Islamic Movement (ETIM), and several other local militant outfits. Now these militant groups mainly operate from Afghanistan. The IS would get the support of these militant groups in terms of new recruits, planning, propaganda, and on-ground tactical help.

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The Islamic State is the wealthiest militant organisation in the world; it can provide funds to cash-strapped militant organizations, which might work to benefit them. In such a scenario, more and more radical groups as well as individuals from Pakistan might join Islamic State for monetary benefits if nothing else. Militant outfits like the TTP have faced huge setbacks in military operations. They lost their central command and control centres, communication networks, and most importantly their operational bases. The IS funds would put a new life into the TTP and would help them in reorganization and fresh recruitment, which could result in a new wave of violence engulfing Pakistan. The TTP and other affiliated militant organizations could then carry out attacks against Pakistani security forces, government installations, rival sects, and religious minorities more lethally. Therefore, it is important to understand the emergence of IS and its subsequent impact on Afghanistan and Pakistan.

The emergence of Islamic State: A brief overview

The emergence of the Islamic State (IS) in Iraq and Syria is the result of US intervention in Iraq in 2003, which resulted in dismantling of the Saddam regime as well as an unending violence in the country. Militant groups like Al-Qaeda also jumped in Iraqi insurgency and formed Al-Qaeda in Iraq (AQI) led by a Jordanian militant Abu Musab Al-Zarqawi. He continued to be the commander of AQI until his death in an airstrike by the US military in 2006.[1]

After his death, the AQI faced huge setbacks. In 2010, Abu Bakr Al-Baghdadi took the command of this group. Abu Bakr Al-Baghdadi reformed and reorganized AQI to give rise to the organisation now known as the Islamic State of Iraq and Syria (ISIS) or the Islamic State of Iraq and Levant or (ISIL).[2] After the abrupt withdrawal of the US forces in 2011, the Iraqi military was unable to control the resurgence of ISIS. Another reason of IS victory was the marginalization of Sunni tribes.[3] In 2013, the IS-led violence was at its peak in which over 7,000 people lost their lives. Mostly Shia Muslims and non-Muslims were targeted by the IS.[4]

Ultimately in 2014, the ISIS in a well-coordinated and swift attack captured the key town of Mosul about 400 kilometres north of the capital Baghdad.[5] In Syria it managed to capture Raqqa, a town with strategic significance about 445 kilometres north-east of the capital Damascus.[6] It was around this time that the IS militants declared caliphate in Iraq and Syria.[7] The Iraqi troops left their positions as well as weapons and fled. After capturing Mosul, the ISIS militants renamed the group as Islamic State and proclaimed caliphate in Iraq with Abu Bakr Al-Baghdadi as the so-called caliph.[8] This was the time the Islamic State started attracting foreign fighters in great numbers. According to some estimates more than 20,000 foreign fighters from over 90 countries – including around 3,400 fighters from the US and other Western countries – are fighting alongside the IS.[9] Such a development makes IS a truly transnational militant organisation. To counter this unprecedented threat to global peace and security, the US-led alliance of over 60 countries is carrying out airstrikes against IS in Iraq and Syria.

Recently, Russia has also got militarily involved in the conflict. Russian aircraft bombed the IS positions in Raqqa and Aleppo and significantly degraded the IS capabilities. There are also allegations by the US that Russian airstrikes are aimed at anti-Bashar al-Assad groups instead of the Islamic State.[10] According to Russia it has achieved significant success in recent airstrikes and destroyed most of the IS ammunition and heavy weaponry. According to Russian military it has destroyed several targets of the Islamic State.[11] Although Russian claims could not be verified independently, consistent Russian airstrikes coinciding with ground offensive by the Syrian military would weaken the IS position in Syria and Iraq.

Russia is not part of US led coalition against IS but a major stakeholder in the Syrian conflict. Russia is involved in the Syrian conflict because of three main reasons: First, Russia wants to protect its ally Bashar al-Assad in Syria.[12] Second, Russia got a naval base in Syria which is strategically important for the Russian military to remain relevant in this region.[13] Third, Russia is also suffering from terrorism back home. There is a possibility that Islamic State militants may try to approach Chechen militants in Russia to consolidate their position in Caucasus region.[14]

The developments in the Middle East have not, however, stopped them from trying to exert influence in other regions. Many militant groups around the globe have accepted Abu Bakr Al-Baghdadi as their caliph and pledged allegiance to him. Especially some key TTP commanders in Pakistan and Boko Haram in Nigeria announced their allegiance to Abu Bakr Al-Baghdadi.[15] The Islamic State is opening new branches in other countries in order to accomplish its goal of global caliphate.

Funding is the backbone of every militant organization, and IS does not seem wanting in this regard. They have got multiple sources of income, which include: kidnapping for ransom, extortion, oil sales on black market, donations from likeminded people, human and antique smuggling, and drug trade.[16] Such a huge financial base could not only help IS in sustaining insurgency in Iraq and Syria, but also in supporting other militant groups and affiliates in other regions around the globe.

The emergence of IS in Iraq and Syria would have far-reaching implications for Pakistan and Afghanistan. Both states are suffering from religiously motivated terrorism and extremism led by Afghan and Pakistani Taliban, Al-Qaeda, and other affiliated groups. Thousands of people have lost their lives to terrorism, and financial cost to both countries is also gigantic. For instance, Pakistan has lost over 80,000 people in the war against terror since 2005.[17] The financial cost to the country is over $100 billion.[18] Afghanistan is no different from Pakistan. The US spent over $1 trillion on the country but the security situation in Afghanistan is still worse than Pakistan.[19] There are several likeminded extremist organizations in both countries which could work as a launch-pad for the Islamic state.

Is Islamic State a threat to Pakistan?

Pakistan is a fertile country for extremist groups because of the presence of numerous extremist organisations and their support networks among the likeminded segments of the society. The nuclear weapon state was once known as a safe haven for militant groups like Al-Qaeda, Taliban, IMU, as well as dangerous local sectarian organizations like Lashkar-e-Jhangvi (LeJ) and others. After its emergence in Iraq, the IS published a roadmap for the next five years. The document refers to the region where Pakistan and Afghanistan are located as "Khorasan." The Islamic State has formed a ten-member Strategic Planning Wing, which would be responsible for recruitment, planning, funding, and training of the militants under the banner of IS in Pakistan.[20]

According to a report of the provincial government of Balochistan, the IS militants have recruited between 10,000 and 12,000 fighters from Hangu in Khyber-Pakhtunkhwa province, and Kurram Agency and some other areas in the Federally Administered Tribal Areas (FATA).[21] After concerted efforts and successful military operations by Pakistani military and intelligence agencies, the TTP-linked militants lost their ground. Since they are on the run, they are happy to get IS support in Pakistan.

The IS nexus with the militant groups in Pakistan

The IS possesses huge financial resources and militant organisations in Pakistan are now short of funds because of the continuous operations by Pakistan's security forces. This naturally attracts them to each other. In fact the IS militants are planning to establish local chapters in many countries around the globe, and in Pakistan their "Khorasan" branch would recruit locals to carry out terrorist activities against Pakistan's security forces, religious minorities, other sects of Islam, and public places.

The banned militant organisation Tehrik-i-Taliban Pakistan (TTP) led by Maulana Fazalullah faced huge setbacks in the recent military operations by the Pakistan military. The TTP militants lost their safe havens in North Waziristan and now Pakistan army is controlling most of the FATA.[22] There are reports that some TTP commanders from FATA accepted Abu Bakr Al-Baghdadi as their caliph. Former spokesman of TTP Shahid Ullah Shahid said in a statement, "I am going to announce my allegiance to Al-Baghdadi al-Qarshi. I will obey his every command, whether good or bad and whatever the situation. Neither the TTP nor its leader Maulana Fazalullah has directed me to announce my allegiance to the ISIS, but I and five senior leaders have decided to join al-Baghdadi al-Qarshi."[23]

The other five TTP men who announced allegiance to Abu Bakr Al-Baghdadi were key commanders: Hafiz Saeed Khan who operated from Orakzai Agency; Hafiz Daulat Khan who was TTP commander in Kurram Agency; Maulana Gul Zaman who was controlling the affairs in Khyber Agency; Mufti Hassaan who was the TTP commander for Peshawar; and Khalid Mansoor who was responsible for Hangu.[24] In addition to this, TTP commander from Bajaur, Maulana Abu Bakar, his deputy Qari Zahid, and affiliates, commanders,

fighters, religious advisors, and Shura have accepted Abu Bakr Al-Baghdadi as their caliph.[25]

Two recent terrorist attacks in Karachi pointed towards the IS connection in Pakistan. The security forces found IS leaflets after the failed assassination attempt on Dr Debra Lobo, the American Vice Principal of the Jinnah Medical and Dental College in Karachi, as well as the target killing of 44 people of the minority Ismaili Muslim community in the city.[26] After the preliminary investigation, the security forces captured a few people allegedly linked with Al-Qaeda, which shows that likeminded militant organizations or people are carrying out terrorist attacks and use the brand name of the Islamic State.[27]

Lashkar-e-Jhangvi (LeJ) is another militant organization in Pakistan that could join hands with the Islamic State.[28] Formed in 1996, the group is designated as a terrorist organisation by the governments of Pakistan and the United States, and has been involved in several sectarian attacks. Some estimates suggest that LeJ has over 1,000 active members.[29]

The IS and LeJ are ideologically very similar. LeJ has carried out some of the deadliest attacks against Shia Muslims in Pakistan. The IS militants want to exploit their sectarian connection in Pakistan. Recently a militant group linked with IS in Karachi carried out a deadly attack targeting the Shia community in which 47 people were killed.[30] The Islamic State is an overtly sectarian organization and its strategy of attacking Shia Muslims in Iraq has worked due to weak Iraqi security apparatus. The IS militants exploited the power vacuum to create instability and ultimately established their control over major towns in Iraq.

The IS was successful in creating a sectarian clash between the Shia and Sunni tribes which ultimately destabilized Iraq. The Iraqi security forces were weak, ill-trained, and least motivated, which paved the way for the highly trained, motivated, and well-equipped fighters of the IS to acquire physical space in Iraq and Syria. The Islamic State in collaboration with the TTP and LeJ might ignite sectarian violence in Pakistan.[31] It is expected that the Shia Muslims along with Ahmedis and Christians could bear the brunt of the emergence of IS in Pakistan. The government of Pakistan must take concrete measures to ensure the security of minorities and all other sects.

Pakistan's militant groups want to join hands with IS for monetary benefits. An effective campaign by Pakistan security forces has destroyed the command and control centres of these militants as well as their safe havens and financial assets. Now they are short of funds and the Islamic State is currently the wealthiest militant organisation in the world that can provide them with funds.

Pakistan's military does not consider the emergence of IS a threat though. Corps Commander of the XI Corps (Peshawar) Lieutenant General Hidayat-Ur-Rehman, said, "For us it's just a change of name, and there is no need for Pakistanis to worry. There are several defections in the Taliban now, which are becoming part of Daesh (IS). But we're well aware of the situation and are able to tackle them effectively."[32] Chief of Army Staff of the Pakistan

Army General Raheel Sharif, during his visit to the Royal United Services Institute for Defence and Security Studies London, said that Pakistan would not allow even the shadow of Islamic State in the country.[33] The recent military operation in North Waziristan and intelligence-based operations in Karachi and other parts of the country prove the seriousness of Pakistan's security forces to eliminate militancy from Pakistan.

Pakistan military has been fighting these militants since 9/11; they know their strategies, and tactics. The denial of safe havens to militants in FATA would be a major challenge for the IS to establish its foothold in Pakistan. Moreover, the security apparatus in settled districts of the country is much better than before. It would be very difficult for the IS-linked militants to establish their network in settled areas. There is a greater seriousness on the part of the government to eradicate militancy from Pakistan. Owing to the military operation in North Waziristan, the overall security situation in the country has considerably improved. According to Inter Services Public Relations, 2,763 militants have been killed in the year-long Operation Zarb-i-Azb. More than 837 safe havens have been destroyed and 253 tons of explosives have been recovered.[34] According to Pakistan Institute for Conflict and Security Studies (PICSS) — an independent Islamabad-based think tank — terrorist attacks in the country have decreased by 50 per cent from 154 per month before the Operation Zarb-i-Azb to 71 per month after one year of the operation.[35] Since the onset of the military operations in 2009, the TTP command, control, and communication network has been seriously disrupted. With more than 160,000 regular army personnel deployed in FATA, getting a physical space by the IS-linked militants in tribal areas would be difficult. [36]

Notwithstanding the odds stacked against them by Pakistan's security force, the Islamic State and its affiliates would aim to target Pakistani military and other security forces though. They could aim their violence against the police, rangers, and the paramilitary Frontier Corps (FC) because these forces dislodged the TTP and other militant organizations from their safe havens. The IS and their cronies in Pakistan would like to demoralize the Pakistani security forces by carrying out terrorist attacks on senior officers, their families, and military installations etc. The IS and its linked militant groups in Pakistan would also want to find a refuge in the tribal areas of Pakistan. Without a physical space it would be difficult for the IS or its affiliates to operationalize their plans on a larger scale in this region. They need a base for training, planning, regrouping, and reorganization.

The rise of Islamic State and its implications for Afghanistan

Afghanistan is a very weak war-ravaged country with feeble security forces, fragile economy, and an active insurgency. Ethnic divide in Afghanistan further complicates the affairs. The Islamic State in its larger plans includes expansion to other areas, such as what it calls "Khorasan" that includes Afghanistan, Pakistan, and parts of Iran and Central Asia. Afghanistan being an unstable country would be an ideal place for the IS militants to establish their

command and control centre.[37] Afghanistan would provide them physical space and on-ground bases with its large swathes of lawless, ungoverned, and remote areas. The surfacing of the Islamic State in Afghanistan would be devastating for a country already in turmoil. The IS in Afghanistan would make some ground because of the power vacuum after the withdrawal of the US forces.

The operations led by the US in Iraq and Syria have degraded IS capabilities. Thousands of IS fighters have been killed in the airstrikes by the US and its allies. The Islamic State is also looking for new recruits who can help sustain its insurgency in Iraq and Syria. It also needs recruits for its plans of expansion in "Khorasan." The commander of NATO forces in Afghanistan General John F Campbell once said, "There's recruiting going on in Afghanistan, there is recruiting going on in Pakistan. There is money being passed back and forth."[38] But they are passing through initial phase of organization, and are not yet fully operational.[39] It is expected, however, that if serious steps are not taken, the militants linked with the IS could pose a serious threat to the safety and security of this region. There are reports of the IS presence in Helmand, Faryab, and Nangarhar provinces.[40]

The US military is cognizant of the presence of Islamic State in Afghanistan. According to the US assessment, the IS militants are establishing their network in Afghanistan. Despite the fact that they are small in number right now, they have got plans to establish their control in Afghanistan.[41] Even the Afghan President warned the US and the international community that Islamic State is making ground in Afghanistan, and is recruiting and pouring funds in the country to establish its foothold.[42]

The IS had designated Mullah Abdul Rauf, a former Taliban commander, for recruitment and reorganization in the Helmand province.[43] Later, he was appointed as the deputy commander for the region. On 9 February 2015, he was killed in drone strike.[44] His death did not mean the end of IS in the Afghanistan-Pakistan region though. The senior most commander of the IS for this region now is Saeed Khan from Orakzai Agency in Pakistan.[45] The IS in Afghanistan would soon replace Mullah Rauf and come up with a new leader. According to another report, the IS has taken control of five northern provinces of Afghanistan and is also controlling the drug trade in the south.[46]

There are over 1,000 IS militants in these areas – predominantly Uzbeks and Chechens – and their numbers are growing day by day. The IS-linked militants are exploiting its natural and mineral resources in Afghanistan such as Lithium, which is in abundance in certain areas of Afghanistan and probably the target of IS militants to generate funds.[47]

Under the Bilateral Security Agreement (BSA) between Afghanistan and the US, the US-led alliance would not station more than 14,800 troops in Afghanistan.[48] Such a meagre force cannot stop IS emergence in Afghanistan.

The IS and the Afghan Taliban

It would not be easy for the IS to establish its bases or training camps in Afghanistan because it would have to face a three-pronged challenge. The first challenge comes from the US-led coalition. It is hammering its fighters in

Iraq and Syria, and is not going to let it acquire physical space in Afghanistan. The second challenge comes from the Afghan national security forces. The third, and perhaps more important, challenge is posed by the Afghan Taliban. Afghanistan is the home of Afghan Taliban, and they would never allow any militant group to replace them or undermine their role in the country.

There were reports of clashes between the IS militants and Taliban for the control of certain areas. In Farah province the IS militants established a training camp and recruited around 600 people. Soon after, the Afghan Taliban besieged the camp and outnumbered IS militants. After heavy fighting, the IS militants ultimately surrendered and were banished from the province.[49]

The IS militants could establish connections with militant groups other than the Taliban, like the IMU and ETIM. The leader of Hizb-i-Islami, Gulbuddin Hekmatyar, has extended his support to IS militants in Afghanistan.[50] The support of Hizb-i-Islami could accelerate IS recruitment in Afghanistan and create serious challenges for the internal security of the country.

The IS militants possess a vast amount of cash and a transnational image, which may attract the local militant groups to break away with Taliban and join hands with it. The militants in Afghanistan would compare the Afghan Taliban and Islamic State. The Afghan Taliban is focused on Afghanistan. They do not have any plans for establishing a global caliphate in the near future. Whereas the IS militants have declared that they want to regain the lost territories once under Muslim empires. They might consider Abu Bakr Al-Baghdadi greater in status than Mullah Omar because the former has got wider support of the other militant organizations and a larger base of operations, whereas Mullah Omar and his successor are considered as leader of Afghan and Pakistani Taliban only.

Afghanistan is a poverty-stricken country where significant proportion of the population lives below the poverty line. According to an estimate, 36 per cent of the Afghan population lives below the poverty line with monthly income not exceeding $30.[51] In addition to this 68 per cent of the Afghan population is under the age of 25.[52] This makes the youthful population of the country productive if utilized properly and destructive if used otherwise. With high unemployment rate and rampant poverty, Afghanistan is a fertile land for militancy. The slain leader of the Islamic State in Afghanistan, Mullah Rauf, offered $500 per month to a new recruit in Helmand province.[53] The IS militants could get thousands of recruits for their terrorist activities in Afghanistan because of widespread poverty and unemployment. It could pose a serious challenge to the US-led alliance, Afghan government, and the Taliban insurgents.

Afghanistan is lucrative for the Islamic State because of its drug trade. Afghanistan is a hub of opium production and drug trade, which generate billions of dollars. According to an estimate, Afghanistan cultivates more than 94 per cent and produces about 95 per cent of the world's opium.[54] Taliban alone generate $100 to $155 million per annum from drug trade.[55] More than 16.5 million people around the world use illicit drugs annually, generating an estimated US $68 billion worldwide in opiate market.[56] The IS wants to exploit

this area to generate funds for its operations in this region and beyond. If the Islamic State militants establish their firm control in Afghanistan, they might not need any other source of funding because the drug trade would alone be sufficient for them.

The IS militants carry a legacy of attacking rival sects and minorities. In Iraq they have carried out hundreds of suicide attacks against the Shia population and the Yazidi Tribes. In Pakistan their affiliates are involved in sectarian violence. There is a possibility that the Shia Muslims in Afghanistan may also bear the brunt of their brutal tactics. Recently the Hazara community in Afghanistan approached the Taliban for protection against the Islamic State after two incidents of kidnapping of Hazaras (predominantly Shia) by masked men linked with the Islamic State.[57] According to the Deputy Police Chief of Zabul province Ghulam Jillani Farahi, the Islamic State militants were behind this kidnapping. The drivers of the buses said that the abductors spoke a foreign language and wore black masks and dresses. The Afghan Taliban had also denied their involvement in this incident.[58] In such a situation, the Shia Muslims along with other minorities might face a greater risk from the emergence of IS in Afghanistan.

Conclusion and recommendations

The IS militants are trying to establish their foothold in Pakistan and Afghanistan. They need physical space in these two countries to carry out their terrorist activities in the region. The IS wants to establish its control over the area it terms as "Khorasan," because IS considers it necessary for the achievement of its larger goal of establishing a global caliphate.

The IS militants have already made inroads into Pakistan and Afghanistan. The IS cannot take control of territories in Pakistan, because Pakistan possesses a strong military and security forces apparatus. Pakistan's military has demonstrated its capabilities against TTP-linked militants in tribal areas. It would be difficult for the IS to defeat Pakistan military and take control of FATA or any other part of the country and use it as a safe haven. But the IS can disrupt peace in Pakistan and Afghanistan by carrying out terrorist activities on a limited scale in collaboration with their likeminded militant groups like the offshoots of Al-Qaeda, TTP, LeJ, defectors from Afghan Taliban, IMU, ETIM, and the Chechen militants in Pakistan and Afghanistan.

Afghanistan, on the other hand, might be a soft target for the IS where it might get some physical space in remote areas where there is no firm control of the Afghan government. The IS militants would face a challenge from the Afghan Taliban though. It would not be possible for the IS to establish its power in the Taliban-controlled areas. Afghan Taliban inflicted heavy losses on IS militants in a direct clash in the Farah province. On the other hand, however, the capabilities of the IS to carry out terrorist attacks in Afghanistan cannot be ignored. There is a need for a coordinated and comprehensive strategy by Pakistan, Afghanistan, America, and regional states to neutralize this militant group for long-term peace and stability of the region. Here are a few suggestions for countering the threat of IS in the region.

Regional coalition

The Islamic State is a transnational militant organisation with huge financial resources and affiliates around the globe. It poses an unprecedented challenge to the global peace and security. The level of threat posed by the IS demands a comprehensive strategy at the regional and global level. Although under the leadership of the US many countries have come up to counter this threat in Iraq and Syria, it would not be enough. In Afghanistan and Pakistan, the situation demands a different strategy. Here the IS militants are not controlling large territories as they do in Iraq and Syria. Nevertheless, the threat of Islamic State is emerging after the allegiance of the local militant commanders to it. All regional actors like: China, Central Asian states, Iran, Pakistan, and Russia want a peaceful and stable Afghanistan for long-term peace and development.[59] All these regional states must help and support Afghanistan – as well as Pakistan – in its endeavour to eradicate this menace.

Enhanced intelligence cooperation

The Islamic State has proved to be an effective and well organized force. This is the reason it was able to exploit the weak areas of Iraqi and Syrian security forces. To defeat such a force there is a need for enhanced intelligence sharing and coordination among all stakeholders. Pakistan and Afghanistan have already signed a joint intelligence sharing pact to improve intelligence sharing and enhance coordination between them.[60] Such collaboration would help both the states in overcoming this threat collectively, and timely action would help curb Islamic State network in this region.

Building a counter-narrative

The role of religious scholars cannot be ignored in countering terrorism. There have been many decrees by the religious scholars against IS ideology.[61] A counter-narrative must be built around such decrees with supportive arguments from the Holy Quran and *Sunnah* (traditions of Prophet Muhammad (PBUH)). There is no room for brutality or extremism in Islam. Islam is a religion of peace and it does not preach violence and terrorism. The true picture of Islam should be revived in respective Muslim countries. Saudi Arabia and Pakistan have been employing this strategy of de-radicalization and counter extremism in their respective countries with great success.[62] These two countries may take the lead in devising a counter-narrative to the IS ideology which is logically supported with Quran and *Sunnah*.

Reconstruction and development

Militant organizations like the Islamic State, Al-Qaeda, Boko Haram, Al-Shebab, and TTP target impoverished societies. For instance, Al-Qaeda established its foothold in countries like Somalia, Afghanistan, and Yemen. The TTP was successful in making inroads in FATA, a less developed area as compared to the rest of the country. According to the 1998 census, the adult male literacy rate in FATA was 17 per cent.[63] In such impoverished societies,

militant organizations with money and a self-styled version of Islam brainwash people for their own objectives.

It is necessary for the regional and global stakeholders that after rooting out Islamic State from Pakistan and Afghanistan they must develop these areas, so that no militant group would penetrate these societies again. Pakistan and Afghanistan depend on each other. Pakistan is the largest trading partner of Afghanistan with bilateral trade of $2 billion.[64] Pakistan can play an important role in the development and revitalization of Afghan economy. Afghanistan can benefit from the developing Gwadar Port of Pakistan and transit its goods to the rest of the world, whereas, Pakistan can have access to resource-rich Central Asian states via Afghanistan for trade and investment. Mutual collaboration for trade and investment would bring peace and prosperity in Afghanistan and Pakistan. Development and reconstruction would deny space to militant groups like IS for recruitment, funding, or regrouping in both states.

Curb terrorist financing in this region

The Islamic State is the wealthiest terrorist group in the world. On the basis of its immense financial assets it is helping other terrorist organizations, and establishing its branches in other countries. There is a dire need to curb Islamic State's financing. The US and some other countries have taken some action to disrupt illegal oil sales of the IS militants but the latter have got many other sources of funding. Those sources of funding could only be disrupted with collective effort by regional and global community. The drug trade, human trafficking, charities, natural resources, and extortion on the main highways generate millions of dollars for IS annually. All these sources of funds need to be curbed to halt the advance of the Islamic State militants. In Afghanistan, the IS militants focus on the drug trade. The lucrative drug trade in Afghanistan could generate additional millions of dollars for them. Pakistan, along with other regional states, must take concrete steps to control drug trade originating from this region. Main supply routes of this drug trade are from Pakistan, Iran, and Central Asian states. All these countries must work together and coordinate their operations against drug mafia.

Enhance Pak-Afghan Border Security

Pakistan's border with Afghanistan was considered the most dangerous place on earth because of the lawlessness and safe havens of the different militant groups.[65] The situation on the border has improved after a concerted military campaign by Pakistan. Pakistan and Afghanistan must take collective measures to improve coordination along the border areas. Both countries must increase the number of check-posts along the border and enhance vigilance to keep an eye on the movement of militant groups.

Pakistan's military has started Operation Zarb-i-Azb in 2014 and successfully dislodged militants from the North Waziristan tribal agency. Now the militants linked with TTP, Al-Qaeda, IMU, and Afghan Taliban are on the run, operating only from Afghanistan. The Afghan military must take concrete steps and deny safe havens to fleeing militants in Nuristan, Kunar, Nangarhar,

and Khowst provinces. Joint collaboration between Pakistan and Afghanistan would improve border security and disallow groups like TTP or IS to establish their networks in these areas.

Training of Afghan security forces

Since the Afghan forces are facing a two-pronged threat, one from the Afghan Taliban, and the other from the emerging IS, it is essential for the regional states to help in training of the Afghan National Army and the Afghan National Police. The US-led alliance is taking the lead in training the Afghan National Security forces. The signing of BSA is a good omen for Afghanistan. Under this agreement, the US and its allies not only bear the financial cost of Afghan military but also train them on modern lines, and improve their fighting skills and overall operational capabilities.[66]

Pakistan military is a professional and well-trained force, its help would be crucial for Afghanistan. Pakistan has already offered to train Afghan national security forces.[67] The Afghan security forces can learn from Pakistan's counter insurgency experiences. Such collaboration would improve overall operational capabilities of the Afghan national security forces against Islamic State in Afghanistan and it would help them in facing this unprecedented threat efficiently.

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