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CHINA-BENGAL TRADITIONAL RELATIONS IN THE PRE-EUROPEAN TIMES: AN ENQUIRY

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Abstract

The paper focuses on the nature of traditional relations between China and Bengal in the pre-European times. Cultural exchange, trade, and diplomatic relations between the two countries had existed since the ancient period, particularly, during the Han, Tang, Yuan, and Ming dynasties of China. The ancient Silk Road and Maritime Road facilitated them in establishing their cultural, commercial, and diplomatic relations. This paper finds out the nature of bilateral traditional relations between China and Bengal before European merchants came to Bengal. In particular, it explores cultural, diplomatic, and trade connectivity between the two countries in the period. The paper concludes that warm bilateral relations between China and Bengal prevailed in the period and that the regions were connected with each other through the ancient Silk Road and Maritime Road. Significantly, political and diplomatic relations between the two regions reached their highest level during the Ming dynasty of China and Muslim rule in Bengal.

Traditional relations between China and Bengal (present-day Bangladesh and West Bengal of India) have a rich heritage in the socio-cultural affairs of the two countries for the past two-and-a-half millennia. China's southern overland and maritime Silk Road, known as the Indian Northern Silk Road, resulted in commercial, cultural, and diplomatic relations between the two countries. Particularly, their cultural,

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diplomatic, and commercial relations had existed during the Han, Tang, Yuan, and Ming Dynasties. The Chinese Han Emperor Wu-di sent interpreter-envoys to the southern and south-eastern parts of Asia as far as Bengal (on the bank of the Ganges near present-day Tamluk) to open contacts with these places. Significantly, bilateral diplomatic relations between the two countries reached the highest level during the Ming dynasty in China and the Muslim rule in Bengal. The Ming emperor and the king of Bengal exchanged ambassadors almost every year. Most importantly, the diplomacy of the Ming emperor was very successful in solving the conflict between the kings of Bengal and Jaunpur. Furthermore, Chinese scholars and travellers visited Bengal and the people of Bengal also used to go to China to seek knowledge, preaching Buddhism, as well as for the purposes of trade. Besides, it is evident that Buddhist monks from Bengal have been going to China in order to preach Buddhism since the period of the Tang dynasty and Chinese silk was exchanged for Buddhist artefacts of Bengal. Moreover, the early commercial exchanges involved Chinese silk, textile, gold, silver, satins, blue and white porcelain, copper, iron, musk, Vermillion, quick-silver, and grass mats and Bengali cotton, textile, coral, pearls, crystals, cornelians, and peacock feathers. Significantly, the silk cloth produced in China was famous all over the world, while cotton textile—first manufactured in South Asia, particularly in Bengal, known as pi-cloth—was famous all over the world.

This is, thus, a very interesting area of academic enquiry but still under exploration. Ray has focused on the nature of trade and diplomatic relations between China and India in the ancient and medieval period.² Dale has investigated the connectivity between China and India and the exchange of silk and cotton textile in their trade relations in these periods.³ Ray, in one of his later works, has found out trade network and cultural identities of Bengal in the ancient period based on archaeological data.⁴ The more recent work of Yang Bin emphasised the cultural influence of Bengal in Yunnan province of China and connectivity between the two regions.⁵ These sources explored connectivity between Bengal and Yunnan in terms of trade and cultural relations in pre-European times, but have hardly investigated the nature of overall relations between Bengal and China during the period. This paper will, therefore, find out the nature of bilateral traditional relations between

China and Bengal in the period before European merchants came to Bengal. In particular, it will explore cultural, diplomatic, political, and trade relations, as well as connectivity between them in the period.

China-Bengal traditional relations

This section offers traditional cultural, trade, and political and diplomatic relations between China and Bengal before the arrival of European merchants in Bengal. It investigates the nature of these relations.

Cultural relations

The exchanges of religion, knowledge, and language were an important feature of the traditional cultural relations between China and Bengal. Chinese scholars and travellers visited Bengal of South Asian sub-continent and the people of Bengal also used to go to China for the pursuit of knowledge, preaching Buddhism, and trade since the ancient period. Their writings provided valuable data on the socio-economic and political conditions of the two countries. In particular, the Chinese monks, scholars, and traders of the Qing dynasty of China travelled by the southwestern Silk Road to the ancient Vedic Kingdom of Pundra Vardhana of Bengal, located in the present-day Bogra in Bangladesh as early as the second century BC.6 Besides, famous Chinese scholar and traveller Fa Xian travelled to Bengal during the rule of the Bengal King Shashanka under the reign of Chandragupta II of the Gupta dynasty in the late fourth and early fifth century.7 Between fifth and seventh centuries, many Chinese monks, such as Yijing and Xuan Zang, travelled to the Buddhist monasteries of northern Bengal for gathering knowledge of the 'western heaven'.8 Moreover, during the reign of Ming-ti of the Han dynasty, Buddhist monks were invited to China from Bengal, since Buddha had received enlightenment in the northwest Bengal (Gaya).9 During this era, the emperors enthusiastically patronised Buddhism. The custom of Hindu people in India and Bengal is to cremate the dead on a pyre which is called ch'a-pi. This custom is prevalent even now in Buddhist communities, since the discipline of Buddha has followed the same custom. The ordinary people of China also imitate this and cremate their dead because a majority of the people of China converted to Buddhism. Tang emissaries and Buddhist monks exchanged silk in India and Bengal for Buddhist artefacts. 10 In the early six dynasties era of China,

the demand for such artefacts was enormous and traders exchanged Chinese silk for such artefacts. ¹¹ Furthermore, during the Yuan period, the expanding maritime exchanges between China and Bengal, especially the participation of traders from China in these interactions, can be observed from the work of Wang Dayuan. He sailed with Chinese traders to Bengal on two occasions: first from 1330 to 1334 and then between 1337 and 1339. ¹² Wang Dayuan's account known as *Daoyi Zhilue* (Brief Records of the Island Barbarians) reveals that the rice fields and arable lands were spectacular and three crops were harvested in Bengal every year. He also related that the customs of the people of Bengal were extremely pure and honest. ¹³

In 1405, during the Ming dynasty, the emperor ordered his emissaries to go to Bengal and other parts of the Indian sub-continent to invite some Buddhist monks.¹⁴ A Buddhist monk named Mahāratna Dharmaraja went to the then capital of China from West Bengal on Chinese invitation. He stayed in the Ling-ku-sse. He is reported to have possessed miraculous powers called rddhi that taught the people to recite om mani padme hum (yang mo ni pa mi hung). Then, all of those who believed in him began to recite it day and night. Additionally, a monk and scholar from Bikrampur of East Bengal (Bangladesh) named Atish Dipankar Srigyan travelled to Tibet in 1038 AD during the greatest Buddhist Pala Empire (750-1174 AD) and preached Buddhism there for 17 years. 15 The teachings of his ideology spread to medieval China and resulted in the establishment of the Sarma school of Tibetan Buddhism.¹⁶ He died in Tibet and the Chinese government has returned his ashes to his place of birth in Dhaka as a mark of friendship between the two countries.¹⁷ Besides, the brick temples with terracotta decoration are a distinctive cultural feature in the history of temple building in the Indian sub-continent. There was a spike in temple construction in Bengal from the thirteenth century, especially, a marked concentration in the eighteenth and nineteenth centuries. 18 The earliest recorded literary work of Bengali language is the Charyapada, found in the palace of Tibet, where it used to be the official language. In 1414, the King of Bengal Shihabuddin Bayazid Shah had presented a sahala (giraffe) to the Chinese emperor of the Ming dynasty Yongle (reign: 1402-24).¹⁹ Significantly, the giraffe was greeted with a tumultuous chorus of chants and panegyrics by senior officials at his court, affirming that the gilin (giraffe) had finally appeared as a proof that a great rightful emperor was indeed on the throne.²⁰ The giraffe was famous in China as the legendary auspicious 'unicorn' that prompted the composition of many poems and paintings. The work of the famous Ming painter Shen Du on Giraffe as mythical *qilin* named *ruiying qilin song bing xu* (painting in praise of the auspicious unicorn) is preserved in the Palace Museum.²¹ This is one of the rare cultural proofs of the cordial historical relationship between China and Bengal during the Ming dynasty.

Historical records testify that cowries (kauris) were used as currency in Bengal from the fourth century to the thirteenth century. Fa Xian saw in the late fourth century during the reign of the Gupta dynasty that cowries were used as the currency of Bengal. The monetary system was vividly revealed in the second half of the thirteenth century when the Delhi Sultanate established an empire that stretched from Sindh to Bengal.²² In Pala, Bengal, trade was carried out by means of cowries, which were the then money of the country.²³ The cowries originated in the Maldives and were shipped to South Asia and Bengal, where they, therefore, began functioning as the monetary system. Many scholars have explored the cowrie monetary system in Yunnan from ninth to seventeenth centuries. But, where was the source of cowries in the landlocked Yunnan province of China located far from the sea? Tomè Pires observed that Bengal was the source of cowries in Yunnan.²⁴ Besides, both Ma Huan and Gong Zhen of the early fifteenth century recorded the word *kaoli* for the first time in their linguistic explanation. Kaoli, from its pronunciation, clearly refers to the transliteration of cury or kauri, suggesting the origin of cowries of Yunnan to be Bengal.²⁵ Likewise, in Bengal, the cowries were called kaoli.²⁶ On the other hand, in order to make silver coins known as Tangjia, silver was imported from China as there is no silver or lead mine in Bengal.²⁷ Coins were the symbol of sovereignty during the Muslim rule in Bengal. After announcing independence, every ruler issued coins in their name from their respective mints and trade was also conducted by the silver coin. Moreover, the knowledge of silk and cotton production from China and Bengal, respectively, transferred the opposite ways through the Silk Road. The Silk cloth production originated in China and the Chinese always produced certain varieties of silk cloth while the cotton cloth was first produced in South Asia, particularly, in Bengal. One of the routes for the transfer of cotton cultivation to China was East Bengal (Bangladesh), Assam of India, and Burma to western Yunnan and this may have also occurred during the Han dynasty.²⁸ Gossypium Arboretum, one of the varieties of cotton cloth, which originated in East Bengal, became the basis for the Chinese cotton industry.²⁹ This has been attributed to the development of a new ginning frame in the late twelfth and early thirteenth century and to the Mongol of Yuan dynasty's (1271-1368 AD) encouragement of cotton cultivation in which the Mongols demanded cotton cloth for their troops.³⁰ Under the Mongols, five provinces paid a cotton tax in kind and later, during the Ming era, peasants with certain-sized holdings were required to use part of their land to produce cotton.

A host of tribal communities of extra-Indian origins, the Kambojas, infiltrated into Bengal from the northern and the north-eastern direction at different times of the ancient period. The Kambojas settled in the north-eastern hill tracts and, in due course of time, moved downwards into the plains of Bengal.³¹ For understanding the ethnic origin of the Kambojas, linguistic sources of the term Kamboja need to be discussed. Levi thinks that the term Kamboja is derived from 'Kam+bhoja'. It is a Sanskritised form of a Tibeto-Burmese word.32 Put differently, the Singhalese and Tibetans have shown the word Kamboja as derived from 'Kam+vuja', as transcribed form of San-fo-tsi, i.e., Sambu-jay in Chinese and Samboja in Javanese. 33 The word, thus, appears to be a Sanskritised form of a foreign word of Tibeto-Chinese origins. However, Sircar argues that the term Kamboja is a Sanskritised form of Koch, a group of people of north Bengal.³⁴ The Bengali term Koch is, thus, said to have come from Kawocha or Kamocha that may be Sanskritised into Kamboja. The analysis of the term, thus, reveals its non-Aryan derivation and indicates extra-Indian origin. Besides, the Koch and the Mech, other allied peoples of Bengal were originally of the Mongoloid ethnic-racial stock. The ancient Kambojas were also of the Mongoloid ethnic-racial stock. Moreover, Smith refers to Tibet or the Hindukush as the land of the Kambojas.³⁵ By analysing all the available facts, Ray has argued that the conquerors of northern Bengal might have come from the north-east of Bengal.³⁶ Similarly, in the Tibetan work, Pang-Sam-Jon-Zang, there are references to the Kambojas of both north-western and north-eastern region.³⁷ The ancestors of Kambojas were, therefore, of Tibeto-Chinese origin and came to Bengal from the

region. Gradually, the Kambojas mixed up with the peoples of Bengal and their original physical features might have, thus, undergone considerable changes.³⁸ The Kambojas were also integrated within the Brahmanical fold of the people of Bengal. Even with respect to religion, the Kambojas were devoted to Siva as is proved by the epigraphic record. The Kamboja king had built temples in honour of Siva.³⁹ In addition, the Kamboja king adopted Buddhism and the Brahmanic religion and, thus, merged into the religious patterns of the Bengali people. Besides, it is found that Rajyapala, who was the crest of the jewels of the Kamboja family, was a Saugata, a worshipper of the Buddha. Rajyapala, who was a devotee of God Vasudeva, was granted land as a gift from his capital Priyangu. The gift was recorded in the grant of Irda copper plate of Nayapaladeva.⁴⁰ The Kambojas, assimilated into the people of Bengal and contributed to its religious and political pattern.

Trade relations

Chinese silk and cotton textile of Bengal was dominant in their trade relationship in the ancient and medieval period. Besides, other goods used by the Chinese in trading with Bengal were gold, silver, satins, blue and white porcelain, copper, iron, musk, Vermillion, quicksilver, and grass mats. On the other hand, the products of Bengal traded with China were corals, pearls, crystals, cornelians, and peacock feathers. China sold silk textiles to Bengal for nearly two millennia from the early years of the Han dynasty (206 BC to 220 AD) to the period of the Ming dynasty (1368-1644) and continued so even though India/Bengal began producing the cloth in the early Gupta period.⁴¹ In particular, Chinese silk, in Sanskrit cinapatta, was imported via Burma into Bengal during Mauryan (322-183 BC) or early Han times. Similarly, certain kinds of Bengal cotton cloth continued to be sold in China well after Chinese cultivation of cotton in the late thirteenth and early fourteenth centuries.⁴² There is no doubt that cotton textile production and trade were important features of the Bengal economy for a long time. However, in the Tang era, the Chinese imported drugs and medical texts from Bengal and other parts of Indian sub-continent, many of them also associated with flourishing Chinese Buddhist culture of the period.⁴³ Recent archaeological excavations around modern Tamluk in West Bengal have brought out hundreds of gold coins and Terracotta objects belonging to second century BC.44 During the construction of the

Farakka Barrage of West Bengal, numerous materials of daily use and structures of the Maurya period in the fourth century BC were found.⁴⁵ In addition to all these, there are numerous architectural and sculptural remains dating from the fourth to the twelfth century. These objects prove that trade between Bengal and China existed and Bengal was an important trade centre of the Indian sub-continent in the Maurya, Sunga, and Kusana periods. Apart from these, during the Yuan period, Wang Dayuan's account of his 1330s travels with Chinese sailors in the Straits of Malacca and the Bay of Bengal regions, Daoyi Zhilue (Brief Records of the Island Barbarians), published in 1349, shows that Bengal (Pengjiala) was, by the early fourteenth century, a destination of note for Chinese traders. 46 Then, Bengal was called *Pengjiala* in Chinese, which at present has been changed to the word *Mengjiala*. However, the record in the Yingzong Shilu (Veritable Records of Emperor Yingzong) provides that Song Yun, a Chinese trader, first visited the Ming court as the deputy envoy of a tributary mission from Bengal in mid-1439 and asked for and received funding to repair his damaged ship as well as a guarantee of protection for its return voyage from China to Bengal.⁴⁷ A subsequent record in the Yingzong Shilu in 1446 reveals that he was not only actively trading in Bengal but was networked with Samudra in northern Sumatra of Indonesia. The upper Bay of Bengal region, Bengal, was one of the Chinese marketplaces with goods of note.

All accounts of Chinese sources state that the soil of Bengal was fertile and there were produced crops in abundance. Among the agricultural products of Bengal, the Chinese especially mentioned twice-a-year cultivation of rice, two kinds of millet, sesame, beans, ginger, mustard, onions, garlic, cucumber, melons, and eggplant. Among other native products, the Chinese have mentioned corals, pearls, crystals, cornelians, and peacock feathers. The common fruits were banana, jackfruit, sour pomegranate, and coconut. Sugarcane, sugar, honey, butter, and ghee were also much in use. The Chinese speak of the various industries of Bengal, such as paper, lacquer, sugar, cotton, and silk. In particular, the paper used to be made from the mulberry tree. One Chinese account said that the Bengal paper was white and that it used to be made from the bark of a tree. The most important industry was, however, the cotton industry and the Chinese accounts mentioned a number of cotton fabrics of Bengal. During the Muslim rule in Bengal

and Ming dynasty in China, trade relation between the two countries reached beyond of the previous eras. Particularly Ma Huan (1380-1460), to most accounts, paid his first visit to Bengal with Cheng Ho, the ambassador of Ming Emperor Youngle as an interpreter in 1411-12 in order to conduct tributary trade. As seen in Ma Huan's travelogue, the Chinese mission reached Chittagong from Sumatra and there they changed over to small boats. Then they sailed towards Sonargaon, a distance of 500 Li or more (One Li is equal to one-third of a mile).⁵⁰ Travelling from this place in a south-western direction for thirty-five stages, they reached Gaur, the capital of Bengal and called on King Ghiyasuddin Azam Shah.⁵¹ The cotton textile, particularly, the pi-cloth was an attractive product of their trading from Bengal. Ma Huan remarked about Bengal fabrics that the land of Bengal produced five or six kinds of fine cloth. One of these cotton fabrics, a 'cloth as fine as starched paper', known as the pi-cloth, perhaps, the fine Muslin cloth for which Bengal was famous, is a type often mentioned in Chinese sources.⁵² The Muslin of Bengal was then superior to all others and received the name of Gangatiki from the Greeks indicating that it was on the bank of the Ganges.⁵³ However, the production of Muslin cloth became extinct during the colonial period. Furthermore, Fei Shin, another traveller like Ma Huan, came to Bengal with a mission led by Hou-Hien in 1415. According to his travelogue, Bengal had a seaport called Chittagong on the Bay of Bengal. Here certain duties were collected but King of Bengal received Chinese ships warmly. When the king heard that Chinese ships had arrived there, he sent high officers to offer robes and other presents, and over a thousand men and horses would also come to receive them to the port. By travelling 16 stages. they reached Sonargaon that was a walled city with tanks, streets, and bazaars wherein trade of all kinds of goods was carried on.⁵⁴ Here servants of the king met Chinese merchants with elephants and horses. Again by travelling twenty stages, they came to Pandua wherein the palace of King Jalaluddin Muhammad Shah was. 55

Chinese Admiral Zheng He also visited the port of Chittagong. He conducted tributary trade between Bengal and China and established warm diplomatic relations between Bengal Sultanate and the Ming dynasty of China.⁵⁶ Most of the 'tributary goods' were perfumes, spices, jewels, rare birds and animals, Chinese silk, and other special local

products. Goods were exchanged between Chinese ship commanders and Bengali and other Indian merchants. On the arrival of the Chinese ship, local merchants came on board and fixed the date of transaction with the ship commanders.⁵⁷ On the appointed day, the Chinese displayed their goods, negotiated the prices with local merchants and signed an agreement in duplicate.⁵⁸ Both sides obtained a copy of the agreement. Then, the local merchants and the merchants of the ship clapped each other's hands signifying finalisation of the deal. Negotiation over prices could consume from one to three months. Chinese silk was. for instance, exchanged for pearls. According to the description of Ibn Battuta, in Chinese vessels, there were three classes: the biggest called Junk, the middle sized called Zao, and the small size called Kakam.⁵⁹ The greater ships had from three to twelve sails, made of strips of bamboo woven like mats. Each of them had a crew of 1,000 men, viz., 600 sailors and 400 soldiers, and had three tenders attached, which were called, respectively, the Half, the Third, and the Quarter, names apparently indicating their proportionate sizes. 60 Every ship had four decks and numerous private and public cabins for the merchant passengers, with closets and all sorts of conveniences. The commander of the ship was an important personage and, when he landed, the soldiers belonging to big ship marched before him with swords, spears, and martial music.61 Therefore, there were conducted two kinds of trade between China and Bengal-tributary trade and private trade with local merchants. Trade relations between them were friendly and the process of trading was disciplined.

Political and diplomatic relations

China and Bengal have been conducting political and diplomatic relations since the period of the Tang dynasty. In the mid-seventh century, diplomatic missions were exchanged between the Tang court and the kingdoms of northern India and Bengal that often included Buddhist monks along with diplomatic envoys.⁶² In particular, cordiality between the two countries developed during the reigns of the Indian (including Bengal) King Harshavardhana and the Tang Emperor Tai Zong (627-649). King Harshavardhana sent his first mission to China in 641 and, in response, the Chinese Emperor reciprocated a mission headed by a military man General Liang Huaijing in 643. The second Chinese mission was sent in 645 or 646 under the leadership of Li

Yibiao. Again, without waiting for the return mission from King Harshavardhana, the Chinese emperor sent the third embassy led by Wang Xuanze in 648.63 Likewise, during the Yuan dynasty, emissaries including Buddhist monks, were exchanged with each other. It is evident from the visit of Chinese traveller Wang Dayuan to Bengal, even though there are different views about exact dates of his visit. As Visva-Bharati Annal 1 (1945) describes that Wang Dayuan visited Bengal in the winter of 1349-50 AD,64 while Sen states two occasions of his visit, first from 1330 to 1334 and then between 1337 and 1339.65 Whatever the dates. he visited Bengal during Yuan period in order to establish diplomatic relations and to conduct trade. Apart from these, during the Pala dynasty in India, the Kambojas of Chinese origin played an important role in the political history of ancient Bengal. They made a matrimonial relationship with the Pala kings and the kinship was so deep that even the last king of Pala dynasty was of Kamboja origin. In this context, a reference may be made to the Irda copper plate which records Kamvo Javamsatilaka Rajyapala. The name of the Kamboja king was suffixed with Pala. From the statement of the Arthasastra, it is known that the Kambojas were the best warriors.⁶⁶ The Sabhaparva of the Mahabharata also recorded that the king of Kamboja presented to Yudhishthira three hundred horses of various colours.⁶⁷ In the battle of Kurukshetra, the fast and powerful horses of Kambojas provided a great service to the Kauravas.

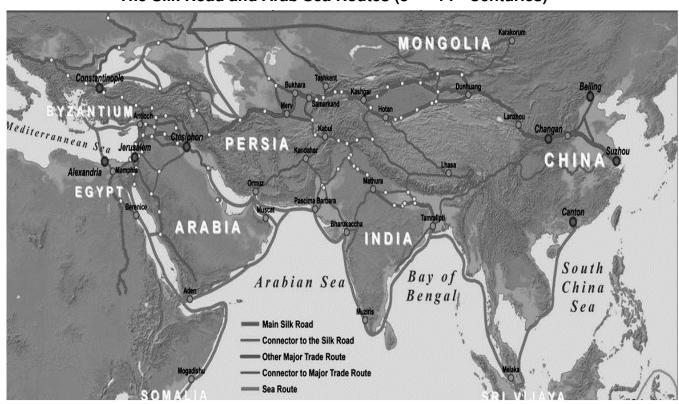
Significantly, there are a number of records on political and diplomatic relations between China and Bengal during the Ming dynasty in the first half of the fifteenth century. During the period, Jaunpur (West Bengal and Bihar) and Bengal was ruled by Pathan kings independent from Delhi Sultanate. Padua in the district of Maldah was then the capital of Bengal. A full account of political and diplomatic missions was found in the *Siyang Chao Kung Tien Lu* compiled in 1520, the *Shu Yu Chou Tseu Lu* compiled in 1574, and the *Ming-She*. According to the *Siyang Chao Kung Tien Lu* (a contemporary Chinese book), the first diplomatic mission was sent from Bengal by King Ghiyasuddin Azam Shah in 1408 AD during the reign of Hung Wu, the founder of the Ming dynasty. ⁶⁸ It reached Tai-Tsang in Kiang-su with presents for the Emperor in the next year (1409). In this context, the Bengal King Ghiyashuddin Azam Shah was regarded as a farsighted statesman, since he adopted the policy to open up Bengal to China and other countries for trade relations.

However, after that, in the earlier fifteenth century, Ming emperor, Yongle sent Chang Hu, a Chinese Muslim, as an envoy to Bengal.⁶⁹ According to the description of Ming-She (Annals of the Ming Dynasty), the Chinese Ming emperor had also initiated a policy of opening up and communicating with foreign countries. Since then, ambassadors were sent from Bengal in almost every year. In particular, ambassadors were sent from Bengal in 1408, 1409, 1411, 1412, 1414, 1418, 1420, 1421, 1423, 1438–39 and from China in 1411-12, 1415, 1420, and 1422-23.70 lt was distinguishable that in 1412, the Chinese emperor sent a minister named Chenkiang for reception of ambassadors from Bengal before their arrival to the palace. The ambassadors reached the palace with news of the death of their king, Ghiyasuddin Azam Shah. The officials of the Chinese Emperor were, then, sent to attend the mourning ceremony of the dead king and the coronation ceremony of Prince Saifuddin Hamza Shah.⁷¹ In 1414, the new King of Bengal sent an ambassador with a mandate of expressing gratitude and presenting famous horses and other luxurious products of Bengal as gifts. Moreover, there is a kingdom called Jaunpur, the country of the Diamond Seat (Vajrāsana), in western Bengal; where Buddha attained spiritual enlightenment. The kingdom of Jaunpur, which had come to be founded in 1393 included Gaya, the place of Buddha's enlightenment.⁷² In 1412, the Chinese ambassador was sent to the kingdom of Jaunpur with the imperial mandate and presents of gold embroidered silk and decorated clothes for King Ibrahim Sharqi for opening up diplomatic and commercial relations with him.⁷³ Likewise, in 1415, the Chinese emperor sent Hou Hien with a naval force to communicate with Bengal and other countries. In 1420, the ambassador of King Jalaluddin Muhammad Shah of Bengal complained to the Chinese emperor's court that their country had been invaded by Jaunpur's King Ibrahim Sharqi, several times.⁷⁴ In October 1420, the Chinese emperor ordered Hou-Hien to go again for pacifying them. The mission was headed by a senior eunuch diplomat Hou Xian who delivered to the Jaunpur king the imperial edict that "Only through good neighbourliness can you protect your own territory."75 Gold and money were, then, presented to the king of Jaunpur Ibrahim Sharqi and then the war stopped. It was said that Jalaluddin Muhammad Shah, the son of Raja Ganesh who had embraced in Islam, occupied the power of the Bengal Kindom as a de facto king, making King Saifuddin Hamza Shah a

puppet king. Raja Ganesh believed in Hindu religion and was a minister of King Ghiyasuddin Azam Shah. The Muslim king of Jaunpur, thus, attacked the *de facto* king Jalaluddin in order to recover the power of King Saifuddin Hamza Shah. Ibrahim Sharqi was specially requested by Qutb-ul-Alam, a Muslim saint of Bengal, to intervene in favour of the Muslims in Bengal. Since warm diplomatic relations existed between the Ming emperor and the Muslim rulers in Bengal, the diplomacy of the Ming emperor was quite successful in solving the conflict between Bengal and Jaunpur kings.

Connectivity between China and Bengal

It is generally accepted that there were two main routes of the 'Silk Road', i.e., the northern route and the southern route, supplemented by the middle route, the sea routes, and by combined part-land and partsea routes.77 According to Herodotus's description of 430 BC, the northern route started at the mouth of the River Don, a region belonging to the Sarmatians (today's Uzbekistan). It then crossed the Volga (Oarus) and continued to the Ural River and finally reached Gansu.⁷⁸ The southern Silk Road from China to South Asia and Southeast Asia existed even before the Central Asian Silk Road became popular and the introduction of Buddhism to China. Moreover, evidence from ancient classics. historical writings, and archaeological anthropological observations has proved that there was a historical trade link between Bengal and Yunnan province of China via Assam and Manipur provinces of India and Myanmar. All trade links with northwest India were carried through the Qin territory of China. The state of Qin was a member of the Chinese feudal system during the Chun Qiu period (770-476 BCE) and became powerful following a policy of economic advancement. 79 Significantly, it was also found out that the road from Yongchang (Baoshan) of Ailao kingdom in Yunnan was historically a gateway to the outside world, where merchants from home and abroad would come for the purpose of trade.80 In Myanmar, Bhamo and Myitkina were equally important centres of trade links between Bengal in the west and China in the east. During the period of the Qin and the Han dynasties, merchants from Sichuan travelled to Changan in the north and Nanyue (present-day Guangxi) in the south and travelled to Burma and Bengal via Dianyue.81 Additionally, travel in the Brahmaputra Valley of Bengal and India was possible both by land and water routes passing through Sadiya, Kapili (within the boundaries of present Nowgong), Pragjyotishpura (Guwahati), Hadapeswara (Tezpur), and Davaka. Guwahati in the middle of the Brahmaputra Valley was the capital of the ancient powerful kingdom of Kamarupa. It enjoyed a strategic geographic position, linked to the Burmese trade route in the east and feeding northern India in the west. It had flourishing commerce, being the major trans-shipment centre of goods by land and water. It has already been established by the evidence from the Arthasastra, the Indian epics, and the Puranas that around the fourth century, China had very close trade relations with India and Bengal. Furthermore, Singhal (1969) and Frank (1998) have alluded to trade over two overland routes through Nepal and Tibet to China.82 The southern Silk Road was, therefore, a circular road connecting South Asia and Central Asia with southern China and present-day Southeast Asia.83 It began from Yunnan, passed through Myanmar, India, Bangladesh, Nepal, and Tibet, and looped back to Yunnan.



The Silk Road and Arab Sea Routes (8th – 14th Centuries)

Source: https://www.chinadiscovery.com/assets/images/silk-road/maps/Silk-Road-arabsea-route-Map-full.jpg

In the fourth century BC, the Uttarapatha land route entered into central India on the one hand and the land routes from Bengal to China via Nepal and Myanmar on the other. The area was rich in resources, notably of cotton, iron, copper, and gold. The entire Gangetic area (the area of the Ganges River) as an international and domestic trading centre is well documented in various literary sources, dating from before the fourth century BC to the first five centuries.84 Besides, the road linking south-western China (Yunnan and Sichuan) with India was recorded by Xuanzang (mid-seventh century) and Yijing (late-seventh century), as both authors described the route between Bengal and Sichuan. Fan Chuo, a military official who served in Tang China's Annan Protectorate also recorded these roads in his Man Shu (Records of the Barbarians). Although his books are currently missing, Xin Tang Shu (New History of the Tang Dynasty), edited in the tenth century, fortunately, kept a record of the seven routes that he had discerned, linking China with the 'barbarians of four directions'.85 The sixth route linked Annan with India starting from Tonkin via Yunnan province through Prome to Maghada. Besides, the Xin Tang Shu (The New History of the Tang Dynasty) gives the distance from present-day Dali to the ancient city of Tagaung in Burma as 700 km from where the city of Pyus (Pugan, ancient Burmese kingdom) was 500 km.86 The Kamarupa at the lower and middle course of the Brahmaputra River was 800 km to the west from where Pundravardhana (in north Bengal) was 200 km and Magadha on the south bank of the Ganges 300 km. Another route from Zhuge Liang passed through Myitkyina and Mogaung to Manipur (called Dagin Bolomen, Dakshin [South] Brahmadesa) covering a distance of about 850 km and finally south-westward to Pundravardhana, a distance of 750 km. Xuanzang describes the route from Magadha to Kamarupa, which covers a distance of 1,200 km.87 Similarly, according to Jia Dan's record, there were two ways from Tonkin to Dai, one by the river and the other over land.88 After arriving at Dali, the routes joined together and extended to Myanmar and Bengal. From Yunnan to India, there were again two routes; the southern one from Dali to Yongchang through the Pyu kingdom, Prome, the Arakan Range, Kamarupa and Bengal and the western one crossing the Irrawaddy, the Mogaung, and the Chindwin Rivers reached India beyond.89 The southern route seemed very roundabout but it was important, not only because it linked Yunnan and

Myanmar but also because it connected the maritime Silk Road in the Bay of Bengal. From there eastward, people could reach Rongzhou in Sichuan, westward to India (Yandu) via Bengal, southeastward to Vietnam (Jiaozhi), north-eastward to Chengdu (capital of Sichuan), northward to the Big Snow Mountain (Daxueshan), and southward via Myanmar and Bengal to the sea. Moreover, Yang Bin has found out a vivid trade network that, as Tome Pires described, encompassed Bengal, Arakan, Pegu, Siam, Burma, and China. 90 The merchants from different regions including Chinese, Arabs, Gujaratis, Persians, Bengalis, Kling, Siamese, and other Southeast Asian from Ava, Burma, and Cambodia used the trade network. The centre of this trade network was most certainly Bengal as all of these countries were located along the Bay of Bengal. Although Yunnan was a land-locked area, it had built a historical relationship with the peoples of the Bay of Bengal through the land route. All scholars agree that China, Sri Lanka, and Bengal were all the sources of the origin of Buddhism in Yunnan. They argue that the introduction of Tantric Buddhism to Nanzhao was part of the Indianisation trend and vividly reveals the Bengali connections in Yunnan, just as the cowrie monetary system has done. In ancient period, Bengal, Northeast India, Myanmar, and south-western China were therefore, connected by the ancient Silk Road. The people of these countries visited and conducted trade with each other and exchanged religion, knowledge, arts, and literature. But, indeed there is, at present, no major transport route connecting this sub-region. An overland route linking the sub-region would facilitate the transnational flow of people, knowledge, and culture, minimising cross-border trade barriers, ensuring greater market access, and enhancing trade, tourism, investment, and economic growth. The connectivity initiative of the BCIM forum and China's BCIM Economic Corridor can revive the ancient Silk Road, which connected the subregion.

Renowned navigator, Admiral Zheng He of the Ming dynasty, led seven maritime expeditions to the Indian Ocean during the period from 1405 to 1433, visiting 30 or more countries and places and expanded the Chinese maritime sphere of influence in the Indian Ocean region, in particular, the Bay of Bengal.⁹¹ The voyages of Vasco da Gama were successful in reaching the region a century after these expeditions. However, the maritime Silk Road followed by Admiral Zheng He went

through the Indian Ocean and the Pacific Ocean to the shores of Arabia and Africa and would touch the seaports of Canton, Bangkok, Chittagong, Calcutta, Madras, Goa, Karachi, Muscat, and Alexandria on the Indian and African peninsula.92 The first expedition from 1405 to 1407 had its end destination in Guli (present-day Calicut in Kerala state) and the second expedition from 1407 to 1409 called at Jiayile (present Cail on the eastern coast of India), Xiao Gelan (Quilon of Kerala), Kezhi (Cochin of Kerala), Guli, and Ganbali (Coimbatore of Tamil Nadu).93 The third expedition from 1409 to 1411 and fourth from 1413 to 1415 visited Jiayile, Kezhi, Xiao Gelan, and Guli. The fifth expedition travelled from 1417 to 1419 to Cochin, Coimbatore, and Shaliwanni (present-day Nagapatam of Tamil Nadu). The sixth expedition of Zheng He visited Chittagong and Calcutta ports in present-day Bangladesh and West Bengal, respectively, in 1421. The seventh expedition from 1432 to 1433 called at Cail, Cochin, Calicut, and Coimbatore.94 These expeditions conducted tributary trade and diplomatic duties between China and Indian southern coast and Bengal. Therefore, it may be noted that by the maritime expedition of Admiral Zheng He China conducted trade and diplomatic relations with Bengal and other places of the Indian Ocean region. China's twenty-first century maritime Silk Road is the updated version of the maritime route followed by Admiral Zheng He.

Conclusion

The overall traditional relations of Bengal and China can be regarded as friendly in the pre-European times of Bengal. Their relations included exchange of culture and knowledge, trade, as well as political and diplomatic relations. Particularly, during China's Han, Tang, and Yuan Dynasties, religious (Buddhism) and trade relations between the two countries were a dominant feature. However, during the Ming dynasty in China and Muslim rule in Bengal, political, diplomatic, and trade relations were prominent. Scholars, travellers, and Buddhist monks visited China and Bengal for gathering knowledge, preaching Buddhism, and for the purpose of trade. Significantly, the Kambojas of Chinese origin settled in and mixed with the people of Bengal and contributed to the religion and politics of Bengal. Besides, the cowries originating in the Maldives were shipped to South Asia and Bengal, where they began functioning as the monetary system. The source of cowries in Yunnan

was Bengal that worked as the monetary system there from the ninth to the seventeenth centuries. During the Ming dynasty, the giraffe presented by the king of Bengal to the Chinese emperor was one of the rare cultural proofs of the cordial historical relationship between China and Bengal.

Trade Relations between China and Bengal existed in all of the dynasties of China. In particular, Chinese sold silk textiles to India/Bengal for nearly two millennia from the early years of the Han dynasty to the period of the Ming dynasty. Similarly, certain kinds of Bengal cotton textile were sold in China even well after the Chinese cultivation of cotton in the late thirteenth and early fourteenth centuries. The silk cloth production originated in China, while cotton textile was first manufactured in South Asia, particularly, in Bengal. The knowledge of silk and cotton production from China and Bengal, respectively, transferred to each other through the Silk Road. Gossypium Arboretum, one of the varieties of cotton cloth, which originated in East Bengal (Bangladesh) transferred to China and became the basis for the Chinese cotton industry. Moreover, other goods used by the Chinese in trading with Bengal were gold, silver, satins, blue and white porcelain, copper, iron, musk, Vermillion, quick-silver and grass mats. On the other hand, products of Bengal traded with China were corals, pearls, crystals, cornelians and peacock feathers. During Ming dynasty in China and Muslim rule in Bengal, the expeditions of Admiral Zheng He of the Ming emperor conducted tributary trade between Bengal and conducted warm diplomatic relations with the king of Bengal. Most of the goods of this trade were perfumes, spices, jewels, rare birds and animals, Chinese silk, and other special local products. Furthermore, political and diplomatic relations between China and Bengal have been evidenced in the Tang dynasty. Diplomatic relations between the Tang court and the kingdom of north-western Bengal often included Buddhist monks along with diplomatic envoys, who performed religious activities. In particular, cordiality between the two countries developed first between the Indian/Bengal King Harshavardhana and the Tang Emperor Tai Zong (627-649). Significantly, diplomatic relations between two countries reached the highest level beyond all other previous relations during the Ming dynasty and Muslim rule in Bengal. The Ming emperor solved the conflict between the kings of Bengal and Jaunpur.

China's southern land-based and maritime Silk Road was connected to Bengal and the Bay of Bengal. In particular, China's southern Silk Road linked Bengal via Myanmar on the one hand and via northeast India on the other, from Yunnan and Tibet. The southern route seemed very roundabout as people could reach Rongzhou in Sichuan eastward, westward to India/Bengal (Yandu), southeastward to Vietnam (Jiaozhi), north-eastward to Chengdu (capital of Sichuan), northward to the Big Snow Mountain (Daxueshan), and southward to the Bay of Bengal via Bengal and Burma. The route was strategically significant because it linked Yunnan and Bengal via Burma, and also connected the maritime Silk Road in the Bay of Bengal. Additionally, the sixth maritime expedition of Zheng He visited Chittagong and Calcutta ports in Bangladesh and West Bengal, respectively. The expedition made trade relations with local merchants and conducted diplomatic relations with the king of Bengal, and fought against piracy in the Indian Ocean. Therefore, a vivid trade network encompassed Bengal, Arakan, Pegu, Siam, Burma and China. The merchants from different regions, including Chinese, Arabs, Gujaratis, Persians, Bengalis, Kling, Siamese, and other Southeast Asian used the trade network. The centre of this trade network was certainly Bengal along the Bay of Bengal. Although the ancient Silk Road has linked Bengal and Yunnan, there is, at present, no over-land road between them. A road link between Bangladesh and Yunnan Province via northeast India and Myanmar can foster economic development, increase people-to-people contact, and return the heritage of ancient period, which prevailed between them in the ancient period.

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IS CPEC REALLY A GIFT? CHINA'S MODEL OF DEVELOPMENT COOPERATION AND ITS RISING ROLE AS A DEVELOPMENT ACTOR IN PAKISTAN

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Abstract

With the rise of China as a leading development actor at the global stage, especially following the launch of President Xi's signature foreign economic plan under the Belt and Road Initiative (BRI), there is an unprecedented focus on China's model of international development financing. This paper aims to unpack China's foreign aid policy and practice. Unlike traditional donors belonging to the Organisation for Economic Cooperation and Development (OECD), where most development assistance is in the form of grants prioritising social sectors, China's model of economic cooperation is a blend of aid, investment, and concessional loans. Similarly, unlike most traditional aid donors, China does not attach specific policy conditionalities while providing aid and concessional loans and also avoids interference in the domestic affairs of its development partners. Focusing specifically on the China-Pakistan Economic Corridor (CPEC) within the framework of the 'gift theory' and the financing model of the initiative, the paper illustrates that besides bringing socio-economic benefits to Pakistan, the corridor is aimed at addressing China's domestic concerns and bringing development to its less developed regions. Mostly. China's aid and development financing are demand-driven, where partner countries' priorities are addressed. At the same time, there is also evidence both in the existing academic literature, as well as in the case of its increasing engagements with Pakistan under CPEC, that China's trade and commercial interests are also promoted along with its political and strategic objectives.

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During his visit to Kazakhstan in 2013, Chinese President Xi Jinping outlined his idea of the Belt and Road Initiative (BRI) aimed at reviving the old trade routes connecting China with Asia, Africa, and Europe via land and ocean. Aimed at reaching about 65 countries covering about 60 percent of the global population, the BRI is considered the most ambitious undertaking of the century. The plan was revealed in 2013 and officially launched in 2015 with the release of the BRI blueprint document 'Vision and Action' by the National Development and Reform Commission (NDRC), Ministry of Foreign Affairs and the Ministry of Commerce, with State Council authorisation. No other policy initiative has attracted as much attention at home and abroad as President Xi's ambitious foreign and economic policy plan. There is a broad consensus that the BRI is perhaps the first initiative spearheaded by China that has made a considerable impact both within China as well as abroad. For example, since it was revealed by President Xi in 2013 and officially sprang into action in 2015, there has been an unprecedented number of studies on the subject both within academic circles and in policy thinktanks. In China alone, numerous universities and policy and research institutes have formed special think-tanks or units focusing on various aspects of the BRI at home and beyond China's shores.

In order to showcase its strength and gather greater international cooperation for the initiative, China organised the BRI Forum in May 2017 in Beijing. While 57 countries attended the BRI Forum, including 29 heads of states or governments, some major powers, including Australia, India, Japan, the United States (US), and the European Union (EU) stayed away from the forum citing various reasons from strategic and security to financial soundness, debt, and financial risks to environmental and social concerns. Hence, for multiple reasons, different countries have either welcomed or bluntly rejected participation in the project. A number of countries in Asia, Europe, and Africa have shown willingness to participate in the initiative to get access to China's financial cooperation and technological expertise. For numerous resourcedeficient countries, the BRI appears to be a source of much-needed financial injection to upgrade and improve physical infrastructure that could lead to better connectivity and enhanced trade. It is expected that the BRI will have a tremendous impact on trade, foreign direct investment (FDI), and transport systems in numerous countries across

various regions. At the same time, a number of "foreign policy analysts view this initiative largely through a geopolitical lens, seeing it as Beijing's attempt to gain political leverage over its neighbors" and beyond its immediate neighbourhood.¹

In order to unpack China's model of international cooperation, this paper examines multiple aspects of China's foreign aid policy. To this end, the next section provides an overview of China's foreign aid policy and its key principles. The subsequent section explores key characteristics that distinguish China's model of foreign aid and illustrates that unlike OECD Development Assistance Committee (DAC) donors' model of international cooperation, China's development assistance is not aid per se but a mixture of aid, investment, and concessional loans. Key issues and challenges with regard to China's foreign aid policy and practice also form part of the discussion in this section. The following section discusses the 'gift theory' and how CPEC can be explained under this theoretical framework. It argues that although Pakistan's political leadership has been calling CPEC a gift from its long-term strategic partner China, Pakistan must also reciprocate, as there are usually no free gifts in bilateral relationships between sovereign states. The subsequent sections elaborate the financing model of CPEC and its overall geo-economic benefits, as well as intended or unintended costs, for both countries.

An overview of China's foreign aid policy and practice

For the first time in its history, China released a White Paper on its foreign aid policy in 2011. The policy document outlines the guiding principles, as well as various forms of aid modalities, that China has been using to deliver development assistance to numerous countries across the globe. The Government of China claims that its foreign aid policy is based on the principles and values of peaceful coexistence, respect for recipient countries' right to independently select their own model of development, and the belief that every country should explore a development path suitable to its actual conditions.² Similarly, the policy document mentions mutual respect for sovereignty and territorial integrity, mutual non-aggression, non-interference in each other's internal affairs, and equality and mutual benefit as the guiding principles

of its foreign aid policy. The 2014 White Paper reiterates the same principles and values as the overarching doctrines of its foreign aid policy.³ The official policy discourse mentions at the outset that the primary principles of Beijing's aid policy are "mutual respect, equality, keeping promise, mutual benefits and win-win."⁴ Thus, in its official policy discourse, considerable emphasis is placed on the continuity of China's foreign policy and how international development cooperation fits into this framework.

It is argued that the 'five principles of peaceful coexistence' of Premier Zhou Enlai, that he had formulated while reorienting the country's bilateral ties with Burma, India, and Indonesia in 1953 are still central to its official narrative.⁵ The five principles of peaceful coexistence are as follows:

- 1. Mutual respect for sovereignty and territorial integrity;
- 2. Mutual non-aggression;
- 3. Non-interference in each other's internal affairs;
- 4. Equality and mutual benefit; and
- 5. Peaceful co-existence.

Both White Papers clearly mention these doctrines.⁶ These five principles were later refined and expanded into the following 'eight principles for Chinese foreign aid' in 1964 and continue to shape its aid policies:

- 1. Equality and mutual benefit in the provision of aid to other countries;
- 2. Respect for the sovereignty of recipient countries;
- 3. Providing aid in the form of interest-free or low-interest loans;
- 4. Promotion of self-reliance and independent economic development;
- 5. Priority to projects that require less investment but fast results;
- 6. Provision of high-quality equipment and materials manufactured by China at international market prices;
- 7. Transfer of skills and technology to recipient countries; and
- 8. Provision of technical and practical expertise by visiting Chinese experts

These principles also reflect "the moral and idealistic elements of China's foreign policy thinking." At the same time, Lengauer asserts that "it is these characteristics that make the Chinese approach to aid

attractive for recipient countries."8 Based on the above principles, Beijing has stated that the key features of China's foreign aid policy are to help "recipient countries build up their self-development capacity," to help them "to foster local personnel and technical forces, build infrastructure, and develop and use domestic resources," and to try "utmost to tailor its aid to the actual needs of recipient countries."9 In addition, faced with the global challenges of reform and innovation in development cooperation policy and practice, the aid policy acknowledges that "China adapts its foreign aid to the development of both domestic and international situations" and continuously adjusts and reforms its aid allocation and delivery mechanisms to improve the efficacy of its development cooperation.¹⁰ Li et al. assert that unlike OECD/DAC donors, China does not have elaborate 'country plans' for its aid recipients. Instead, after consultation with relevant agencies and ministries in partner countries, Chinese embassies convey to Beijing the actual needs of its development partners and how best can China provide support in particular sectors and areas. 11 Thus, it can be inferred from the policy document that China's development cooperation is demand-driven. Moreover, partner countries' needs and priorities regarding where and how to provide and implement development projects and programmes are addressed.

The two policy documents of 2011 and 2014 also identify various forms of development cooperation that China provides to its numerous development partners in Asia, Africa, and Latin America. According to the 2011 White Paper, "China offers foreign aid in eight forms: complete projects, goods and materials, technical cooperation, human resource development cooperation, medical teams sent abroad, emergency humanitarian aid, volunteer programmes in foreign countries, and debt relief."12 In terms of concessionality or amount of grant element in its development cooperation, there are three types of cooperation: grants, interest-free loans, and concessional loans.13 The 2014 White Paper states that between "2010 to 2012, China appropriated in total 89.34 billion yuan (\$14.41 billion) for foreign assistance in three types: grant (aid gratis), interest-free loan, and concessional loan."14 The same document further adds that out of this amount, 36 percent was in grants, 9 percent was interest-free loans, and 56 percent was concessional loans. Overall, a total of 121 countries received aid from China in various

forms, including 30 in Asia, 51 in Africa, 9 in Oceania, 19 in Latin America and the Caribbean, and 12 in Europe. Similarly, agriculture, education, health, industry, and infrastructure are the primary sectors where most Chinese development assistance is targeted.

China as a rising development actor and its foreign aid

Contrary to its official narrative, there is also a certain amount of criticism on Chinese aid programme. First of all, according to Brautigam, China provides development aid that meets the definition of Overseas Development Assistance (ODA) but this is relatively small and insignificant.¹⁷ The author asserts that financing instruments such as export credits, non-concessional state loans, or aid used to foster Chinese investment cannot be categorised as aid or ODA. It is further argued that China's financial contribution may be developmental but it is not primarily based on ODA, as its bulk does not conform to ODA standards.¹⁸ In addition, de Haan points out that there is no transparency or availability of clear data on the actual size of China's aid programme.¹⁹ He argues that the reason for lack of concrete numbers or aid data is that China's aid programme is implemented by various agencies.²⁰ Moreover, there is no clear borderline between aid, trade, and investment.²¹

It merits a mention that unlike traditional or Western aid-providers, in the case of China's development financing, "aid, trade, and investment are seen as interconnected in a mutual benefit framework."²² Thus, rather than looking at aid exclusively and separately from other modes of development financing, China's development cooperation is "the aid-business-trade model" as it combines all three into one strand.²³ Hence, it would be naïve to put to test China's aid through the same set of definitions, standards, and parameters as established by OECD/DAC because in this there is no clear differentiation between aid and other developmental financing in the form of trade and investment or even soft loans.

Regarding criticism of the lack of transparency in China's aid policies and practices, Li et al. argue that the publication of "white papers on aid (and annual reports have been promised in the near future) that provide greater details of allocations and priorities" reflects

that the government has been making efforts to streamline its aid policies and programmes.²⁴ While it is a step in the right direction to make such documents public for enhanced transparency, the fact remains that there has been no disclosure of official documents pertaining to project agreements or formal evaluation of projects undertaken with Chinese assistance. For example, in the case of CPEC in Pakistan, there has been a consistent criticism in the media asking for greater transparency and sharing of information about numerous CPEC projects and their long-term financial implications for the recipient country.²⁵ While the Government of Pakistan finally released the *Long Term Plan for China-Pakistan Economic Corridor (2017-2030)*,²⁶ the only official document made public so far, it neither provides new information about the corridor nor allays old concerns about the financial and environmental sustainability of the initiative.

Another issue is that unlike traditional or OECD donors, China has not set up a special and independent aid agency to deal with all aidrelated decision-making. According to Tang et al. and Huang and Wei, the Chinese Ministry of Commerce plays a central role in the formulation and planning of foreign aid policy and approval of aid-funded projects along with 20 other ministries including the Ministry of Foreign Affairs, the Ministry of Finance, the Ministry of Health, and the Ministry of Agriculture.²⁷ Within the Ministry of Commerce, a specific body named the Department of Aid to Foreign Countries (DAFC) deals with the management of foreign aid affairs and liaison with other government ministries involved in international development cooperation. There are three additional government bodies to support China's aid work management, including the Executive Bureau of International Economic Cooperation (EBIEC), China International Center for Economic and Technical Exchanges (CICETE), and the Training Center of the Ministry of Commerce.

Due to the involvement of various ministries, Kitano asserts that Chinese aid is at the 'transitional stage' as the presence of various government ministries and departments often blurs the lines between aid per se and other developmental financing, including investments, trade, and state loans.²⁸ Tang et al. argue that "with the expansion of China's assistance scale, however, the lack of systematic and standardised aid quality monitoring and evaluation will become an increasing and

prominent disadvantage."²⁹ Similarly, Huang and Wei assert that "the current management system, and overall management capacity, cannot meet the needs of the rapidly growing volume of China's foreign aid."³⁰ Thus, although the government has come up with reasonable policy and institutional measures to streamline and strengthen its aid portfolio, these steps are not sufficient to fully address the challenge and effectively deal with its expanding aid programme. To effectively spearhead its everincreasing overseas aid and development programmes around the world, China does not have a specialised aid and development agency to consolidate roles and responsibilities that have been divided among various ministries resulting in lack of aid coordination and ineffective utilisation of development cooperation.

Besides the above issues, there are also concerns that Beijing's trade and commercial interests and the desire to get access to natural resources and new markets in a number of countries drive its foreign assistance programme.³¹ Naím argues that development cooperation from China is largely aimed at ensuring access to raw materials in developing countries, particularly energy. As such the author calls it 'rogue aid' driven by self-interest.32 Xu and Carey assert that "the financial transactions involved in project financing pass through Chinese channels, and for the most part procurement is tied to Chinese procurement."33 However, prioritisation of economic, political, security, and diplomatic interests have influenced foreign aid policies of a majority of DAC and non-DAC donors during and after the Cold War period and multifaceted foreign policy objectives continue to play a vital role in bilateral aid allocation decisions.³⁴ Therefore, perhaps China as a donor is not alone to use aid as a foreign policy tool in pursuit of its economic, political, and diplomatic interests along with poverty reduction and developmental objectives.

Furthermore, contrary to the criticism of China's aid being primarily driven by selfish interests, Dreher and Fuchs illustrate that this is actually not the case.³⁵ Analysing Chinese project aid, food aid, medical staff, and total aid allocations to 132 developing countries in various regions during the 1956–2006 period, they empirically test the extent to which China's commercial and political self-interest shape its foreign aid allocations. Based on their empirical assessment, the authors assert that as compared to traditional as well as the so-called emerging

donors, it does not appear that China pays significantly more attention to politics in aid allocation. Furthermore, they state that in contrast to widespread perceptions, there is no substantial evidence that China's aid allocation is dominated by natural resource endowments. They argue that "denoting Chinese aid as 'rogue aid' seems unjustified." Lengauer also argues that China's foreign aid has been quite successful in a number of countries and "this does not do full justice to the Chinese approach" to call it 'rogue aid'. 37

Leaving aside these criticisms, it is also a fact that China has become an influential aid provider during the last several years. It is estimated that the overall volume of foreign aid from China has increased significantly since 2004.38 Based on data from the websites of 50 departments and other relevant organisations and sources in China, Kitano and Harada show that China's net foreign aid increased consistently from \$5.2 billion in 2012 to \$5.4 billion in 2013 and increased further to \$6.1 billion in 2014.³⁹ They argue that based on its overall aid budget, China's bilateral foreign aid ranks at number 6 since 2012, next to Japan and France. The authors assert that based on its past aid budgets, China's foreign aid is expected to increase and catch up with the top five DAC members in the foreseeable future.⁴⁰ Thus, China is moving "from its traditional largely passive role in international development governance to a new role as a proactive institutional and conceptual innovator based around a large view of geography and development."41 Hence, irrespective of the fact that there is a lack of clarity and transparency concerning its aid programme, China has gradually emerged as a key development actor at the global development landscape as it has become "much more assertive in international development, trade, environment and foreign aid policies."42

Another key characteristic of China's aid is the willingness of the Chinese government to finance infrastructure projects in energy, transport, and communication. De Haan argues that with the passage of time, China's impact and role is going to be more pronounced and integral in the arena of international development as it has been investing substantially in countries where traditional donors have been less active (fragile states) and in sectors that have remained neglected and underfunded such as infrastructure.⁴³ Large investment in "the productive sectors, including agriculture, along with investment in core

infrastructure" is welcomed by numerous developing countries as "many Western donors have prioritised the social sectors, and broader policy interventions around 'human rights' and 'good governance'."44 Tang et al. also assert that "there is no doubt that China has put substantial aid resources into the field of infrastructure, which the Western countries are unwilling to invest in."45 A prime example of this is the unprecedented investment package in Pakistan in the form of CPEC, a flagship project of the BRI in a country that has suffered huge human and financial losses due to the spillover effects of the ongoing conflict in neighbouring Afghanistan after the US-led 'war on terror'. Being a frontline US ally, terrorist groups started targeting Pakistan and the escalation of the 'war on terror' at the domestic front has cost the country over \$123 billion as it has affected the country's exports, prevented the inflows of foreign investment, led to additional security spending, affected the tourism industry, damaged physical infrastructure, and resulted in displacement of thousands of people from conflict-affected areas.⁴⁶ Hence, unlike other major traditional donors, China has come up with an investment package in infrastructure projects and both countries expect that increased connectivity would result in greater inter-regional trade and would bring peace, stability, and prosperity not only in Pakistan but also to the whole region.

CPEC within the analytical framework of 'gift theory'

Before going into the discussion of the 'gift theory' and how an assessment of CPEC can be grounded in this theoretical debate, it is pertinent to mention that in Pakistan CPEC is often stated to be a gift from China—its longstanding strategic friend. For example, former Prime Minister Nawaz Sharif in an address to a parliamentary meeting revealed that Chinese President Xi Jinping had told him that CPEC was a gift from China to Pakistan. "He said this is a gift to you from China. They were also waiting for the time when our government would be in power so that they could make this investment," the premier said while referring to the \$46 billion investment made by the Chinese government under CPEC. ⁴⁷

Similarly, in his meeting with a Chinese delegation, Chief Minister of the Punjab province Shahbaz Sharif, who is also the brother

of the former Prime Minister, stated that CPEC was a great gift of China for the people of Pakistan that would help in bringing progress and prosperity in the country. 48 Several other political figures from the ruling political party have been terming the project as a gift from its long-time strategic ally to share the benefits of economic progress.

The question arises here that what is the significance of such mega-gifts in the context of the diplomatic relationship between countries and what are the obligations on the part of the recipients of such gifts. In his classic work titled The Gift: Forms and Functions of Exchange in Archaic Societies, Mauss argues that gifts are never free of any obligations.⁴⁹ Rather, there are numerous instances where gifts lead to a reciprocal exchange. His seminal question in this regard is: "What power resides in the object given that causes its recipient to pay it back?"50 The author explains that the process and act of giving results in the creation of a social bond with an obligation to reciprocate on the part of the recipient. He further elaborates that if somehow the recipient of gifts does not reciprocate or is unable to respond as expected, it means to lose honour and prestige. A number of studies have examined the concept of foreign aid from this perspective of gift theory involving the acts of giving, receiving, and reciprocating in one form or another.51 It is argued in these studies that one of the salient features of the concept of international development cooperation within the framework of the gift theory is "the fact that it involves real goods and services that fulfil real needs and desires, or precisely what donors have that recipients want."52 Thus, it can be implied that the process of giving aid or concessional loans results in a kind of a gift-debt that aid recipient will have to repay in one form or another. Whether it is a gift exchange or aid relationship between aid providers and recipients, the overall act of giving and receiving leads to a reciprocal interdependence between both partners. There are numerous instances of how foreign aid is employed by developed countries to make alliances with developing countries and accomplish their multifaceted foreign policy goals during, as well as after, the Cold War period.53 It means there is no free gift as the policy and practice of using foreign aid to achieve political, security, geo-strategic, and commercial interests still continue.

Aid, soft loans, or investment? CPEC financing model

After assuming power following his victory in general elections 2013, Pakistan's former Prime Minister Nawaz Sharif visited Beijing in July 2013. During his trip, China and Pakistan signed a Memorandum of Understanding (MoU) in the presence of Chinese Premier Li Keqiang. The main purpose was to encourage China to enhance its investment in energy, trade, and communication infrastructure. It also aimed at building linkages between the western region of China and northern Pakistan by establishing communication links and developing economic and trade corridors. To give further substance to the existing partnership, the most significant development took place during President Xi Jinping's visit to Islamabad in April 2015, where the two countries signed 51 Memorandums of Understanding (MoUs) related to CPEC and various other fields of mutual interests. During his visit, President Xi announced that China had agreed to \$46 billion investments in the form of CPEC.⁵⁴

As explained earlier in the context of China's model of foreign aid policy, this amount is not aid but a mixture of aid/grant, soft loans, and investment. Out of \$46 billion, about \$11 billion will be provided in the form of concessional and commercial loans.55 According to Pakistani and Chinese officials based in Islamabad, the \$11 billion amount is in the form of government-to-government loans with a 2 percent interest rate.⁵⁶ It also includes some small grants to finance certain development projects in the education and health sectors in Gwadar. The remaining \$35 billion will be provided as export credit and FDI in the energy sector in the form of Independent Power Producers (IPP) mode.⁵⁷ Various Chinese entities such as the China Development Bank, the Export-Import Bank of China, the Industrial and Commercial Bank of China Ltd., and other financial institutions provide loans to Chinese companies to implement CPEC-related projects in Pakistan. In terms of eligibility for Chinese funding, only China's state-owned companies and enterprises can participate in the bidding, as there is no open international competitive bidding. Pakistani officials stated during interviews that this is also the practice in the case of other bilateral donors, as only organisations and companies from the lender countries participate in the bidding process to execute development projects in partner countries.

CPEC and its implications for Pakistan and China

There is no doubt that CPEC has considerable socioeconomic as well as geostrategic benefits for both countries and is a win-win situation. Pakistan is undoubtedly the first country where a number of projects are currently being implemented under the BRI. At present, 22 projects costing \$29 billion are under various phases of implementation, including 15 projects worth an estimated \$22 billion in the energy sector. Small has appropriately stated that the corridor is considered the flagship project of the BRI, as several objectives of the initiative converge in Pakistan including "the outsourcing of industrial capacity, the search for growth drivers in the Chinese interior, the push to build up new markets for Chinese exports, efforts to stabilise China's western periphery" vital to effectively addressing the threat of Islamic extremism, and the plans to explore alternative and viable transportation routes linking China with the Indian Ocean and beyond.

While the two countries have been enjoying warm bilateral ties for decades, unlike the US-Pakistan relationship, Pakistan and China "have never been treaty allies." Both Beijing and Islamabad have enjoyed diplomatic ties for over six-and-a-half decades that are characterised by "peaceful coexistence with zero number of clashes at states' level." Both countries have developed an unprecedented level of mutual trust at the government-to-government level. There are even metaphors describing the diplomatic relationship as 'time-tested' and 'all-weather friendship', and 'higher than the Himalayas, deeper than the Indian Ocean, and sweeter than honey'.

In the context of viewing CPEC as a gift to Pakistan, there is no doubt about its significant socio-economic prospects, provided various externalities are effectively addressed—including social and environmental costs. In fact, both countries have to exert strenuous effort to thwart implicit and explicit attempts by some national, regional, and international actors to partially or fully impede its implementation. The question is that how can Pakistan return the favour to China, applying gift theory, so that CPEC is a win-win situation for both countries.

For China, there are two main drivers behind the BRI and CPEC. The first is to effectively utilise Pakistan's privileged geographical position to further its geo-economic and strategic objectives and

minimise its 'Malacca Dilemma' in case of any blockades by hostile forces. The second relates to China's domestic imperatives and concerns. Although the former has been widely discussed, the latter has drawn limited attention. The reality is that the primary motivations behind the BRI are "economic and commercial drivers, creating new markets for Chinese companies or addressing challenges facing the Chinese economy such as industrial overcapacity."62 For example, according to Cai, in the steel industry alone, "China's annual steel production surged from 512 million tonnes in 2008 to 803 million tonnes in 2015."63 The same author further states that the capacity to produce an additional 300 million tonnes per year is larger than the production capacity of the United States and the European Union put together. Thus, China is pursuing the policy of shifting its factories with overcapacity to BRI countries in order to minimise its supply glut at home and at the same time to assist less developed countries to accelerate the process of industrialisation. It is an interesting twist of irony that Beijing's "domestic economic liabilities become foreign economic and diplomatic assets."64

In addition, the development of various mainland regions and cities across China has been a key factor. For example, in the case of Xinjiang Autonomous Region, the concept of bringing economic development to this region received the attention of policymakers as early as the 1980s. It was envisioned to develop "Xinjiang eastwards to integrate it more closely into the national economy, and westwards towards Central Asia, following the reopening of border trade between Xinjiang and Central Asia in 1983."65 Similarly, Huasheng also concurs that "economic development of Xinjiang is a national priority. In 2000, the Chinese government released its strategy for the development of the western regions."66 The case of Xinjiang is conspicuous due to multiple factors, including "narrowing the economic gap between Xinjiang and the more developed eastern provinces...helping alleviate discontent and security problems in Xinjiang."67 The elimination of poverty and improvement of the living standard of local residents, state-led development interventions could significantly help reduce the threat of East Turkestan separatist movement. Hence, the overall objective is to bring economic prosperity to the vulnerable population and "to alleviate the conditions that allow terrorism, separatism and extremism to flourish."68

In the 12th Five-Year Plan introduced by the Chinese central government, which set out major development goals for the period between 2011 and 2015, Xinjiang was envisaged as an essential hub to 'open to the West'. In the same context, the main policy document on the 'Vision and Actions' of the BRI asserts to utilise Xinjiang's geographic position as a gateway to "deepen communication and cooperation with Central, South and West Asian countries, [we must] make it a key transportation, trade, logistics, culture, science and education centre, and a core area in the overall BRI."69 Although conspicuously missing in official documents, China's security concerns—particularly vis-à-vis Xinjiang and the associated issue of Uighur terrorism—also run alongside the development agenda. Hence, there are various domestic dynamics at play to make Xinjiang a successful node in the BRI. The "Belt and Rod Initiative should be viewed as an extension, consolidation and political elevation of pre-existing policy ideas and practice at the subnational level in China."70 In addition to the external or international aspects, the BRI and CPEC have vital domestic drivers that are often found missing in the overall discourse on the subject.

From the perspectives of the 'gift theory', how Pakistan is expected to reciprocate Chinese largesse? As Andrew Small has aptly stated, "Pakistan is a central part of China's transition from a regional power to a global one."71 To capitalise on Pakistan's geographical location to advance its geostrategic and geo-economic ambitions, China also expects Pakistan to reciprocate by ensuring domestic harmony and not letting inimical forces disrupt CPEC. If Pakistan fails to maintain the stability required for the implementation of numerous CPEC-related projects, it would be tantamount to not reciprocating China's 'gift' and losing its 'prestige and honour'. If China has come up with a huge investment plan under CPEC, there is an obligation on Pakistan to respond in a manner through which it can practically demonstrate its ability to reciprocate the 'gift'. This can be achieved on two fronts. First, there is a need for internal political stability, domestic harmony, and better law and order situation so that Chinese companies and workers could wholeheartedly focus on completion of CPEC-related projects in due time. Similarly, China expects Pakistan to make sure that Uighur separatists belonging to the East Turkestan Islamic Movement (ETIM) do not find any safe haven in the country's tribal belt bordering Afghanistan

or elsewhere, as the issue of Uighur insurgency has become a serious internal security challenge for China in recent years. In the past, acting on a tip-off from Chinese security forces, Pakistani military forces have detained or killed a number of ETIM members in raids carried out in border areas of Gilgit-Baltistan and Khyber Pakhtunkhwa. Second, there is a need for institutional reforms so that unnecessary red tape, bureaucratic hurdles, and excessive regulations are avoided. Such issues lead to delays in decision-making and eventually mar the overall process of projects' approval and implementation. Without addressing chronic issues of bad governance and structural reforms, the true potential of CPEC seems hard to be materialised for the mutual benefit of both countries.

Conclusion: is CPEC a gift?

This paper has given a detailed account of the key characteristics and elements of Chinese foreign aid policy. In doing so, the paper has critically analysed China's foreign aid policy and its development cooperation model, which is a combination of aid, investment, and concessional loans. On account of its ever-expanding aid programme, as well as due to its willingness to readily invest in sectors such as energy, agriculture, and communication infrastructure unlike Western donors, China has emerged as a global development actor. While Chinese leadership has used lofty ideals such as respect for sovereignty, non-conditionality, and mutual win-win in its foreign aid policy, there is also considerable evidence suggesting that China has used its development aid to promote its trade and commercial interests, as well as to safeguard its strategic objectives.

In the case of increased Chinese investments in Pakistan under CPEC and the perception nurtured and built by Pakistani leadership that CPEC is actually a gift from China, this paper has critiqued the corridor from the conceptual lens of the 'gift theory'. The study has illustrated that the project would certainly bring socioeconomic benefits to Pakistan. It is the only country participating in the China-led BRI where numerous energy and infrastructure projects are already under different stages of implementation. In view of the unprecedented Chinese investments in various sectors of the economy, there are huge socioeconomic prospects associated with CPEC. Nonetheless, elaborating the financing

model of CPEC, Chinese investment is not a gift or aid per se. Chinese investment in CPEC is neither purely motivated by self-interest nor merely by compassion. Via CPEC, China wants to address both its domestic concerns regarding the export of overcapacity and access to new markets and to bring economic development and prosperity in its less developed mainland regions by connecting these with the Indian Ocean through Gwadar Port of Pakistan. Hence, the corridor has both geo-economic and geostrategic benefits for China. In sum, if China has come up with a massive multiyear investment plan in the form of CPEC to accomplish its own domestic and foreign policy objectives—as well as to help Pakistan resolve its energy crisis, foster industrialisation, and upgrade its communication infrastructure—Pakistan must respond earnestly to allay Chinese concerns vis-à-vis political stability and maintaining law and order to ensure the safety and security of Chinese nationals working in Pakistan. In order for China to effectively utilise Pakistan's geographical location for the mutual win-win situation, many of the domestic challenges are to be addressed by the Pakistani government to make the country a favourite destination for foreign investors and a hub for regional trade and commerce.

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IRAN NUCLEAR DEAL AND ITS FUTURE UNDER TRUMP ADMINISTRATION

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Abstract

The successful nuclear deal signed between Iran and P5+1 nations, also known as the Joint Comprehensive Plan of Action (JCPOA), limited Iran's nuclear activities, placing these under the watch of the International Atomic Energy Agency (IAEA). The deal has not only increased Iran's breakout time to develop nuclear weapons to more than a decade but has also diminished the threat of Iran-Israel confrontation. The JCPOA only applies to Iran's nuclear programme and does not take into account other issues like Iran's missile programme and its role in the Syrian conflict. Iran has used this deal to influence the situation in Syria, Iraq, and Yemen in its favour, which antagonised several regional states, including Israel, Turkey, Saudi Arabia, and other Gulf Cooperation Council (GCC) states. The newly elected Trump administration in Washington has threatened to scrap the JCPOA if Iran would not stop its other controversial activities, especially its missile development programme and interference in other parts of the region, including Syria, Iraq, and Palestine. Israel and Saudi Arabia are in favour of scrapping the deal and support a tougher line against Iran. The EU, China, and Russia are supportive of the deal and fear that in case the deal is terminated, it would create more instability in the region, besides encouraging Iran to resume its controversial nuclear activities, thus, drastically cutting down the breakout time to develop a nuclear device.

Iranian nuclear controversy was stirred after the disclosure of two secret nuclear facilities in 2002 by a Paris-based Iranian dissident group called the National Council of Resistance of Iran (NCRI). These facilities included a Heavy Water research reactor in Arak and a uranium

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enrichment facility at Natanz.1 Due to mounting international pressure, Iran agreed to address the issues related to its nuclear programme and started engaging diplomatically with the EU-3 states, including France, Germany, and the United Kingdom. As a result of these negotiations, Iran agreed to sign the Additional Protocol on Nuclear Safeguards in 2003, in addition to sending a proposal to the US government for a comprehensive dialogue on addressing Western concerns over its nuclear programme.² In 2004, Iran temporarily suspended its uranium enrichment activity after signing the Paris Agreement. However, the Bush administration did not show any interest in negotiating with Iran and remained unresponsive to the Iranian proposal. Later, in 2005, the newly elected Iranian government of former president Ahmedinejad adopted an entirely different approach towards its nuclear issue. Ahmedinejad refused to ratify the Additional Protocol, commenced construction work on the Arak Heavy Water nuclear reactor and also resumed the uranium enrichment process at Natanz.³ Owing to the sensitivity of the situation, in 2006, China, Russia, and the US joined the EU-3 to form P5+1 diplomatic team to negotiate on the controversial Iranian nuclear activities. In 2009, Iran disclosed another secret uranium enrichment facility at Fordo, near Qom, which was supposed to enrich uranium up to 20 percent, as permitted under the Nuclear Non-proliferation Treaty (NPT). Despite P5+1 warnings and threats of sanctions, former Iranian president Ahmedinejad refused to allow the International Atomic Energy Agency (IAEA) inspectors access to the Parchin Military Complex near Tehran. The complex was suspected to have been a testing ground for high explosives and hydrodynamic experiments considered critical for nuclear weapons knowhow. Thus, in response to the firm Iranian stance on its nuclear activities, the international community imposed sanctions on Iran, which adversely affected its economy and oil exports. On the other hand, several reports published in the Western media warned of an imminent Israeli strike on the Iranian nuclear facilities.4 In 2013, a moderate figure named Hassan Rouhani was elected as President of Iran, who adopted a conciliatory approach with P5+1 on the nuclear issue. Not only did Rouhani resume diplomatic process with P5+1 but he also secretly engaged in bilateral talks with the US in Oman.5 These negotiations subsequently resulted in the signing of an interim nuclear agreement or the Joint Plan of Action (JPOA) between Iran and P5+1 in November 2013. Finally, after intense rounds of parleys between Iran and P5+1, both parties successfully concluded the Joint Comprehensive Plan of Action (JCPOA) at Vienna on 15 July 2015.⁶

Controversies regarding the Iranian nuclear program

Iran always maintained that its nuclear programme was for peaceful purposes with no intentions to manufacture nuclear weapons. In 2007, the official Iranian estimates predicted that the state's energy needs would rise up to 70,000 megawatts by 2021, for which generation of power through alternative means would be necessary. However, the EU and the US had their suspicions. There was a perception in Brussels and Washington that due to the secretive nature of Iran's nuclear programme, Iran had made plans to develop nuclear weapons in future. This Western hypothesis of Iran pursuing a nuclear bomb was supported by the argument that Iran had built several hidden nuclear sites without notifying the IAEA with no justifiable reason. This, according to Western analysts, showed that Iran either had plans to manufacture nuclear warheads in future or an intention to possess the capability of developing a nuclear device at will. Iranian nuclear programme can be divided into two categories: one consisting of sites that are continuously under the safeguards of IAEA and the other consisting of facilities where suspicious nuclear-related activities were discovered. Some of the key Iranian nuclear sites are illustrated in the table below:

Key Iranian nuclear sites

Location	Facility	Status
Anarak	Nuclear waste storage	Operating
Ardekan, Yazd	Uranium milling facility	Operating
Bonab	Nuclear research for agriculture	Operating
Bushehr	Nuclear power production plant	Operating
Gachin	Uranium mines	Operating
Isfahan	Uranium conversion technology centre (uranium	Operating

	oxide/UF6/metal)	
Karaj	Radioactive waste	Operating
	storage facility	
Saghand	Uranium ore mines	Operating
Tehran	Multiple facilities at	Mostly operating
	Tehran Nuclear Research	
	Centre	
Darkovin	360 MW Nuclear Power	Construction started
	Plant	in 2007 but work
		has stopped
Facilities viewed with suspicion in the West		
Arak	40 MW Heavy Water	To be completed
	reactor (to be re-designed	yet
	to 20 MW with least	
	possibility of producing	
	weapon grade Plutonium)	
Fordo, Qom	Uranium enrichment	Operating (with
	facility (to be re-	1,044 centrifuges
	designated as nuclear,	for spinning without
	physics, technology	enrichment)
	centre)	
Lashkarabad	Uranium enrichment plant	Dismantled
Natanz	Uranium enrichment	Operating (with
	facility	6,104 centrifuges
		and enrichment
		allowed at 3.67
		percent)
Parchin	High explosive testing site	Operating but
	suspected to be related to	modified under the
	nuclear weapons	JCPOA

Source: "Nuclear Iran: Nuclear Sites", *ISIS (The Institute for Science and International Security)*, available at http://www.isisnucleariran.org/sites/alpha/.

Following is a detailed commentary on the controversial Iranian nuclear sites with suspected military dimensions listed above:8

Heavy Water and production plant at Arak

The existence of a Heavy Water facility near Arak was first revealed by the Institute for Science and International Security (ISIS) in December 2002. This 40 MW reactor moderated by Heavy Water was inaugurated by former Iranian president Ahmedinejad in July 2006, which was to become operational by 2014 but has yet to be completed. International community fears that the spent fuel from Arak reactor can be reprocessed to extract Plutonium, which could subsequently be used by Iran to manufacture nuclear weapons.

Fordo uranium enrichment facility

In September 2009, Iran acknowledged to have constructed a secret underground uranium enrichment facility at Fordo near Qom, which started the uranium enrichment process in January 2012. Later, Iran also notified the IAEA that it had plans to enrich uranium to 20 percent, which would be subsequently used as fuel for its Tehran Nuclear Research Reactor.

Natanz uranium enrichment plant

The Natanz fuel enrichment plant is Iran's largest gas centrifuge uranium enrichment facility and has the capacity to house 50,000 centrifuges. Natanz plant has two main portions: Pilot Fuel Enrichment Plant (PFEP) and the Fuel Enrichment Plant (FEP), which are in operation since February 2007. Despite repeated calls from the UN and P5+1, Iran refused to stop uranium enrichment activities at Natanz. In February 2010, Iran claimed to have successfully enriched uranium up to 19.75 percent, which can conveniently be enriched up to 90 percent for producing fissile material.

Parchin

In November 2011, the IAEA disclosed that since 2000 Iran had been conducting large scale explosives tests in a secretly built chamber at the Parchin military complex near Tehran. During the visits conducted by IAEA inspectors prior to 2005, no suspicious activity was observed in the buildings. Analysis of environmental samples also did not reveal the presence of nuclear materials at these locations, possibly because some portions of the site were kept hidden from the IAEA. Israeli and American sources have accused that Parchin site was used to conduct high

explosives and hydrodynamic experiments for missiles and neutron initiator tests for nuclear weapons. In October 2014, the Parchin testing site was partially damaged as a result of a mysterious explosion. However, Iran has repeatedly reiterated that the site is only used for conventional explosive testing and in September 2015 the Director General of the IAEA head Mr. Yukiya Amano also visited the Parchin military site.

Isfahan uranium conversion facility

Iran began operating the uranium conversion facility (UCF) at Isfahan in 2006, which is used to convert yellowcake into uranium oxide, uranium hexafluoride gas, and uranium metal. The site is regularly visited by IAEA inspectors.

Key restrictions and relaxations under the JCPOA

The Iran nuclear deal, also known as the JCPOA, was signed on 14 July 2015 in Vienna after years of diplomacy between P5+1 states and Iran. It was a sequel to the Joint Plan of Action (JPOA) signed in November 2013 between the two parties. The deal is a 109-page long document and contains 5 annexes. It restricts Iran's nuclear activities for a specified time (10-25 years)—also known as the 'sunset clauses'—and offers incentives in return. The main aspects of the JCPOA are as follows:9

Uranium enrichment activities and stocks

Iran had previously claimed that it had enriched uranium up to 20 percent, a limit that was permitted under the NPT. After the finalisation of the nuclear deal, however, Iran was allowed to enrich uranium up to a maximum of 3.67 percent. Iran was also believed to be in possession of 10,000 kilograms of Low Enriched Uranium (LEU) stocks, which were gradually being reduced by 98 percent after the agreement. Therefore, according to the JCPOA, for the next 15 years, Iran would be permitted only to store a maximum 300 kg of LEU (enriched maximum up to 3.67 percent) either in the shape of uranium hexafluoride gas (UF6) or other equivalent chemical forms. In addition, all stocks of LEU enriched above 3.67 percent are being treated under four options. First, being downblended to the permissible limit. Second, being shipped out of the

country. Third, to be sold to purchase natural uranium as fuel for nuclear reactors. And fourth, to be fabricated into fuel plates for Tehran Nuclear Research Reactor. 10 Therefore, additional stocks of LEU would either be placed under the custody of the IAEA or shipped out of the country. The Uranium Enrichment Plant at Fordo shall only be used for research and development related to enrichment activities and no enrichment would be carried out at the facility for the next 15 years. After 15 years, however, the limits and restrictions on Iran's enrichment and operational centrifuges would either have to be lifted or re-negotiated.

Limits on centrifuges

Prior to the deal, Iran had approximately 19,000 installed centrifuges, out of which 10,000 were operational. These centrifuges included the old IR-1, IR-2, as well as the advanced IR-4 types. As a consequence of the deal, only 6,104 centrifuges of IR-1 type are permitted to be used for enrichment and research purposes. A total of 5,060 centrifuges are allowed to be operated for uranium enrichment at Natanz, while remaining non-operational centrifuges are placed under the supervision of the IAEA. At Fordo, only 1,044 centrifuges of IR-1 type, in six cascades, can be operated and the facility was re-designated as nuclear physics and technology centre with no uranium enrichment activity permitted for the next 15 years. At Fordo research centre, only two cascades with 348 machines can be operated but without any uranium, while four cascades with 696 machines would remain idle. For eight-and-a-half years Iran can carry out research on a single centrifuge of IR-4, IR-5, IR-6, and IR-8 types designs.

Arak Heavy Water research reactor and spent fuel

The Arak reactor has been re-designed in line with IAEA guidelines to minimise the production of weapon grade plutonium. The power of re-designed reactor has been limited to 20 MW from 40 MW. No weapon grade plutonium is allowed to be produced in the reactor and all unspent fuel from the reactor has to be sent out of the country under IAEA supervision. Any excess Heavy Water, which is additional to Iran's needs, is made available for export in the international market under the deal. Iran has also been forbidden to either build new Heavy Water

reactors or store additional quantity of Heavy Water for the next 15 years.

Additional Protocol

Iran signed the Additional Protocol on Nuclear Safeguards without ratifying it, but after the deal, Iran has provisionally applied the Additional Protocol to the comprehensive safeguards agreement as agreed with the IAEA in the deal. The provisional application of the Additional Protocol, however, is only restricted to nuclear sites and does not mean anywhere and anytime types of inspections. Iran has also agreed to provide complete access to the IAEA for carrying out inspections of suspected and safeguarded sites related to nuclear fuel cycle on short notices of 24 hours. According to the deal, if an issue arises on previously undeclared or suspected nuclear site, the matter would be resolved through a joint commission within 24 days. The deal also allows the IAEA to gain access and inspect all aspects of nuclear fuel cycle and related sites, including mining and milling sites, for the next 25 years. 14

Inspections and transparency

Under the deal, Iran is allowed to continue with peaceful nuclear research activities, which include nuclear research on radioisotopes and medical applications, nuclear research for instructional, agriculture, and scientific purpose, and nuclear research for power generation. The IAEA has round the clock access to Iran's notified nuclear sites and IAEA inspectors can inspect and prepare an inventory of Iran's nuclear sites from mining to waste disposal, without any interruption or hindrance. Iran has to allow IAEA inspection teams to stay in the country for longer durations to carryout inspections, collect samples, verifications of sites, etc. All sites related to nuclear fuel cycle including centrifuge production and research and development facilities would be monitored by the IAEA.

Fuel and technology procurements

A joint commission was established under the deal to review Iran's requests for obtaining and purchasing nuclear-related materials and technology for peaceful purposes through Nuclear Suppliers Group (NSG), as allowed under the NPT and agreed in the JCPOA. Therefore,

EU+3 parties are supposed to support the purchases required by Iran for the construction of the redesigned Arak reactor, including transfer and supply of necessary materials, equipment, instruments, and control systems. However, Iran is not allowed to engage in reprocessing of spent fuel to extract plutonium for the next 15 years and all spent fuel would be sent out of the country under IAEA supervision.

Sanctions

Under the Obama administration, after the UN Security Council's endorsement of the JCPOA, all UN and related sanctions with regard to nuclear programme are to be gradually lifted. A key milestone in implementation of the JCPOA was achieved on 16 January 2016: the day the IAEA verified that Iran is fulfilling its commitments as per the deal and the EU lifted economic and financial sanctions in light of Annex V of the agreement.¹⁶ Other sanctions imposed by the UN and the US related to nuclear issue of Iran-were also lifted after the IAEA report of January 2016, in light of Annex II of JCPOA.¹⁷ However, the sanctions imposed by the UN and the US specific to missile programme, supporting terrorism in the region, and human rights abuses and violations remained intact. In case any violation of the JCPOA takes place, the P5+1 states reserve the right to re-impose all the sanctions lifted after the agreement under the 'snap back' mechanism.¹⁸ However, it is interesting to note that the deal does not specify a mechanism to punish a violator state other than Iran, except that the matter has to be referred to the UN where it can be vetoed by any of the permanent members of the UN Security Council.

Will President Trump quit the deal?

Iranian parliament, called Majlis, and Iranian spiritual leader Ayatollah Khamenei had extended support to the JCPOA, alongside the Democrats and former president Obama on the US side. ¹⁹ But the more conservative Republicans and the current US President Donald Trump pose a serious risk to the deal. ²⁰ The newly elected US President Donald Trump has threatened to quit the deal despite the fact that the JCPOA is considered a UN-backed international agreement, which was negotiated after an intense diplomacy of more than 15 years. It was also reported that President Trump only agreed to certify Iran's compliance after several senior officials in his administration convinced him to certify in

the greater interest.²¹ However, keeping in mind the unpredictable nature of President Trump, it is becoming more likely that he may eventually quit the deal. The Trump administration has pointed out a few weaknesses in the JCPOA, which—along with several other factors—could be used as a pretext to guit the deal in future:

- The sunset clauses (which restrict Iran's nuclear activities for specific time, i.e., 10-15 years) are problematic, as Iran would pursue nuclear activities after the limit lapses; even though Europeans have asserted that these activities can be renegotiated after the time limit ends.
- The Iran deal does not include restrictions on other Iranian controversial activities in the region. Most notably these activities include Iranian missile programme, its support to non-state actors like Hamas and Hezbollah, and Iranian meddling in regional conflicts, notably in Syria and Yemen.
- Another main reason could be the pressure from the state of Israel and Israeli lobbies functioning inside the US (like the American Israel Public Affairs Committee, the American Jewish Committee, the World Zionist Organisation, etc.). The Israeli businesses and lobbies are already maintaining strong relations with President Trump and his family to influence his decision-making process in favour of abandoning Iran nuclear deal.²²
- The JCPOA's 'snap back' provision, providing that any state party to the deal could give a thirty-day notice to exit, accusing the other of non-compliance, could be used by the US for the purpose. So if any state amongst the P5+1 accuses Iran of non-compliance, it could exit the deal and sanctions would be reimposed after thirty days. Although the US has not invoked the 'snap back' clause, it has said that the deal fails to restrain Iran's other controversial activities related to missile development and regional interference.

Various options for Iran in case the US quits the JCPOA

It remains debatable whether Iran actually has intentions of developing nuclear weapons, but even if Iran had such intentions, the

JCPOA ensures that Iran is unable to manufacture a bomb for at least a decade. Any Iranian violation of the terms and conditions of the deal would not remain concealed from the IAEA and the international community. Therefore, the comprehensive agreement has forced Iran to be more transparent regarding its nuclear programme, making it almost impossible for it to clandestinely manufacture a nuclear bomb for at least a decade. As of now, Iran has shown its commitment to stick to the JCPOA but in case the UN, EU, and the US reimpose sanctions and international firms wrap up their businesses from Iran, it would make the situation complicated and Iran might resort to some drastic steps. Under such circumstances, Iran might adopt any of the following courses of action:

Scrapping the Additional Protocol while remaining within the NPT

The head of the Atomic Energy Organisation of Iran (AEOI) Mr Ali Akbar Salehi warned in October 2017 that if the US terminated the JCPOA, Iran would stop the implementation of the Additional Protocol.²³ This means that Iran could restrict access to the IAEA inspectors, which it is otherwise obliged to provide to the IAEA without any hindrance under the Additional Protocol. More so, Iran might also stop sharing complete information regarding its nuclear fuel cycle and facilities as mandated by the Additional Protocol.²⁴ This could create an international crisis, as Iran's nuclear activities would be hidden from the worldview. Iran could use this opportunity to increase uranium enrichment up to a 20 percent level. Iran has already announced that it could resume production of highly enriched uranium in case the US quits the deal.²⁵ Consequently, the controversy with regard to Iran's nuclear programme would intensify, taking the situation back to a point where threat of a military action against Iran could appear plausible. The US and Israel might either consider initiating military action against Iran or could decide to use diplomatic pressure and economic sanctions to pressurise Iran to stop enrichment activities. Diplomacy and economic options might not work, as Iran would remain undeterred by claiming a moral high ground and maintaining that under the NPT such enrichment is permitted. Moreover, the situation might be different after the unilateral withdrawal of the US from the JCPOA, as Russia and China, in addition to a few European states, might consider the US at fault rather than Iran and,

thus, sanctions might not be as effective as before. So, in frustration, the Islamic Military Alliance to Fight Terrorism (IMAFT), created recently by the Gulf Cooperation Council (GCC) states, remains a plausible option for the US to strike Iran. This war could be triggered in case of missile strikes from Yemen on Saudi Royal Palaces or Holy Mosques, either fired by Houthis or managed through a false flag operation to win support of the Sunni states for an invasion of Iran. Pakistan will have to balance the odds between Shiite and Sunni rift, showing neutrality and opposing another military campaign in the Middle East, which could have devastating consequences for the region, besides exacerbating the sectarian tensions within Pakistan.

Maintaining the status quo with support from Russia and China

For Iran, another possibility could be of maintaining the status quo on the deal with the help of Russia and China, as the EU is likely to quit the deal under US pressure. The European firms would be more interested in doing business with the US, where they are likely to get more dividends, rather than Iran. Consequently, Iran's reliance on other regional states like India, Pakistan, Qatar, etc. would increase. Iran might also like to become part of the China-Pakistan Economic Corridor (CPEC), besides resuscitating the Iran-Pakistan-India gas pipeline. Closer Pak-Iran relationship might, however, strain the relationship between Pakistan and Saudi Arabia. Therefore, it would be an extremely tight walk for Pakistan to balance the equation between Iran and Saudi Arabia. Iran and Saudi Arabia would continue using proxies for their own benefit in the region, especially in Syria and Yemen, which will keep the situation in the region unstable and tense. In the longer run, Pakistan would have to play a mediating role between Saudi Arabia and Iran for the sake of regional stability. Such a role could be facilitated with the help of other regional powers, especially Russia and China. A normal relationship between Iran and Saudi Arabia would also help in bringing sectarian harmony inside Pakistan.

Abandoning the NPT in pursuit of nuclear weapons

Article X(1) of the NPT gives the right to each party to withdraw from the treaty, "if it decides that extraordinary events, related to the

subject matter of this Treaty, have jeopardised the supreme interests of its country."27 Thus, citing the US violation of the JCPOA and reimposition of sanctions, Iran could take the radical step of quitting the NPT and reserving the option to initiate an overt nuclear weapons programme. Although this appears very unlikely, it is still conceivable, especially in the backdrop of the North Korean withdrawal from the NPT in 2003. Nevertheless, Iran might only do this once it is sure that it is only days behind from assembling or manufacturing a nuclear device. This would certainly result in the outbreak of another major war in the Middle East and the US and Israel would likely take a joint military action, possibly involving aerial and missile attacks on Iranian nuclear installations. Israel has a declared policy of 'never again', which means that Israel would never allow emergence of a nuclear state in the Middle East.²⁸ This strike might or might not have the UN backing and might even involve an implicit Saudi role as well. This could allow Iran to retaliate against Saudi Arabia, Israel, or even US targets in the Middle East. However, it would be a worst case scenario if the US manages to use the IMAFT to wage a war against Iran. Pakistan will have to guit the coalition under such circumstances. This war would have devastating consequences for the region and Pakistan, which will have to align with the policy adopted by regional powers like China and Russia under the ambit of UN resolutions. Pakistan will also have to consider policy options amid the possibility of being the next target for being the only Islamic state posing a potential danger to the West after elimination of the Iranian threat.

Prospects of regime change in Iran

The Trump administration is trying for a regime change in Iran. The US has already made plans for it. Although during the 2009 public uprising in Iran, former US president Barack Obama had instructed the CIA to stand down but this may not be the case with President Trump.²⁹ Any such uprising could have devastating consequences and a possible civil war in Iran, likes of which have already been witnessed in Syria. The continued war and stalemate in the Levant due to external actors' intervention has resulted in a humanitarian crisis. This crisis has resulted in deaths of hundreds of thousands of civilians and at the same time displacing millions of others from their homes. According to estimates,

more than 4.2 million Syrian refugees have sought refuge in Turkey, Jordan, Lebanon, Egypt, and Iraq while another 680,000 have fled to Europe.³⁰ The outbreak of a civil war in Iran would further deepen the refugee crisis and seriously affect Iran's neighbouring countries in the region and beyond, including Pakistan and Turkey. The fleeing refugees to neighbouring states and Europe would seriously affect their economies, demography, and law and order situation, besides fuelling a fresh wave of terrorism.

Iran's nuclear breakout capability and nuclear arms race in the region

There are varying estimates regarding Iran's nuclear breakout capability. Breakout capability implies Iran's capability to produce enough HEU or Plutonium to manufacture at least one nuclear device from the day Iran decides to develop the bomb.31 Iran has multiple types of centrifuges, including IR-1, IR-2m, IR-4, IR-5, IR-6, IR-6s, IR-7, and IR-8 types.32 As per the deal, Iran cannot start mass production of IR-6 and IR-8 types of centrifuges for 10 years from the signing of the JCPOA. In addition, Iran can only install one centrifuge of IR-6 and IR-8 for research purposes for these 10 years. IR-6 and IR-8 centrifuges have a relatively complex design and if Tehran moves forward with enhancing its uranium enrichment capacity for mass-production through these advanced centrifuges, its presumed breakout time towards manufacturing nuclear weapons could significantly reduce. According to the spokesperson of the AEOI, the enrichment capacity of IR-8 type centrifuges is 20 times more than the IR-1 type, which means that Iran's capacity to produce HEU would increase 20 times if it plans to use IR-8 type centrifuges for enrichment at a mass scale.33 Former CIA deputy director Michael Morell said, "If you are going to have a nuclear weapons program, 5000 [centrifuges] is pretty much the number you need."34 Another nuclear expert, Daryl Kimball of the Arms Control Association said, "With that, it would take 12 months for Iran to produce enough material for one bomb."35 In 2015, the Belfer Centre estimated that with 9,000 operational centrifuges Iran's breakout time would be approximately three months and with 6,500 operational centrifuges this time could double to six months.³⁶ But this would only be possible if Iran openly enriches uranium without concealing its activities and facilities. Concealing and operating

centrifuges would be an extremely difficult task, resulting in significantly increasing the breakout time by a few years. Nevertheless, in case the JCPOA falters, Iran's breakout time to develop a nuclear bomb would not be in years but months and it would be able to conceal some of the activities if it abandons the Additional Protocol. Iran's pursuit of nuclear weapons could ignite a nuclear arms race in the region and beyond. Therefore, other states in the region perceived to be in strategic competition with Iran, especially Egypt, Turkey, Saudi Arabia, and the UAE, could possibly look for a nuclear weapon option, precipitating a conventional and a nuclear arms race. The UAE already has plans to construct four nuclear power plants by 2020, first of which is likely to become operational by end of 2017. Saudi Arabia also plans to construct 16 nuclear power reactors by 2031. Saudis have already signed nuclear deals with Japan and South Korea for constructing nuclear power plants and that expertise can become extremely useful for a weapons programme if Iran moves towards the path of developing nuclear weapons.

Conclusion

It is still not clear whether President Trump would actually abandon the JCPOA or not. However, Pakistan must make contingency plans if that happens. Pakistan will have to wait and see how the situation further shapes, while strongly supporting the JCPOA at the same time. Moreover, Pakistan should also engage in consultations with all the important states in the region, especially China, Russia, Turkey, as well as the Shanghai Cooperation Organisation (SCO) and GCC states, to formulate a comprehensive strategy in case the US abandons the deal. A mediating role of Pakistan to bridge the gap between Saudi Arabia and Iran may also help in improving the overall regional situation. Pakistan will have to convince Saudi Arabia that a new war in the region would not only lead to further instability in the region but could also have dangerous outcomes for the Saudi regime. Pakistan may also try convincing important regional actors like China, Russia, and Turkey to find a regional solution in case the deal is abandoned. After the deal ends, the threat of an Israeli strike on Iran would become likely, which would have serious implications for the whole region and even beyond.

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MARITIME FUTURE OF THE INDIAN OCEAN: NEED FOR A REGIONAL COOPERATIVE SECURITY ARCHITECTURE

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Abstract

The Indian Ocean Region (IOR) has morphed into the geopolitical epicentre of the 21st century. The shifting global balance of power, evolving traditional and non-traditional security challenges, and a vigorous ensuing arms race are the harbingers of renewed tensions in the Indian Ocean. The IOR is replete with multifarious issues that cannot be rectified or resolved by any single political entity. To ensure stability across the oceanic sphere of the IOR, a coordinated and sustained effort towards cooperation at a regional as well as the international level is the only way forward. Order at sea can be ensured through cooperative mechanisms amongst states driven by their own national interest and stakes in the region.

"The pessimist complains about the wind; the optimist expects it to change; the realist adjusts the sails."

—William Arthur Ward

The world's third largest ocean covering 27 percent² of the oceanic sphere has long been dubbed as the *Ratnarka* (the mine of the gems) in Sanskrit language and quite rightly so. The geopolitical and geo-economic significance of the aquatic expanse is unquestionable. The Indian Ocean Region (IOR) contains approximately 40 percent³ of the world's oil and gas reserves and its adjoining landmass is home to

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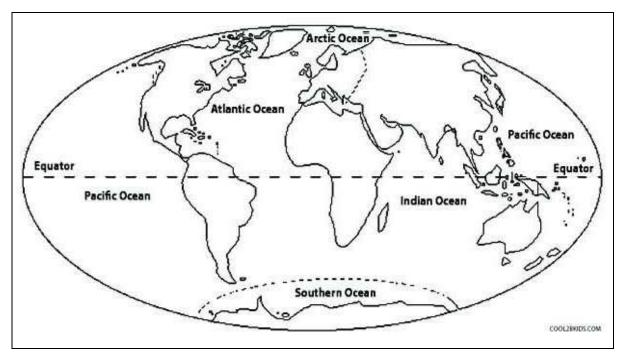
about one-third of the world's population. About 70 percent of the world's oil and 33 percent of global trade traverses through the strategic sea lines of communication of the IOR.⁴

The geography

With an area extending over 70,560,000 square kilometres, the 'bluish yolk' is bounded by the continents of Africa, Asia, and Australia.⁵ In comparison to the topographical features of other oceans, the Indian Ocean is a relatively enclosed body of water garlanded by a landmass. As of 2000, the International Hydrographic Organisation (IHO) demarcated a fifth ocean comprising of the southern parts of the Atlantic, Indian, and Pacific oceans. The momentous decision by the IHO has stripped the Indian Ocean of the area to the south of 60 degrees south latitude.⁶ Now, the Indian Ocean is enclosed by 36 key states and 20 peripheral states—extending from east to west—and to the south now sprawls the Southern Ocean.⁷

Another striking geographical feature that has garnered a lot of attention towards the waters of the Indian Ocean is the peculiar placement of its chokepoints, such as the Strait of Malacca (Indonesia-Malaysia), the Strait of Hormuz (Iran-Oman), and Bab el-Mandeb (Dijibouti-Yemen). In this regard, the significance of the Indian Ocean cannot be overstated, as it contains vital and crucial sea lanes on which the economic health of the globe invariably depends.⁸ The global market relies on the free flow of trade and reliable transport. The disruption or blockage of any of the chokepoints can cause immense problems in energy/trade markets.⁹

Demarcation of world oceans



Source: http://marcolemcke.com/world-coloring-pages/world-coloring-pages-world-map-coloring-pages-for-kids-on-world-coloring-pages-sea-world-colouring-pages/

The coastal configuration

The Indian Ocean is replete with distinguishable coastal configurations, such as barrier islands, deltas, estuaries, salt marshes, mangrove swamps, coral reefs, cliffs, lagoons, beaches, and dunes. The Indian subcontinent houses the most expansive beach area and also contains the largest mangroves forests in the world. The United Nations Educational, Scientific, and Cultural Organisation (UNESCO), in 1987, recognised the significance of the area, thereby, designating it as a World Heritage site. In addition, the IOR is also deemed to be the most tectonically active coast of the world where its mud flats and salty wastes are more than often prone to floods.¹⁰

The ecosystem

Owing to depleting land resources, the nation states have now diverted their attention towards exploration and exploitation of the oceanic sphere. Coastal and marine environment has the potential to deliver essential goods and services and provide ample supply of minerals, and food/fisheries. It is crucial in regulating hydrological and nutritional flows. It has been estimated that annually the ecosystem of the oceans provides goods and services worth up to \$21 trillion, half of which is derived from coastal configurations, such as estuaries and coral reefs.¹¹ The Indian Ocean is a repository of natural resources, living and non-living.

In 2010, approximately 14.6 percent of the world's total marine catch came from the waters of the Indian Ocean, which reaffirmed the notion that the Indian Ocean has transfigured as a lynchpin of regional and global food security. By the year 2010, the eastern hemisphere of the Indian Ocean had become the second most heavily fished area of the world in terms of metric tonnes of fish caught, i.e., approximately 7 million, closely following the Northeast Atlantic Ocean at approximately 9 million metric tonnes. It has been indicated that swelling population across the littoral states that is projected to rise up to 3.18 billion, adding 690 million to the IOR's 2010 population, will endanger the marine resources if the current trend of over-exploitation continues.¹²

Moreover, multiple human activities pose a grave threat to the resources and functions of the ecosystem of the IOR. Coastal developments for the purposes of aquaculture, extensive construction of

roads and buildings, and modernised urban infrastructure have been largely detrimental to mangroves, coral reefs, wetlands, and other aquatic organisms. Harmful fishing practices—such as shark finning, blast fishing, poison fishing, *muro-ami* (use of encircling net together with pounding devices), push netting, and coral mining for construction of buildings and coral bleaching—have already caused immense devastation. Around two-thirds of the Indian Ocean's 12,070 km of coral reefs and approximately one-fifth of the 3,175 km corals in the inlet waterway of the Indian Ocean and the Red Sea are critically endangered.

Deciphering the maritime past and developing trends in the IOR

Maritime past

Since times immemorial, the IOR has remained a melting pot of civilisations and a fissuring cauldron of disparate cultures. Sumerians, Persians, Egyptians, Portuguese, Dutch, and the Chinese have all sailed these waters for trade and expeditionary ventures in the times of yore. It has long been a medium of frantic trade activity. As per maritime historians and scholars, trade connections via the IOR even predate the Viking forays into the American land by 4,000 years.¹³

Although the European/American wars were fought and lost in their adjacent waters, the IOR gradually became the epicentre of conquest and clamour. For well over two centuries, the British Empire held sway over the IOR. During the 19th century, owing to Britain's absolute control over the IOR, it came to be referred to as 'Britain's lake'. However, the status quo underwent a tumultuous shift in the 20th century, following the devastation of the World Wars, as the war effort slackened British supremacy in the IOR. Following the Allied victory and with the onset of the Cold War, a wave of decolonisation swept across Asia, Africa, and Eastern Europe resulting in the mushrooming of new and at times unstable states.

Another fundamental shift in the geopolitical realm was that the increasing influence of Great Britain across the land and waters of the IOR had subsided and the void was filled by the United States. The US, through its military prowess, became the sole superpower towards the

late twentieth century and quite effortlessly tilted the balance of power in its favour.

Maritime present

Long relegated by Western scholars as an ocean of secondary importance in comparison to the Pacific and the Atlantic, the Indian Ocean is now emerging as a key maritime region. The attention has now been diverted to its strategic sea lines of communication and enhanced the importance of its ports and strategic natural resources and energy reserves. Moreover, the transformation of peripheral countries—China and India—into affluent states has changed the dynamics of the Indian Ocean politics as it has now become the arena replete with security issues, environmental challenges, weapon proliferation, burgeoning population, terrorism, and above all, a key source of energy.¹⁴

The IOR can be deemed as a burning cauldron brimming with grave security threats and is rightly declared as the nuclear flashpoint of the world. The United States' unequivocal and explicit support for India's entry into the Nuclear Suppliers Group (NSG), as well as the Logistics Exchange Memorandum of Agreement (LEMoA) between the two states, has raised quite a few eyebrows. It is predicted to escalate into an unwarranted arms race in the region. The tit-for-tat missile testing by the archrivals, India and Pakistan, further disturbed the security fabric in the region. Moreover, the IOR has become the locus of conflicts and wars. In a single calendar year of 2009, a total of 170 political conflicts were estimated to have primarily occurred in the IOR. In addition, transnational terrorist networks may become a hindrance to the free flow of sea traffic in the maritime domain.

As America's global clout recedes, China is filling the power vacuum in the Indian Ocean. By adopting a pragmatic realpolitik approach in securing its national interests, China has launched an ambitious commercial and economic drive overseas. Chinese infrastructural development along the littoral states of the Indian Ocean and investment in developing industrial zones has created quite the brouhaha. The One Belt One Road (OBOR) is one such initiative. As part of Chinese grand strategic design, OBOR is aimed at reviving and expanding the ancient trade routes and economic ties with Central Asia, South Asia, and Europe. Maritime Silk Road illustrates a master-stroke of Chinese diplomacy and can be envisaged as a projection of its naval

supremacy in the region to offset US presence and to secure its sea lines of communications or its energy lifelines. A major node of this initiative is the China-Pakistan Economic Corridor (CPEC), which has gained immense traction and is lauded as a game-changer for the participant nations.¹⁵

Amidst the current developments, it will be utterly prosaic to reiterate the significance of the IOR. It has long served as a political chessboard for the great power interests. India's Kautilyan posture is a source of anguish for regional states. Growing discontent between regional rivals India and China has further escalated regional security imperatives.¹⁶

Regional maritime environment

The contemporary world order is in a state of flux. It is now characterised by a multipolar world with rising centres of political and economic power. Centre of interest and activity has now shifted from the Atlantic to the Asia-Pacific. To ensure economic ascendency, access to reliable oil and gas reserves is essential for state supremacy and survival. In the face of fierce global competition and in pursuit of securing energy supplies, a dominant part of which is circulated through sea arteries, oceans are the most critical conduit for transportation. Thence, to maintain an uninterrupted energy flow, major powers have bolstered their navies in order to assert strategic dominance in the oceanic realm to serve their political and economic ends.

In this context, the IOR has become a medium of strategic coercion and a ball game for maritime jurisdictional wrangling. Countries with higher stakes in the region and its flanking waters will rebalance their naval forces to maintain predominance.¹⁹

Another striking feature of the IOR is that it has now become more nuclearised in comparison to other oceans. Not only do regional navies patrol the waters of the Indian Ocean for the purposes of ensuring the free flow of container/ship traffic, preservation of maritime security, and hegemonic control but warships of extra-regional navies have also become a constant factor. This has further added to the complexity of the security framework of the region and requires immediate rethinking on the response options.

Contemporary cooperative architecture

The Indian Ocean Naval Symposium

The Indian Ocean Naval Symposium (IONS), a maritime platform, is an initiative of the Indian Navy. With the pertinent theme of 'Contemporary Transnational Challenges – International Maritime Connectivities' for its inaugural session in 2008, the forum was aimed at increasing collaboration in terms of collective security amongst the littoral states of the Indian Ocean. IONS is driven by its agenda to enhance maritime cooperation, dissemination of knowledge and expertise to tackle issues confronting the region, and to generate mutual understanding. IONS is an exceptional forum and one of its kind for naval officers, particularly naval chiefs, which provides ample opportunity for discussion and interaction on common issues and challenges that haunt the IOR.²⁰ The stated aim of IONS is:

...to attain mutually beneficial maritime security outcomes within the Indian Ocean. These outcomes will be achieved through the cooperation of all members in determining remedies relevant to regional maritime security.

(IONS Charter)21

Currently, IONS is a multinational forum comprised of the following 10 member states: Australia, Bangladesh, France, India, Iran, Oman, Pakistan, Singapore, Thailand, and the United Arab Emirates (UAE).²²

It has dawned upon the naval leadership that in the fast-paced information age, adventurism could be disastrous and it is only through a round of parleys that peace can be ensured. In a similar vein, the theme for the current year was decided to be 'information sharing and interoperability' and the working group meeting was hosted under the auspices of Pakistan Navy.²³

IONS has proved to be the most effective forum for planning and conducting activities directed towards dispersing maritime knowledge, most notable being open essay competitions, technical seminars, and anti-piracy conceptual and operational workshops.²⁴ A sustained and coordinated effort amongst the dynamic member states will add to the

vitality and dynamism of IONS in the face of diverse security issues and challenges.

The Indian Ocean Rim Association

A regional cooperative initiative of Indian Ocean Rim countries, the Indian Ocean Rim Association (IORA) was established in 1997 in Mauritius. The aim and purpose of the initiative was to promote economic and technical cooperation. It brings countries of varying sizes, economies, and diverse cultural backgrounds onto one platform.

It is a grouping of 19 member states: Australia, Bangladesh, India, Indonesia, Iran, Kenya, Malaysia, Madagascar, Mauritius, Mozambique, Oman, Seychelles, Singapore, South Africa, Sri Lanka, Tanzania, Thailand, UAE, and Yemen. Furthermore, there are five dialogue partners: China, Egypt, France, Japan, and the UK.

The Indian Ocean Marine Affairs Cooperation

The Indian Ocean Marine Affairs Cooperation (IOMAC) was the brainchild of the Sri Lankan leadership and has been declared as the most comprehensive cooperative mechanism aimed at expanding ocean governance and management. IOMAC is the only regional initiative that emerged in the United Nations Convention on the Law of the Sea (UNCLOS) process.

At present, IOMAC has nine member states: Indonesia, Iran, Kenya, Mauritius, Mozambique, Nepal, Pakistan, and Sri Lanka. The main objectives and target areas of IOMAC are integration of marine sector into national development strategies, catering for the rights and needs of land-locked and geographically disadvantaged states, acquisition and dissemination of information, harmonisation and strengthening of management arrangements, designation of focal points, development of maritime transport services, cooperation within international organisations, cooperation at international conferences, operational arrangements, and implementation of policies.²⁵

In such times of multifarious challenges, IOMAC is fashioned to adopt a functional approach towards integrated marine affairs management, whereby it has facilitated governments to participate in and comprehend the nature and scope of the cooperative framework.

The International Maritime Conference

The International Maritime Conference (IMC) is an initiative of the Pakistan Navy. The IMC aims to foster maritime security and enhanced cooperation between participant countries. It has provided a forum for intra-regional and inter-regional maritime experts to formulate overarching methodologies. These methodologies and policy frameworks are aimed to combat terrorist onslaught in the IOR, ward off uncertainty caused by disasters owing to climatic changes, and improve governance and ocean management through sustained cooperative and coordinated efforts.

Existing maritime challenges and issues

Since the end of the Cold War, the concept of national security has undergone a fundamental metamorphosis. The twenty-first century saw state-centric traditional security concerns—wars, conquests, colonisation, imperialistic ventures—becoming outmoded. A new set of multifarious challenges has emerged, which confronts all states equally. Non-traditional threats such as piracy, terrorism, arms proliferation, illegal fishing, and drug and human trafficking are now prevalent in the IOR. In the new paradigm, the conventional state-based threats, alongside the violent non-state actors and hybrid warfare, are also surfacing. Nowhere is this more pronounced than in the Indian Ocean and its peripheries.²⁶

The Indian Ocean has emerged as the geopolitical epicentre in the twenty-first century and has assumed immense significance owing to the growing economic dependence upon trans-oceanic trade, rising demand for energy reserves, and resource bonanza. Robert Kaplan has aptly stated:

A map of the Indian Ocean exposes the contours of power politics in the twenty-first century.²⁷

Even though the Indian Ocean is touted as the region of economic opportunity, the prevailing environment is such that the threat of impending wars, conflicts, and a nuclear war looms large. The region is fraught with fault-lines emanating from external military interventions, shifting strategic alliances, a contest for dominance, and possible

reversal of international agreements like the Iran Nuclear Deal—Joint Comprehensive Plan of Action (JCPOA)—between Iran and the P5+1 states. Added to this volatile situation is the Middle Eastern meltdown, an outcome of the US invasion of Iraq and Afghanistan. The region has now become a cauldron of strife, bloodshed, and political power struggle. It will cast deep shadows on the IOR.

The economic buoyancy of the IOR, in short, is ruptured by innumerable traditional and non-traditional challenges that have turned the region into an 'arc of instability'.

Being fully cognizant of the magnitude of threats emanating from the maritime domain, it is pertinent to undertake a threadbare analysis of the varying degrees of the threat perceptions and challenges in the IOR:

Traditional security challenges

Evolving security environment

The IOR's security environment has undergone a fundamental shift. This radical change has been brought about through the advent of globalisation, economic upsurge, migration, shifting demography, and development on its shores.²⁹ The Indian Ocean, since antiquity, has remained a corridor between the Eastern and the Western world. Although it was relegated to a marginal role in the 20th century, it suddenly rose to a position of prominence after 9/11, when the US spearheaded the war against terror in Afghanistan and Iraq one after the other in the Indian Ocean. This propelled the oceanic realm of the Indian Ocean into the global geopolitical discourse and debate, raising concerns amongst major players. Furthermore, the renewed US attention encapsulated in its 'Rebalance to Asia', enshrines the geopolitical significance of the region in the current era. This renewed focus on the Indian Ocean by the major stakeholders (the US, China, and India)—who have shown a keen interest in the altering balance of power and regional peace and stability—has also increased the importance of the region in terms of global commerce. Hence, it becomes imperative that a stable security mechanism based on a cooperative framework between the stakeholders of the IOR be created to neutralise traditional and nontraditional security threats.

Since the Westphalian state system has somewhat become obsolete because the nation-state can no longer exercise supreme

authority over the use of force in the face of conflicts involving the increasing influence of non-state actors—terrorist outfits, multi-national corporations (MNCs), and trans-national corporations (TNCs). The conflict spectrum in the IOR has widened and the possibility of 3rd, 4th, and 5th generation warfare³⁰ is likely to be waged. Moreover, owing to the presence of failed/failing states—where political, economic, and social disparity abounds—the IOR is also susceptible to sub-conventional warfare. In addition, terrorism has made extensive inroads in the IOR and the presence of terrorists gives rise to a greater possibility of the occurrence of limited, conventional, and asymmetric wars under the nuclear umbrella.³¹

Arms race and the security dilemma

An upswing in the economic growth has swelled defence budgets of major powers and their naval forces are now more strongly driven towards acquiring new vessels and capabilities. This razor-sharp focus and persistent effort is evident in the IOR, which, in recent years, has experienced a vigorous arms-race, exemplified by "acquisition of platforms, weapons, & sensors such as anti-ship or land attack cruise missiles, submarines, anti-submarine, capabilities (ASW), sea-based air and missile defence capabilities, electronic warfare capabilities."³²

With an evolving balance of power and emergence of economically strong states with robust naval and military presence, a radical shift is underway, which will be profoundly destabilising. This is likely going to exacerbate the 'security dilemma' and one country's ambitious defence readiness will unnerve the regional countries sparking countervailing similar reactions. Based on the Anglo-German naval arms race of 1909-14, analysts have outlined the following common characteristics of an arms race:

- Driven by international rather than domestic imperatives;
- Usually bilateral;
- Intense in terms of effort, rapidity, and expression;
- Associated with high levels of tension;
- · Operationally specific; and
- Indicative of high strategic stakes.³³

Almost all of the aforementioned characteristics are apparent in the twenty-first century US-China-Russia-India-Pakistan relationship prevalent in the IOR. Due to the altering balance of power in the region, particularly between China and the US, there is a strong likelihood of increased friction between states and their allies in the region. This situation is aptly covered by the Australian Defence White Paper in the following words:

As other powers rise, and the primacy of US is increasingly tested, power relations will inevitably change. When this happens there will be the possibility of miscalculation. There is a small possibility of growing confrontation.³⁴

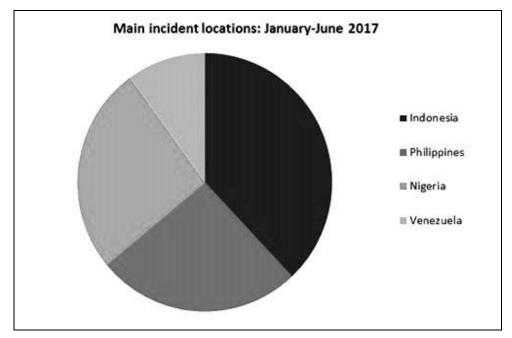
Added to the fragility of this insecure environment is the nuclear factor that is the most worrying aspect of all.

Non-traditional security challenges

Piracy

Piracy in the IOR has remained the most recurrent and critical maritime security threat since mankind sailed towards the oceanic sphere.³⁵ Travel and trade accounts are replete with evidence that territorial waters of the Indian Ocean were rife with piracy since the twelfth century. Towards the end of the twentieth century, piracy in the IOR was rampant to such an extent that redefinition of piracy as 'a crime against humanity' was included in the UNCLOS.

Concentration of piracy attacks in IOR



Source: International Maritime Bureau, http://www.hellenicshippingnews.com/ the-international-maritime-bureau-imb-publishes-its-second-quarter-report-on-piracy-and-

An exponential increase in maritime traffic of the Indian Ocean through congested and strategically located chokepoints—Strait of Malacca, Strait of Bab el-Mandeb, and Strait of Hormuz—was the paramount cause of incidents of piracy at sea.³⁶ To ensure safe passage through narrow chokepoints or the bottlenecks require vessels to reduce speed thus becoming exposed to attacks.

Owing to bad governance, corruption, and permissive social and political environment³⁷ in failed/failing states across the Indian Ocean littoral had led to a higher rate of pirate attacks. This is best illustrated by the example of Somalia, where economic stagnation, prolonged tensions, and disputes had transmuted the state into a hotbed for piracy.

A recent report on piracy and armed robbery published by the International Maritime Bureau (IMB) sheds light on the continuing decline in the trend of piracy incidents. The report states:

87 incidents have been reported in the first six months of 2017, with 63 ships boarded, 8 attempted attacks, 4 ships hijacked and 12 ships fired upon. This represents a decrease from 2016 when there were 97 reported incidents in the same period. In relation to crew, the IMB reports that 63 crew members were taken hostage, 3 injured, 2 killed and 41 kidnapped. The majority of the 87 reported incidents occurred in four countries: Indonesia, Philippines, Nigeria and Venezuela.

Narco-terrorism

Relentless wars, the onslaught of terrorism, and the evolving geopolitical landscape have primarily facilitated narcotics production and distribution across the IOR.³⁸ Money earned from narcotics is the mainstay for the financial stability and sustenance of terrorist organisations.³⁹ Asia is home to two-thirds of the world's opiate users, which has exponentially increased the risk of blood-borne infectious diseases amongst the vulnerable population.⁴⁰

Marine pollution

The Group of Experts on the Scientific Aspects of Marine Pollution of United Nations (GESAMP) defines marine pollution as follow:

Introduction by man directly or indirectly of substances or energy into the marine environment (including estuaries) resulting in such deleterious effects as harm to living resources hazards to human health, hindrance to marine activities including fishing, impairment of quality for use of sea water and reduction of amenities.⁴¹

Almost all the countries across the IOR are in their developmental phase and with a gradually expanding industrial base. The degrading effects of maritime pollution have become a source of anguish, despite the fact that industrial and agrarian activities have ceaselessly taken place through centuries. The pollution predicament is felt largely near coastal areas due to the circulation of waters, nature of the bottom topography, and relentless release of domestic and industrial discharges emanating from the increasing urbanisation and industrialisation across the region.⁴²

According to one estimate, the amount of oil and petroleum discharged into the Indian Ocean is "around 3–5 \times 10 6 tonnes annually which is approximately 40% of the total petroleum spill of the world oceans. The total recorded incidents of accidental oil spills in the Indian Ocean is 38 tanker and non-tanker disasters and 22 blowouts during the period of 1975 to the mid of 1988, resulting in a general tendency to ascribe 'Tar lumps' or 'Oil Slicks' afloat everywhere. The pollution caused by heavy metals and their salts continental wash and river the turbidity load by 24 \times 10 8 tonnes annually."

Maritime terrorism

As reliance on sea-borne trade rises, so does the risk of terrorist activities in the maritime domain. A suicide attack was carried out against USS Cole in 2000 at the Port of Aden, Yemen. Since then, a slew of terrorist activities have taken place: a small boat rammed against French MV Limberg along the coast of Yemen, Japanese oil tanker M-star was attacked in Strait of Hormuz. In 2004, a splinter group of Al-Qaeda attacked Iraq's offshore Oil Terminals-AlBashrah and Khor-al-Amayah. Only 2 days closure of the terminals inflicted a loss of \$40 million in oil export revenues.⁴⁴

About 90 percent of inter-continental cargo and approximately 63 percent of the global oil production traversing through maritime routes face the risk of interception.⁴⁵

Climate change

The Himalayan-Karakoram-Hindukush mountain range is the world's 3rd largest ice mass after the North/South poles. It has been estimated that the mountain range has warmed up to 1.5°C which is double the average temperature (0.76°C) recorded in the last 3 decades. Owing to this heat wave, the Indus Delta has become prone to torrential rains, frequent tropical cyclones, recurring floods, and droughts.

The vulnerable situation is not only due to the melting of glaciers at a fast rate but also due to the rising sea level. Also, the intrusion of saline water is further causing havoc in the agricultural lands along coastal areas. The effects of rising sea level, seawater intrusion, and land subsidence will further lead to coastal erosion, coastal plain flooding, inundation of deltaic plains, salinisation of aquifers and soils, and alarming loss of habitats for wildlife.⁴⁶

Maritime future of the IOR

We can all look at the types of ships and the types of airplanes and the number of airplanes--that's interesting and worthy of note. But it is how countries elect to use those capabilities, and what purposes are that they see, and how they will interact with other navies.

Admiral Gary Roughead US Chief of Naval Operations, in China for talks and an international fleet review in 2009⁴⁷

The naval forces in the IOR have evolved in an unprecedented manner and a substantial strategic shift in the region is underway. The shifting and evolving global balance of power will be downright destabilising. This will give way to the following two scenarios:

Scenario I: proclivity towards competition

Technological advancement is likely to create an environment of peer competition between states, between navies, and between military forces. This may urge the IOR states to enhance sea control, defence of trade, and territory and territorial waters through coercive means. Furthermore, the use of nuclear deterrent and ballistic missile defence will be an obvious choice.

Scenario II: proclivity towards cooperation

As articulated by Alfred Mahan: "commercial interest of the sea powers ... lie in the preservation of peace." The wave of globalisation in the 21st century has created an inter-dependent world where cooperation is the only antidote to scarcity and backwardness. Economic wellbeing can only be ensured through collaborative efforts on issues of common interest. Alfred Mahan was well aware of the phenomenon of connectivity of states and its implications. He further prognosticated:

This, with the vast increase in rapidity of communication, has multiplied and strengthened the bonds knitting together the interests of nations to one another, till the whole new forms an articulated system not only of prodigious size and activity but of excessive sensitivities, unequalled in former ages.⁴⁹

Applying this dictum of Mahan in the IOR, there is a low probability of such a cooperative scenario to emerge as long as the superfluous role of extra-regional countries continues to shape the political order of the region.

Suggested cooperative security construct

The developing maritime security environment in the Indian Ocean points to a menacing future marred by contests for military dominance underpinned by non-traditional challenges. Some of the political differences are hard to resolve and are victims of ingrained narratives. To overcome this muddled setup, a bottom-up approach is needed.

This will require navy-to-navy contact and expanded cooperation between maritime security agencies. We, the people of Asia, must realise and come to grips with the fact that a Tsunami will never discriminate between a friend or a foe, a nuclear or a conventional naval force, and urban or coastal centres, but it may uproot or even wipe out entire swathes of populations, towns, and cities.

Future historians may uncover in the debris of the Indian Ocean, along with shipwrecks, traces of a civilisation whose differences led to its annihilation. Here are few starting points to avoid an impending catastrophe:

- Joint seminars (IONS-IMC)
- Joint naval exercises (Malabar-Aman)
- Increased interaction between maritime think tanks: exchange programs

Furthermore, in order to ensure good order at sea or maritime security, it is essential to undertake maritime capacity building at institutional, national, and regional levels.

At the institutional level, duplication of roles and responsibilities should be avoided and a clear demarcation should be made by assigning agency-specific duties and legitimising it through legal framework or regulations.

At the national level, command and control is the defining feature and disparate maritime challenges can be sorted out through effective maritime domain awareness and effective surveillance of its zones through satellites, aircraft, drones, and surface vessels. To reiterate the abovementioned notion, duplication of responsibility should be avoided by a clear delineation between state agencies—coast guards, marine police, and intelligence networks.⁵⁰

At the regional level, a forum like IONS can help in generating the capacity of member states by assisting them in areas of information sharing and interoperability.

Conclusion

I find the great thing in this world is not so much where we stand, as in what direction we are moving: To reach the port of heaven, we must sail sometimes with the wind and sometimes against it – but we must sail, and not drift, nor lie at anchor.

Oliver Wendell Holmes⁵¹

The maritime nature of the IOR as it is heavily dependent upon sea-borne trade, energy security, and marine resources implies that the maritime future of the IOR will be fraught with innumerable challenges. However, the need for a regional cooperative security architecture is indispensable. The US's continuous preoccupation with the IOR and the reactive strategic postures by China will continue to generate strategic challenges and the resultant shifting alliances will be the determinants of the maritime future of the IOR. For that reason alone, the IOR requires renewed attention to ensure peace and stability.

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manpower and eventually with the invention of rifled musket, machine guns, breech-loading weapons, states entered into another generation, i.e., 2nd generation of warfare. The 3rd generation warfare was centered upon leveraging speed, stealth, and surprise to bypass enemy lines so as to collapse forces from the rear. The 4th generation warfare, however, is characterised by post-modern ethos—loss of state's monopoly over the use of violence—where the lines have blurred between war and politics, combatants and civilians, and an ingress by non-state actors is pronounced.

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ABSTRACTS OF RESEARCH PAPERS PUBLISHED IN VOL. XXXV, NO.3, SUMMER 2017

TOWARDS ACHIEVING THE SDG OF ENDING POVERTY IN SOUTH ASIA: A CASE STUDY OF INDIA AND PAKISTAN

SYED IMRAN SARDAR

Abstract

Ending poverty by 2030 in all its dimensions is indeed challenging. It is even more challenging for countries that remained off-the-track in the previous Millennium Development Goal of halving poverty by 2015. The reason behind it was twofold: lack of will and the states' vulnerability to inter and intrastate conflicts. Both apply to India and Pakistan, the two largest and the most populous states in South Asia. Since their inception, the relationship between both states has never been smooth, resultantly, human security was compromised. In line with this thinking, this paper purposely takes India and Pakistan as a case study to highlight the state of poverty by monitoring progress made in the Millennium well as the Sustainable Development Goal of eradicating poverty so far. While examining, the paper argues that ending poverty by 2030 would remain a pipedream, unless both India and Pakistan prioritise non-traditional issues and put serious efforts into the global mission of poverty-free world.

APPROPRIATION AND FICTIONALISATION OF BUDDHA'S LIFE BY THE WEST

RASIB MEHMOOD, SHAHEEN KHAN, KAINAT ZAFAR

Abstract

Siddhartha, a novel written in 1992 by a German author Herman Hesse, is an appropriation and re-telling of the Gautama Buddha's story of enlightenment in a much simplified manner. The novel has mystified its readers and critics everywhere in the world. This is because Gautama Buddha's life history has been appropriated by a German writer in ways that not only personalise and naturalise what the Eastern followers of Gautama Buddha might consider 'revelation' but also Westernise it to a great extent. The East considers the Buddha as a visionary religious leader with divine powers, but Hesse has shown him as a modern man who validated his own experience, observation, and analysis over others and tradition. So Hesse's Siddhartha is a triumph of 'reason' and 'experience' over superstitious reverence for the supernatural. This view or perception of the Buddha has implications for the epistemological claims of the postcolonial world. This paper aims to explore, argue, and establish the hidden implications of Hesse's Siddhartha for the postcolonial world we inhabit.

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THE 'WORLD ORDERS' IN CENTRAL ASIA: UNITED AGAINST POLITICAL ISLAM?

ADAM SAUD

Abstract

Central Asia is a region of immense importance for all major powers, as well as regional states, for their diverse interests. There is more of a divergence of interest than convergence, as far as major powers are concerned. The situation is so complex that this involvement and divergence of interest has been given the name of the 'New Great Game'. Despite having divergent interests, Russia, China, the US, and the Central Asian Republics want to counter Political Islam in the region. All of them are also concerned with the Afghan situation, which is considered the spring of Political Islam in the region. This paper attempts to explore the convergence of interest of major powers, better known as the 'world orders' against the Islamic Order. The research tries to address the following questions: What are the world orders? Which world orders are involved in Central Asia? Why has Political Islam emerged in Central Asia? What are the kinds of Political Islam in Central Asia? And why the world orders' interests converge against Political Islam in this region?

AN ASSESSMENT OF INDIAN FACTOR IN PAK-AFGHAN RELATIONS

MIRAJ MUHAMMAD AND JAMAL SHAH

Abstract

Pakistan and Afghanistan-being neighbours with a long, porous, and not effectively managed border-influence each other strongly due to their common history, culture, and religion. Their relations have been mostly hostile rather than friendly due to political and territorial issues and, more significantly, because of a trust deficit between them. This state of affairs has been galvanised because of the Indian factor, which, in turn, has greatly influenced Pakistan's foreign policy in general and towards Afghanistan in particular. The Indian factor is considered to be mainly responsible for the strained relations between Pakistan and Afghanistan. Pakistan's adoption of the policy of 'strategic depth' was a move in that direction. Both Pakistan and India are busy in achieving maximum political gains in Afghanistan. The main interests of Pakistan and India are to circumvent the installation of a pro-India and pro-Pakistan government, respectively, in Afghanistan. The main objective of this paper is to show how and to what extent India influences Pak-Afghan relations. It briefly explores the main stages of the Pak-Afghan relations and also looks into the Indian interests in Afghanistan and the means New Delhi has employed to realise them.