# China-Bangladesh Relations: From Co-operation to Strategy

By **Dr Rajkumar Singh**

About a decade before the liberation war of Bangladesh beginning in early 1971, the People's Republic of China became an ally of Pakistan following its declared war with India in October 1962, and Beijing began using Islamabad as a conduit for rapprochement with Richard Nixon and Henry Kissinger of the USA. Earlier China also supported Pakistan during the latter's war with India in 1965. In 1971, it got membership of the United Nations replacing Taiwan, and it also used its first veto at the UN to support Pakistan in the Indo-Pakistan war of 1971. On the other hand, at the time of Independence Bangladesh was close to the USSR, a country rival of China's, and it was considered a nation of the Indo-Soviet fold, Beijing vetoed Bangladesh's entry in the United Nations till 1974. But it all changed with the military coup in Bangladesh and the new regime kept itself aloof from the Indo-Soviet axis of Cold War in South Asia. The new military ruler-cum- President of Bangladesh, Ziaur Rahman, fitted in the Sino-Pak fold and diplomatic relations between the two established in 1976 and in the succeeding years frequent high-level exchange of visits took place and the groundwork for strengthening their relationship was made. In the coming years and decades their relations expanded to economic and military relations, culminating ultimately in a strategic relationship.

Establishment of diplomatic relations between the two in 1976 consolidated and enhanced China-Bangladesh relations and served the fundamental interests of both countries, meeting the common aspirations of their people conducive to peace development in the region and the globe. It paved the way for the exchange of high-level visits between government agencies, parliamentarians, political parties, armed forces, and non-governmental groups from both sides which also included various trade committees, diplomatic consultations and joint agriculture committees. Over the years, especially after the disintegration of the USSR in the early 1990s and ending of its superpower status, China became active and after a reasonable time gap began to stake a claim for great-power status in the region and beyond.

Its main global rival remained the USA while at the regional level India was its target also, because in the last three decades New Delhi has developed as a dependable partner of the USA in the region, particularly in South Asia.

As a result, for China Bangladesh became more important due to its geographical location. With the polarisation of countries at regional and global levels, Beijing came

forward with a number of major and minor developmental projects suited to small and medium-grade countries with poor infrastructure, to win their goodwill and make them aligned with China. As a first step to narrow down the trade gap, China not only provided economic aid to Bangladesh but also signed the Asia Pacific Trade Agreement (APTA) to remove the barriers and offered resources to develop natural gas and nuclear power plants to meet the growing energy requirements, while Bangladesh, in return, offered to set up a Special Economic Zone for China. In addition, the two agreements, the Agreement on Economic and Technical Co-operation and a framework agreement on a concessional loan provided by China to Bangladesh, proved very helpful for the country.

Particularly in the last one decade the different angles of China- Bangladesh understandings reached a new height and as a result, the two countries signed a bilateral trade and investment agreement to give Bangladesh duty-free access for 97 percent of its products, which came into force from 1 July 2020. Earlier too, according to the notice of the Tariff Commission of the State Council of China on 16 June 2016, in which zero-tariff facility has been applied to 8,256 products originating from Bangladesh.

However, despite these facilities the China- Bangladesh bilateral trade is highly tilted in favour of Beijing and latter's bilateral trade deficit with China has increased 1600 percent in the last 20 years. In 2018-19, 25 percent of Bangladesh's total imports were from China, worth $13.6 billion, while Bangladesh's export to China was only $0.56 billion. Apart from this, there are several loans given to Bangladesh on less favourable terms in comparison to India and this could lead Bangladesh into a debt-trap.

Likewise, in the defence sphere the Bangladesh Army has been equipped with Chinese tanks, its navy has Chinese fighters and missiles and the Bangladesh Air Force flies Chinese fighter jets. Between 2002 and 2006, several defence cooperation agreements were signed which cover military training and defence material, and as revealed in a Chinese report to the UN, Dhaka is emerging as a major buyer of Chinese-made weapons. In a further move, in 2008 Bangladesh set up an anti-ship missile launch pad near the Chittagong Port with Chinese assistance and a maiden missile test was performed on 12 May 2008 with the help of Chinese experts.

Like India alike, Bangladesh also has a 'Look East Policy' which has been specially designed to lessen the country's dependence on India and open up new avenues of co-operation with China and South-East Asia. In fact, many areas encompassing South Asian states and its maritime spaces are of growing strategic importance to China, and Beijing's involvement in bilateral relationships appear beneficial, but actually they are driven by deep and long-term Chinese designs to fulfil its political, economic and strategic interests. By saying Bangladesh is adopting a diplomatic line with the guiding principle of its Constitution which says,' Friendship towards all, malice towards none', but in trying to implement this the country has heavily leaned to Beijing which, in practice has meant greater dependence on China and the economic and defence understandings that were

reached between the two countries, soon transformed into a strategic partnership. Even the present Prime Minister of Bangladesh, Sheikh Hasina Wazed, wants to take maximum advantage of the country's geographical position which abuts the sea lanes of the Indian Ocean linking China with the Persian Gulf, which has a role in securing the energy supply for Beijing. This vision and approach have put Bangladesh in a 'win-win' situation, bypassing all odds of the present and past.

# The Afghan endgame and geopolitics

By **Jai Kumar Dhirani**

The strategically important country of central Asia, namely Afghanistan, is called the "Graveyard of empires." The United States has spent almost two decades fighting the "longest war" in its history. Currently, its troops are withdrawing. President Biden on Wednesday announced that the United States will fully withdraw all of its troops from Afghanistan by September 11, the 20th anniversary of the attacks that started the war. "I'm now the fourth United States president to preside over American troop presence in Afghanistan. Two Republicans, two Democrats," Biden said. "I will not pass this responsibility on to a fifth."

The announcement puts America on the list of Afghanistan's failed occupiers. US leaders thought they could succeed where others had not. They were wrong. As Afghanistan had already proven, it might be an easy country to invade, but a terrible place for outsiders to win a war.

Since 2001, at least 47,245 civilians have been killed in the war. The Afghan government keeps the toll among its soldiers' secret to avoid undermining morale, but Costs of War estimates the war has killed 66,000 to 69,000 Afghan troops. It has forced 2.7 million Afghans to flee abroad, mostly to Iran, Pakistan and Europe, the UN said. Another 4 million are displaced within the country, which has a total population of 36 million. Meanwhile, 2,442 US troops have been killed and 20,666 wounded in the war since 2001, according to the Defence Department.

According to the Costs of War project, the US has spent a stunning total of $2.26 trillion on a dizzying array of expenses. The Defence Department's latest 2020 report said war-fighting costs totalled $815.7 billion over the years. That covers the operating costs of the US military in Afghanistan, everything from fuel and food to Humvees, weapons and ammunition, from tanks and armoured vehicles to aircraft carriers and airstrikes. Out of the $143 billion of the nation building goal since 2002, $88 billion went to training, equipping and funding the Afghan military and police forces. Another $36 billion was spent on reconstruction projects, education and infrastructure like dams and highways—$4.1 billion has gone to humanitarian aid for refugees and disasters. The campaign to deter Afghans from selling heroin around the world cost over $9 billion. The US borrowed heavily to fund the war in Afghanistan and has paid some $530 billion in interest. It has also paid $296 billion in medical and other care for veterans.

Much of the billions lavished on huge infrastructure projects went to waste, according to the US inspector general. Canals, dams and highways fell into disrepair, as Afghanistan

failed to absorb the flood of aid. Newly built hospitals and schools stood empty. Without proper oversight, the US money bred corruption that undermined government legitimacy. Despite the costly counter-narcotics campaign, opium exports reached record heights. Despite the billions in weapons and training to Afghan security forces, the Taliban increased the amount of territory they controlled. Despite vast spending on job creation and welfare, unemployment hovers around 25 percent. The poverty rate has fluctuated over the years, reaching 47 percent through 2020, according to the World Bank, compared to 36 percent when the fund first began calculating in 2007.

The failure of America's ambitions to build a stable, democratic Afghanistan has left the country mired in uncertainty as US forces leave. It will not only pave the way for civil war in the country but will further fuel into the fire to destabilise the entire region. Pakistan's arch-rival India would further endeavour to exploit Pakistan from Afghanistan by using Indian-sponsored terrorist elements in Afghanistan.

Geopolitically, the much wider picture in the coming months and years will be intense as the international power plays as neighbouring states jockey for position in this latest stage of 'The New Great Game'. The major players this time are Pakistan, Russia, China, along with Turkey and Iran.

Pakistan, a significant country of the region, shares a 2430-km border with Afghanistan and has played a key role in not only combating global war on terrorism, but in the peace process of Afghanistan and stability of the region. It will cooperate with abovementioned countries in Afghanistan to prevent not only the impact of US withdrawal, but Indian-sponsored terrorism from Afghanistan as well.

# Global economic war and Pakistan

By **Sheikh Jawad Hussain**

Time is changing at a swift pace. The world has altered the tactics of war. New alliances are forming rapidly. There are issues of new strategies among countries, political alliances, distribution of resources, future planning, military cooperation, cognisance of problems, regional integrity, defence of geographical boundaries, water resources, self-sufficiency in oil, gas, science and technology but more than that, the need of the hour is economic development and increase in trade. A country that doesn't acknowledge this fact or even tries to ignore it will become collateral among the nations of the world in the near future. At present, the economic war is at its zenith in the form of a third world war. Powerful countries are facing off against each other. Plans are being made to wreck others economically in order to win the war on the economic front. The coming ten years are crucial in this economic warfare because economic changes are taking place at an unimaginably fast speed. The world's powers are striving hard to improve and buttress their economic and financial position and resources but only that nation will emerge victorious which has the ability to do something practically through effective planning, sound strategy and tireless hard work.

In the new political horizon, China is ready to swoop down like an eagle. By the end of this decade, the world will have to acknowledge the new rising power because China has left America behind in trade and investment. As per recent statistics issued by the United Nations, China has beaten America in new direct foreign investment. Last year, new direct investment by foreign companies in America has declined to almost half of what it used to be, while according to United Nations' data, this same investment has increased four times in Chinese firms. This has given China a prominent position globally.

The United Nations Conference on Trade and Development has stated in its report that in China, the volume of direct foreign investment was 163 billion dollars while America's share was just 134 billion dollars. This is a warning bell for America. In 2019, the American share was 251 billion dollars and China got 140 billion dollars, but now the situation has changed completely. According to the Centre for Economics and Business Research (CEBR) in England, China, which is currently locked in a trade war with America, will leave the rest of the world behind by 2028. After this it will become impossible to defeat China in the economic sphere.

On the other hand, Chinese endeavours in Gwadar are playing a pivotal role in extracting Pakistan from economic destitution and making it a pivotal global economic hub. China is also using its influence in oil and gas agreements with Iran and Russia and in the Kashmir-Ladakh issue. All these efforts will more or less come to fruition after the current

decade. At this moment, China's defence, diplomatic and trade assistance to Pakistan will change history because in addition to Pakistan—Russia, Iran and Turkey are other important players of this bloc.

Indisputably, Pakistan's currently worsening economic condition is at its peak. In a recent report, total debt has reached 113 billion dollars out of which only 18 billion is from the last years because when PTI came to power. The debt was 95 billion dollars which is now touching new heights. The economic team of the Prime Minister has miserably failed. It is absolutely pertinent to raise questions about the efficacy of the team which can't ensure just distribution of resources to the level of the common man.

In fact, the government has no control over the current situation since inflation, corruption, plunder and black marketing have become the fate of this nation and the government is calmly witnessing this whole drama as a silent spectator. Instead of keeping mum the government should learn a lesson from the changes that are taking place in the global economic scenario. The cat won't leave a pigeon alone just because it has closed its eyes.

# Pakistan tackles a global pandemic

By **Twangar Kazmi and Dr Adnan Khan**

As the world enters mid-2021, the Covid-19 pandemic continues to rage. With 177 million cases and 3.8 million deaths worldwide, nearly all of us have seen loved ones suffer from Covid-19. The tragedy has been as personal as societal. For nations, the choice has been stark. Either lock down schools, offices and public places with dire economic consequences or see hospitals fill up and deaths swell to unimaginable levels. However, this shared misery has also united mankind uniquely and even the poorest of countries have generously offered to help.

The availability of vaccines though has been a ray of light. Since early 2020, nearly 50 candidate vaccines have been developed and tested, and currently 17 different vaccines are in public use worldwide. Although the process of vaccine development and deployment has been superfast by historic standards—10 to 12 months for Covid vaccines compared to the typical 8-10 years it takes—the testing has been rigorous. Each marketed vaccine has been tested in nearly 50,000 or more volunteers to evaluate if it limits the seriousness of infection.

Indeed, this is the largest adult vaccination exercise in human history. Approximately 2.2 billion people have been partially inoculated and 480 million have been fully vaccinated globally. This rapid process has also led to global production capacity struggling to meet demand. Affluent countries had safeguarded themselves by ordering vaccines even before their approval. This is a risky and costly option as Australia found out. It had ordered 160 million doses of the vaccine being developed by New South Wales University. The vaccine wasn't approved and the Australian government lost its investment of billions of dollars. Developing countries like Pakistan could not afford to order in advance for unapproved vaccines and found that there is very little vaccine to buy in the open market. Not surprisingly then, only 15 percent of all Covid-19 vaccines have been administered in developing countries.

Nevertheless, Pakistan undertook an ambitious programme to procure and vaccinate its population. It has had to buy vaccines from multiple sources as only limited quantities have become available from any one manufacturer. In fact, around 75 percent of vaccine doses that have arrived in Pakistan so far were purchased. We also received vaccine donations from China and COVAX (the global vaccine support facility for developing countries). However, this has meant that there are currently 6 different types of vaccines in use in Pakistan, which has created logistical complexities. Although Pakistan has long had a programme to immunise children, an adult vaccination programme is a novelty.

A system was created to register individuals by their National Identity Card numbers. A person can send their identity card number via SMS and the system then assigns them a location from the over 2200 Covid vaccinations centres established nationwide. The system also ensures that individuals receive both doses (most require 2 jabs) of the same vaccine after a predetermined interval, sends reminders of appointments and missed appointments, accommodates if a person walks in at a different location and issues a vaccination certificate at the completion of the prescribed course. Behind the scenes, each vaccine has different storage requirements, including the use of superfreezers for the Pfizer vaccine and the ability to expand a cold chain to equip the 2200 adult vaccination centres across the country.

This system is working extremely well. Nearly 400,000 doses are administered daily free of cost, making Pakistan 21st on the list of daily vaccinations. Overall, more than 12 million doses have been provided while over 3 million people are fully vaccinated. However, there is always potential for hiccups given the complexity. Every day, some appointments are assigned late or not at all (so people are not recognised by the system when they show up for their jab), or their certificates are delayed. These problems have been extremely rare and all are tracked individually and resolved in real time. Supply poses the greatest threat to the system. Given that there aren't sufficient vaccines to buy globally, the national supply is managed on a month-to-month basis. Therefore, the vaccination effort is being expanded with half a breath held, as future stocks are only guaranteed for 1-2 months at the current rates.

The vaccination effort comes in the backdrop of reasonably successful overall management of the epidemic. To date, Pakistan has managed to limit the worst effects of the epidemic. As of today, a little less than a million cases have been identified and 21,874 deaths have occurred due to Covid-19. While there is always concern that testing underestimates actual disease prevalence, as is true for every country, there is good evidence that the overall trend is reasonably well tracked with existing data. This data system was built upon existing resources. Now, reports from nearly 5000 hospitals and 3000 field testing teams are collated, analysed and shared publicly at covid.gov.pk daily.

So while things aren't perfect for a country with limited resources, Pakistan has and continues to manage a pandemic that has devastated even many developed countries. However, the past is no guarantee of the future. Only continued vigilance and cooperation by the public will help.

Disrupted rhythms of the Indus

By **Hassan Abbas | Asghar Hussain**

IN their natural state, the rivers of the Indus basin have four distinct mechanisms of water supply — snowmelt, glacial melt, rains and groundwater seepage. Snowmelt starts adding water to the tributaries of the Indus in March and April. By the time the snowmelt wanes, glacial melt kicks in in late April, reaching its apogee by late June. When the glacial melt is at its peak, the monsoon sets in too.

Between July and early September, the rivers flow to their brim and spread out wide in the floodplains, recharging the aquifers adjacent to the rivers. October through December, the rainfall is negligible and there's no snowmelt/glacial melt feeding the river, but the groundwater recharged into the aquifers starts seeping into the river. Winter rains from January to March, along with groundwater seepage, continue to feed the river system until the cycle of snowmelt begins again. The glaciers, the monsoon, the snowmelt and the aquifers evolved over millions of years and created one of the most reliable and consistent hydrological miracles of nature.

Alexander Burnes, in his book Travels into Bokhara, describes the Sutlej river at its confluence with the Beas in the dry month of December 1831 thus: "These united rivers form a beautiful stream which is … 275 yards wide [and up to 12 feet deep]… the water was running at the rate of two miles and a quarter an hour, and was at this season perfectly clear, and free from … muddy waters [as in] the mountains. The … river had retired to its summer bed, and the melting snow had ceased to feed it."

Conservatively, the river was carrying more than 20,000 cusecs of water when Burnes saw it. The Sutlej, Ravi, Jhelum, Chenab and Indus, at their confluence in Mithankot, used to have well over 100,000 cusecs even at a minimum. The perennial nature of the lower Indus is also evident from the Report of the Indian Irrigation Commission, 1901-03, which stated: "The Indus in Sind contains the combined waters of all the Punjab rivers, and is naturally a much less uncertain source of supply for inundation canals than any of its tributaries. The difference between a bad and a good year are much less marked; and many of the most important canals in Sind — the Sukkur, the Eastern Nara systems, and the Fuleli — have moderate perennial supplies, which are generally sufficient."

The agronomy and culture of Sindh evolved with the rhythms of the river. Aloys Michel, in his 1966 book The Indus Rivers describes this rhythm as: "This practice in the subcontinent … refers to a Rabi, or … crop sown early in the fall after water levels have begun to fall … cropping works in most years because evapotranspiration rates fall at the same time and because the crop is ready for harvest before the warm spring winds desiccate it."

The Indus basin irrigation system, as developed and envisaged by the earlier British planners, was primarily a run-of-the-river system. It was fed by monsoon rains and was naturally regulated by glacial and aquifer storages. Ideas of building dams to supplement

irrigation supplies were always defeated due to the perennial nature of the river already in harmony with irrigation needs.

After independence, however, India rudely demonstrated its intentions to cut off the water supply of the Ravi, Sutlej and Beas to Pakistan, which was not possible without building dams. If that was not enough of a disruption in the natural rhythm of the Indus, Pakistan insisted on building its own dams as part of replacement works, despite technical assessments suggesting that Pakistan's irrigation system could effectively work as a run-of-the-river system, without the need for dams.

In its natural state, snowmelt and glacial-melt waters were always available in the river in the early hot and dry months of summer. However, since the plugging of five large dams in the system, dam managers today have to follow their dam manuals which mandate them to fill the reservoirs as early as possible when the summer flows start. Consequently, every year in early summer, when farmers are yearning for water for summer sowing, the dam managers are blocking the snowmelt/glacial melt in their reservoirs, creating artificial water shortages downstream.

Since 1974-75, Wapda's data on the inflow and outflow from the Tarbela reservoir shows that the dam has never been able to transfer waters collected in a wetter year over to the next year. The data shows that the dam has released an average of just over 5.5 MAF of water in winters which was collected in summers. Given 10 per cent ecological consumption in the riverbed, and the irrigation system's conveyance losses of 50pc, a little over 2 MAF of water released from Tarbela reaches the farm gate. In other words, out of a total of 104 MAF of water diverted for irrigation, Tarbela's effective contribution remains under 3pc. Such a meagre contribution is statistically insignificant as it is well within the natural variability of the system. The data from Wapda, therefore, clearly demonstrates that, one, our irrigation system is sustained by run-of-the-river systems and not dams, and two, that the earlier analysis that dams are not required in the system is validated. The story of Mangla is no different.

Politically, those dams may be touted as 'monumental achievements'; scientifically, however, they are massive plugs choking nature. Economically, they drown us in debts; and socially, they are an engine of discord among the denizens of the basin.

The society and agronomy of the Indus basin evolved in harmony with the rhythms of the river. The disrupted rhythm of the river has disrupted society. The disputes over water between the inhabitants of the upper and lower basin will continue as long as the rhythms of the rivers are not allowed to be in sync. Treating the symptoms with accords, treaties or telemetries will never resolve the Sindh-Punjab or Pakistan-India disputes. Let's address the cause. Let's restore the river's rhythms, and thus of the people around it.

The writers are experts on hydrology and water resources.

# Cost of enforced modesty

By **Pervez Hoodbhoy**

IMPLEMENTATION of the PTI's Single National Curriculum has started in Islamabad's schools and for students the human body is to become a dark mystery, darker than ever before. Religious scholars appointed as members of the SNC Committee are supervising the content of schoolbooks in all subjects including science. In the name of Islamic morality they have warned textbook publishers not to print any diagram or sketch in biology textbooks that show human figures "sans clothes".

For the teaching of biology this surpasses existing de facto prohibitions on teaching evolution, the foundational principle of biological sciences. Illustrations are crucial to explain the digestive system (with both entrance and exit points) and human reproduction, as well as the mammary gland. Diagrams, sketches and human skeletal forms cannot be draped. Excluding these from schoolbooks reduces the teaching of biology to a farce.

Inhibitions about the human body, of course, have been around for much longer than SNC. It's just that henceforth there will be still more. I have looked at a few biology textbooks published in past years by the Punjab and Sindh Textbook Boards and could not find meaningful accounts of mammalian organs and processes needed to sustain life on earth.

In one book from 1996 I did find a diagrammatised rabbit. But with essential parts fuzzed out, it is difficult to figure out whether it was male or female or the equipment that rabbits need to reproduce themselves. That someone should think an un-fuzzed diagram of this little animal would titillate students or stimulate promiscuous behaviour stumps me.

When enforced, clerical interpretations of modesty — translated as sharm-o-haya — cause people to suffer grievously. For example, ex-senator Maulana Gul Naseeb Khan, former provincial secretary of the MMA, roundly condemned diagnostic devices that can look inside women's bodies because, "We think that men could derive sexual pleasure from women's bodies while conducting ECG or ultrasound". Claiming that women would lure men under the pretext of medical procedures, the maulana's party banned ECG and ultrasound for women by male technicians and doctors when in power in KP. Trained females, however, were not to be found.

While sharm-o-haya applies to all, females bear the brunt. Culturally, 'breast' is a taboo word and so breast cancer cannot easily be called 'breast cancer'. This makes early detection hugely difficult and accounts for Pakistan's rate of breast cancer being the highest in South Asia. Most women feel embarrassed in coming forward; only when the pain becomes unbearable and when the cancer metastasizes does a woman finally confide

in someone. By that time it is too late. Ovaries? Thousands of Pakistani women die yearly of ovarian and cervical cancer but 'ovaries' and 'cervix' are words too delicate to ever mention.

With such deep social inhibitions, should women become doctors? This appears an odd question. Presently, about 70 per cent of medical students in Pakistan are female. Our brightest girls get sent to medical college by their parents but mostly to become trophy brides who never practise their profession. Nevertheless, this begs the question: can females become real doctors with their restricted medical knowledge? Would they ever be permitted to study the whole body, including the male anatomy? Or are women doctors only to treat sore throats or become midwives?

Over time the clerically supervised PTI school curriculum will magnify body-related taboos. Even today no one in government dares talk openly about population planning or contraceptives except with bated breath and only after looking over their shoulder. Although Pakistan produces as many people as the state of Israel every two years, yet it abolished the ministry for population planning long ago. It was replaced with some obscure, non-functioning organisation in each province.

Called the Population Welfare Department, the replacement was named to suit our 'cultural sensitivities'. The name implicitly suggests welfare for Pakistanis is possible irrespective of how many of us there are. PWD websites have fancy graphics but no content because ways to limit conception would violate sharm-o-haya. How the human species propagates appears to be a dark national secret that must be kept under wraps. Presumably, the morals of Pakistani society will be wrecked if we discover how babies are made. Somehow it's okay to breed like rabbits but not okay to know how rabbits breed.

Denying basic anatomical knowledge keeps minds clean, say our clerics. This could not be more false. Unsated curiosity and sexual repression drove internet pornographic traffic from Pakistan so high that PTA finally blocked porn sites. Until November 2011 internet cafes were principal porn dispensers and these promptly collapsed after the ban, ruining their owners. One hears, however, that paths to proscribed materials have simply shifted elsewhere. Who knows?

Sharm-o-haya makes protecting children from sexual predators much more difficult. Sometime ago, the PTI minister for human rights, Dr Shireen Mazari, declared at the launch of the Child Protection Campaign that 'Pakistan was ranked as the country with the largest numbers of child pornography viewers'. She suggested that campaigns should be launched at the school level to sensitise students to the menace.

Mazari is, of course, very correct. Her proposal would work far better at protecting children than having child killers and rapists swing from lamp posts, a popular demand. But such educational campaigns require making children aware of basic biological facts so that they can tell between proper and improper behaviour. How can that possibly square with Imran Khan's and Shafqat Mehmood's clerically supervised SNC?

The guardians of sharm-o-haya find undraped diagrams shameful. Yet, to protect their own kind, they suppress every scandal that might implicate them. Earlier this week, unchallengeable video evidence emerged of a mufti's sexual wrongdoing with a madressah lad. While he was stripped of his madressah teaching post after investigation, no cleric suggested Sharia punishment and all religious parties stayed mum.

Saudi Arabia and the GCC countries used to be the world's most stoutly conservative countries while Pakistan was counted among the more open, relaxed ones. This has changed. Presently, Pakistan is not just in reverse gear, it is hell-bent upon moving backward as fast as possible. The kind of mixed-up, confused and ignorant generations PTI's curriculum changes will produce in times ahead is absolutely terrifying.

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# The Get-China syndrome

By **Imran Malik**

The US-led West seems to suffer from an incurable obsessive-compulsive disorder which compels it to fanatically keep bludgeoning the rest of the world into submission. It's compulsion to dominate and dictate is ominous, abrasive, demeaning and threatens international relations. The world is witness to the US' unrelenting, exploitative policies, its stratagems thereof and its rank selective morality in realpolitik to continuously maintain itself as the sole, unchallengeable hegemon of the world. It brooks no challenges on that score.

The US and all its leaders make for an enigmatic study in human psychology and its impact on state policy formulation. It has been prone to imagining, creating and then destroying the many "Frankensteins" that "seem to threaten" its interests and dominance of the world. First it destroyed the erstwhile USSR by emmeshing it in the prohibitively costly strategic defence initiative. Next it invented the Clash of Civilisations, created the Islamic fundamentalism-terrorism bogey, demonised Islam and Muslims universally and launched the much-hyped global War on Terror. It failed miserably in Afghanistan. In the meantime, it destroyed the Greater Middle East Region (GMER) ostensibly to not only forestall any probable Islamic renaissance but also to secure Israel from all possible existentialist threats. The US military-industrial complex is as usual the main beneficiary and has reaped the macabre harvests of all such US endeavours.

The US is now on the prowl to seek yet another adversary to demonise and destroy.

It now sees the emerging Sino-Russo combine, in particular China, as a potential threat to its vital interests and hegemonic domination of the world. It feels compelled to forestall it. It is now out marshalling its political, economic, diplomatic, technological and military assets and its allies (EU, G7, NATO, QUAD etc) to stem, harness and destroy this overwhelming Chinese challenge. This will lead the world back to the "cold war" era and severe polarisation.

What could a US-led anti-China policy look like? The overall grand strategy could be to evoke a global, multidimensional response to the challenge posed by China's irresistible rise to the US-led West's dominance and control of all world affairs. The desired end state could be to isolate China, circumscribe and contain its meteoric rise to within manageable limits and obviate all possible challenges to its pre-eminence in the world.

The operational strategies or ways to get to this end are multifarious. The US-led West can either engage with China, compete, coerce or even confront it. It can engage it in talks to determine Chinese policies and intents thereof and then try to find mutually acceptable and beneficial ways of dealing with the situation. Else the US-led West could compete

with the Chinese Belt and Road Initiative (BRI), as it is ostensibly intending to do, through the thus-far unknown and apparently utopian US $ 40 trillion Build Back Better World, B3W, initiative. It could try coercion but China is now clearly beyond such measures—economic, technological, diplomatic, political or military. It could confront China politically and diplomatically which it is already doing, without much success. It will not confront China militarily because the latter has managed to close the military-technological gap with the US quite emphatically. The US and its allies do not have that distinct military-technological advantage over the Chinese military that they used to have previously. At the moment, the US and its allies are still fishing around for a credible, effective, practical and universally acceptable response to the assumed Chinese challenge.

The means that the US can employ to achieve its desired end state are multidimensional too. The US will most probably employ a two-pronged approach. The first one will tackle China directly while the second one will focus on all those countries (about a hundred and twenty of them including Italy and Greece) who have joined the BRI.

China is being roundly demonised as a pariah, predatory state that is exploiting the poor states of the world through its BRI and its purportedly inherent debt-trap sophistry. The BRI is being portrayed as an exploitative project to the sole benefit and advantage of China. China is being indirectly held responsible for the Covid-19 pandemic. Human rights, freedom and liberties are being vociferously touted where Hong Kong and the Uighur Muslims are concerned (totally disregarding the plight of Kashmiri and Palestinian Muslims under Indian and Israeli yokes respectively. Rohingya Muslims do not seem to exist for them). The abhorrent selective morality in such a policy is lost on the US-led West and its allies. Democracy, however, as the panacea to all governance issues is being flaunted relentlessly. An unrelenting diplomatic and media offensive is already on.

Furthermore, China is deemed to be in violation of intellectual property rights, good trade practices and might yet be subjected to a rejuvenated trade war, as initiated by President Trump. It will also be threatened with the re-anchoring or shifting of the supply chains to other countries, the adverse impact on the world economy notwithstanding. Western multinationals may be forced to relocate their factories to Vietnam, India, Thailand etc and be made to deny China all access to technological inventions and innovations. China will be brought under further and even more severe sanctions and pressures through all leading international fora like the UN, UNSC, EU, ASEAN, NATO, QUAD, etc. It is being continuously accused of expansionist designs in the South China Sea/Pacific Ocean region. Its legitimate claims in the South China Sea (and on Taiwan) are being vigorously challenged politically as well as militarily. A new alignment, the QUAD, is being gradually built up to eventually challenge it militarily too, if required. This could be further reinforced with a regional (Indo-Pacific) coalition on an as required basis. The galloping Chinese economy can only possibly be destroyed by taking it to war. Prudence demands that the US and its befuddled allies avoid this MAD—Mutually Assured Destruction—option.

Sinovac Vaccine: 1.55mn doses arrive in Pakistan

However, China is not entirely without options for itself. For starters, it has already exhaustively beaten the US-led West in the time and space dimensions where the BRI is concerned.

*(To be continued)*

# Contribution in Science and Technology

By **Zeeshan Rasool Khan**

In the present era when Muslims are no more in the picture of science and technology, some people think that Muslims have always been averse to science. They have coined the term "Madrasa Men" for Muslims, which in their terminology means 'ignorant and backward'. Muslims and science are considered antagonistic to each other.

This comes as a challenge to the Muslim science student who does not have access to his glorious past. When we revisit our history, we find the story contradictory to the present scenario. One can hardly believe that we have been pioneers in the scientific field and have titanically contributed to the scientific world. In a wide range of areas, especially astronomy, mathematics, medicine, chemistry, zoology, geography, cartography, optics, photography, etc. we find the role of Muslims.

According to Howard Turner, Muslims began the organized and detailed observations of the skies soon after the early expansion of Islam. This effort was naturally accelerated by the importance of the moon and sun in the everyday life of Muslims, because with the help of the moon, Muslims determine the beginning and end of the months in their lunar calendar and with the help of the sun they calculate the times for prayers and fasting. Consequently, several observatories were established at centres such as Rayy, Isfahan, and Shiraz in Persia, Egypt, and the like. In the early part of the ninth century, Habash al-Hasib directed the composition of astronomical tables. In the second half of the ninth century, Al-Nairizi composed a great treatise on the spherical astrolabe. The Muslim astronomer Al-Battani significantly contributed to the discovery of solar apsis. He discovered a new method for determining the time of the vision of the new moon and made a detailed study of the solar and lunar eclipses, which were later employed by English astronomer Richard Dunthorn in his determination of the gradual change in lunar motion. Al-Biruni contributed by determining latitudes and longitudes, his contemporary Ibn Yunus was later applauded for his work by George Sarton, a noted scientist. American Astronomer E.S. Kennedy named the planetary model as "Tusi-Couple" after Nisar al-din-al-Tusi's work in explaining the apparent motion of planets. Ibn al-Shatir completed the lunar model in his work entitled A Text of the Final Inquiry in Amending the Elements. It has been found that the lunar theory proposed two centuries later by Copernicus is almost similar to that introduced by Ibn al-Shatir. There is a great probability that Ibn al-Shatir's views would have served as the base of the theory of Copernicus. Al-Zarqawi, Al-Shirazi, Abu Sahl al-Kuhi, Abd al-Rahman al-Sufi, Abu Said al-Sijzi, Abul Wafa al-Buzjani, and al-Kirmani are

some among other shining Muslim astronomers who have shown special interests in astronomy.

Science is not new to Islam but it is Islam and Muslims that have played a vital role in its evolution. But it does not mean that the present generation would keep highlighting their brilliance and themselves do nothing. Instead, we need to deliberate and introspect why we are lagging far behind now. We ought to strive for regaining the lost glory by reconnecting with science. That is the only way to make strides.

No one can underestimate the role of Muslim mathematicians such as Al-Khwarizmi who developed methods in algebra, geometry, and trigonometry. Muhammad Ibn Musa-Al Khwarizmi in his Compendious Book on Calculation by Completion and Balancing presented the first systematic solution to linear and quadratic equations in Arabic, and explained how to use algebraic equations with unknown variables, besides establishing the basis of trigonometry. Algebra is considered a valuable contribution of Muslims to the Modern Age. Ibn Sina died as a polymath having a good grip on medicine, mathematics,and chemistry in addition to philosophy. Ibn Sina authored a five-volume medical encyclopedia, The Canon of Medicine (Book of Healing). It was used as the standard medical textbook in the Islamic world and Europe up to the 18th century. The Canon is still relevant in Unani Medicine. Ibn Sina was at the cutting-edge of Muslim discoveries in medicine. His discovery that tuberculosis was contagious and could be transmitted through the air earned him a position as one of the greatest physicians of all time. Even to this day, the quarantine methods (Iisolation to prevent the spread of infectious disease) he introduced have helped to limit the spread of infectious diseases. Al-Nafis and Abdul Lateef Al-Baghdadi cleared several misconceptions and proved many opinions of Galen, a Greek physician, wrong.

After the fall of the Western Roman Empire, the focus of alchemical development moved to the Caliphate and the Islamic Civilization. Much more is known about Islamic alchemy as it was better documented. According to Ibn al-Nadim, bibliographer, the first Muslim alchemist was Khalid ibn Yazid. Besides him, Jabir Bin Hayaan, Abu Bakr Al-Razi, Ibn Umayi, Al-Tughrai, Jaldaki Khorasani made significant contributions in chemistry. Among them, Jabir bin Hayaan is without any doubt, one of the greatest Muslim scientists. Holmyard legitimately names him 'The Father of Chemistry'. Jabir is credited with the use of over 20 types of now-basic chemical laboratory equipment, such as the retort and alembic. Many fundamental chemical processes, such as crystallization, distillation, calcination and sublimation, were invented by him. According to Ismail al-Faruqi and Lois Lamya al-Faruqi, he invented a kind of paper that resisted fire and an ink that could be read at night. He invented an additive, which when applied to an iron surface, inhibited rust and when applied to a textile, would make it water-repellent.

According to the Ancient Greeks, the vision was a visual spirit emanating from the eyes that allowed an object to be perceived. The modern concept of human vision was

developed by Ibn Haythem, the 11th-century Iraqi scientist. He explained that the eye was an optical instrument, and light enters the eye rather than leaving it. The pinhole camera and camera obscura are his famous inventions. Interestingly, the first person to give a detailed account of the human eye was also a Muslim, namely Abu Al-Hassan.

The contributions of Muslims are endlsess and due to space constraints, I mentioned only a few. However, it is pertinent to note that Muslim scientists do not find much mention in our books, even if there is mention, their name has been Latinized like Algoritmi (Al-Khawarizmi), Anaritus (Al-Nairizi), Albatgenius (Al-Battani), Avicenna (Ibn-i-Sina) Alhazen (Abu Al-Hasan) perhaps aimed at keeping the present Muslim generation incognizant about them. But, the truth can never be concealed, that science is not new to Islam but it is Islam and Muslims that have played a vital role in its evolution. But it does not mean that the present generation would keep highlighting their brilliance and themselves do nothing. Instead, we need to deliberate and introspect why we are lagging far behind now. We ought to strive for regaining the lost glory by reconnecting with science that is the only way to make strides.