





AD NCA CASS SEMINAR KEYNOTE ADDRESS 08 JUNE

I would emphasise on Pakistan's national leadership to make the most of this diplomatic vacuum and focus our national technology plans on familiarization, development, induction and indigenization of emerging technologies in relevant areas of civil and military applications to serve the purposes of comprehensive national security. An appropriately focused national task force with clearly defined lead agency, mandate, objectives and reasonable resources at its disposal could be a good start point.

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EDITORIAL

WHO IS GOING TO BE PRIME POWER OF THE WORLD?

China has moved from Geo-Economic position to Geo-strategic status. This has become point of concern for United of America which obtained single super power position of the world after century old efforts. To become a unique in the world in the known history of 2400 year, one can find several powers which have tried to obtain this status. China has sent balloon in the space of USA either for espionage or for teasing US that it can break the barriers of American defense. Further Ching has entered aeo-political field disturbing America. Its influence has increased in Africa, Asia and China is trying to reach Europe which has shown sign of leaving American camp. Europe is also feeling the heat of American decision to boycott Russian oil during winter as America would like to damage Russian economy and to isolate Russia. In pursuit of Chinese design, American foreign Minister Antony Blinken visited China in high-stakes trip amid tension in South China Sea. Very interesting outcome could be seen after this visit. China has helped to bring Saudi Arabia and Iran in terms that both countries have opened their diplomatic missions. China also considered Palestine as its strategic partner and Palestine's President Mahmood Abbas visited China in June 2023. It looks that Ching has entered in the world's geostrategic grend with strategic posture and with determination to share or reduce the primacy of USA. This is an alarming sign and challenge to United States of America in this century. Russia and China also working together to reduce the importance of petrodollar by taking Saudi Arabia in to confidence. Saudis are also fed up with American humiliation of Joe Biden saying that it is a pariah state that means that Saudi Arabia is an outcaste in the world community. This statement has damaged the relations between Kingdom of Saudi Arabia and USA. What are the options for United States of America to compromise with China or choose a clash or full fledge war. If USA reached with some sort of understanding with Ching, India's importance will be reduced and it will be more inclined towards Russia which together with China and SCO is also challenging the supremacy of USA. Zbigniew Brzenski the Security Advisor to two Presidents of USA in his book The Grand Chess Board- American Primacy and its Geostrategic Imperatives has written in the book's Introduction writes "The defeat and collapse of Soviet Union was the final step in the rapid ascendance of a western Hemisphere Power, the United States, as the sole and indeed, the first global Power." He further writes in this book "The ultimate objective of American policy should be benign and visionary: to shape a truly cooperative global community, in keeping with long-range trends and with the fundamental interests of humankind. But in the meantime, it is imperative that no Eurasian challenger emerges, capable of dominating Eurasia and thus also of challenging America."

Brzezinski was of the opinion that USA will keep America the center of world Power for centuries and would not allow any country to challenge American primacy. To keep this supremacy it will do anything like change the government of a country, civil war or direct war. The situation, however, is considerably changed. Its supremacy has been challenged since two decades and American is trying hard to maintain its primacy. Joe Biden the President of USA has warned China that it will not tolerate any effort to change the world order. So in this process the visit of American Foreign Minister be seen. The question is would American can share its sole super status and the world which has become multi-polar practically officially be accepted by USA? To meet the challenges and restore its primacy over the world, in 2010, America planned four steps announced by the elite of USA and the world that (1) Britain should exist from European Union lest Europe itself can become a threat to United State, the second one was the mass migration of Asians and Africans, the third was of rare type of inflation which the world is witnessing now a days and the fourth was a war that is going on between Ukraine and Russia. The second and flash point of war could be strait of Taiwan and South China Sea. America would like to engage in war China and Russia separately. Apparently, it is not possible, there could be a full-fledge war the third world war. This can be said on the basis that the intelligentsia of United States is determined to restore American supremacy over the world at all cost. It is not possible without a war or subdue Russia and China through some new technology. War between China and the U.S. would spell doom for humanity. That's because once the Chinese sink those sitting ducks called U.S. aircraft carriers, hotheads in the pentagon will want to bomb Chinese cities. No one will stop them. And then things turn nuclear. To those geniuses who say, well, we've basically been fighting Russia for 15 months and it hasn't gone radioactive, one has to say only four words: it ain't over yet.

Summarized News & Articles

NEW NUCLEAR POWER PLANT CHASHMA 5 A GOOD NEWS FOR PAKISTAN

According to the agreement signed in Nov 2021, and contract on 19 June 2023, CNNC will build a one million kilowatt-class nuclear power unit with HPR 1000 technology at the Chashma Nuclear Power Plant Complex in Pakistan - Chashma 5. This marks the seventh nuclear power unit that China has exported to Pakistan and the third unit exported with HPR 1000 technology.

CNNC is currently building four HPR 1000 nuclear power units around the world including in the U.K. CNNC has built four nuclear power units in Pakistan so far, with a total installed capacity of 4,630 megawatts and operational capacity of more than 1,300 megawatts. It has helped resolve electricity shortages in Pakistan, and contributed to the country's economy.

PAKISTAN HITS OUT AT US AND INDIA AFTER BIDEN-MODI MEETING

Pakistan on Friday criticized the United States and India after President Joe Biden met Prime Minister Narendra Modi at the White House and both leaders called on Pakistan to ensure its territory was not used as a base for militant attacks. Pakistan's foreign ministry said a joint U.S.-Indian statement was "unwarranted, one-sided, and misleading". The reference to Islamabad in it was "contrary to diplomatic norms," it said. The ministry added that it was surprised by the joint statement and said it had "close counter terrorism cooperation" with the United States. Relations between India and Pakistan have been fraught for years. Since independence from Britain in 1947, India and Pakistan have fought three wars, two of them over the Muslim-majority Himalayan region of Kashmir, which they both claim in full but rule in part. The joint U.S.-Indian statement said: "They (Biden and Modi) strongly condemned cross-border terrorism, the use of terrorist proxies and called on Pakistan to take immediate action to ensure that no territory under its control is used for launching terrorist attacks." Pakistan's foreign ministry said India was using the allegations of extremism against Islamabad to deflect from the situation in Kashmir and the treatment of minorities in India. New Delhi has for years accused Pakistan of launching militant attacks in India, including the one in 2008 in Mumbai that killed over 165 people. India also says Pakistan has helped Islamist militants who have battled Indian security forces in its part of Kashmir since the late 1980s. Pakistan denies the accusation and says it only provides diplomatic and moral support for Kashmiris seeking self-determination.

The special status given to the Indian state of Jammu and Kashmir was revoked in 2019 when New Delhi split it into two federally controlled territories. Pakistan calls the moves illegal and wants them rolled back. Biden rolled out the red carpet for Modi on Thursday, with both leaders touting deals their countries reached on defense and commerce aimed at countering China's global influence.

HIMALAYAN GLACIERS ON TRACK TO LOSE UP TO 75% OF ICE BY 2100, REPORT SAYS Glaciers in Asia's Hindu Kush Himalaya could lose up to 75% of their volume by century's end due to global warming, causing both dangerous flooding and water shortages for the 240 million people who live in the mountainous region, according to a new report. A team of international scientists has found that ice loss in the region, home to the famous peaks of Everest and K2, is speeding up. During the 2010s, the glaciers shed ice as much as 65% faster than they had in the preceding decade, according to the assessment by the Kathmandu-based International Centre for Integrated Mountain Development (ICIMOD), an intergovernmental scientific authority on the region.

'CPEC BOLSTERED PAK-SINO TIES'

The Pakistan-China friendship has further strengthened due to the China Pakistan Economic Corridor (CPEC). China's unparalleled progress is the result of continuous hard work and nationalistic thinking. These remarks were made by Khyber Pakhtunkhwa Governor Haji Gulam Ali while addressing a seminar on the occasion of the completion of ten years of CPEC. He said we need to learn from China and work together to bring prosperity and development to our country.

CHINA OPPOSES G20 MEETING IN IIOJK AND WILL SKIP IT

China said on Friday that it is opposed to a G20 tourism meeting next week in the disputed territory of Indian Illegally Occupied Jammu and Kashmir (IIOJK) and will not attend. India, which holds the chair of G20 this year, has organised a series of meetings across the country in the run-up to the summit in New Delhi in September. "China is firmly opposed to holding any kind of G20 meetings in disputed territory, and will not attend such meetings," Chinese Foreign Ministry spokesperson Wang Wenbin said. In 2019, India split the Muslim-majority state of IIOJK to illegally create the two federal territories of Jammu and Kashmir, and Ladakh. A large chunk of Ladakh is under Chinese control.

Ties between New Delhi and Beijing have been strained since a military clash in Ladakh in 2020 in which 24 soldiers were killed. Srinagar, the summer capital of IIOJK, will host a meeting of the tourism working group for G20 members on May 22-24. Pakistan has also opposed India's decision to hold a G20 meeting in occupied Kashmir.

TURKEY'S FIFTH-GEN TF-X FIGHTER JET REACHES PAKISTAN'S DEFENSE EXPO MONTHS AFTER REPORTS OF JOINT PRODUCTION

Turkey displayed a scale model of its fifth-generation fighter, code named the TF-X, at Pakistan's IDEAS expo 2022, according to images and reports on social media. About 28 Turkish defense manufacturers participated in Pakistan's biennial event IDEAS 2022. Turkey, alongside China, is believed to have the most prominent presence at the expo. Turkish media has also reported that their pavilion attracted hundreds of visitors, including Pakistani officials. A report in the Daily Sabah newspaper said that Turkish defense manufacturers were displaying an array of products, including military hardware, tactical mini-UAVs, light weaponry, artificial intelligence, and cyber security solutions. However, it did not mention that the fifth-generation fighter would be displayed. The design and technical specifications were also visible on a banner in the images posted on social media. The banner read, "Turkish fifth-generation multi role fighter aircraft developed using national technologies and in-house capabilities." The photos were posted on November 16, the second day of IDEAS.

PAKISTAN ENVOY HOLDS TALKS WITH US CONGRESSMAN JIM COSTA

Pakistan's Ambassador to the United States Masood Khan had a meeting Jim Costa, a Congressional leader who visited Pakistan several times, reported on Friday. The US Congressman is keen to explore new avenues to build strong Pakistan-US relations. They also agreed to continue bilateral engagements. Meanwhile, Ambassador Masood Khan has said that Georgia-Sindh Sister State-Province Agreement has opened up vistas of opportunities not only for cementing business and investment ties but also brining the people of two sides closer to each other. Masood Khan made these remarks at an event at Global Atlanta on Growing Trade and Investment with Georgia during his two-day visit to Atlanta.

He said there are 30,000 Pakistani-Americans in Georgia and two-way trade between Pakistan and Georgia has reached almost \$1 billion, with over \$600 million worth of Pakistani exports to Georgia. Masood lauded instrumental role played by Pakistani-American Georgia State Assembly member Farooq Mughal in cementing Pakistan-Georgia relations. Briefing the audience on Pakistan-U.S. relations, he said Pakistan-US relations have seen an upward trajectory during recent months. Both sides have held several high-level dialogues and meetings in last one year including in health, energy, climate change, trade and security. Masood Khan said that Pakistan was looking forward to concrete outcomes of Sister-Province agreement with greater business linkages, people to people and student exchanges and strong cultural ties. The ambassador stressed on establishing robust linkages between universities and the academic institutes. Earlier, Mayor of Atlanta Andre Dickens received the Ambassador at his office and discussed ways to further strengthen ties in trade and investment, people-to-people exchanges and cultural sphere. Masood Khan thanked Andre Dickens for his warm welcome and appreciated his leadership in transforming the metropolis into a smart city.

NO NEED TO LOOK AT ANYTHING NEGATIVELY ABOUT MODI'S US VISIT, SAYS HINA RABBANI KHAR

Commenting on the Indian Prime Minister's visit to the US, Minister of State Hina Rabbani Khar said that Pakistan would always look positively at bilateral ties between sovereign countries and not view them in a negative light. "There is no need to look at anything negatively," she said in an interview with Voice of America (VoA). However, she maintained Pakistan had a very belligerent neighbour who indulged in military adventurism by sending jets to Pakistan in 2019, terming the move "unprecedented" and "unthinkable". She said the world must look into this factor and decide whether those being propagated for a role in regional security deserved it. "The world has to see whether there was conflict preservation instead conflict resolution due to them (India), then it did not augur well for the region. We hope that nothing will go wrong for the region and Pakistan," she remarked. Modi is in US for his first visit with the full diplomatic status of an official state visit. The visit is also the third state visit of Joe Biden's presidency and the third by an Indian leader to the US, indicating the strengthening bond between Washington and New Delhi. The visit is expected to see the two countries expand cooperation in the defence industry and high technology sectors, with India aetting access to critical American technologies that Washington rarely shares with non-allies. The visit, however, puts Pakistan in a precarious position given its strained ties with India. Over the years, Washington's cooperation with India has increased as Pakistan has gotten closer to China especially after the latter's investment in the China-Pakistan Economic Corridor (CPEC). About ties with the EU, the state minister said Pakistan's Scheme of Preferences Plus (GSP+) status was not sufficient to define the country's relations with the EU as their bilateral engagements were wider and broader at all levels, including business contacts, institutional linkages, IT sector growth etc. She said the GSP Plus benefited Pakistan and enhanced the EU's trade with Pakistan, adding that Pakistan and the EU countries were engaged at different multilateral fora. The MoS further stressed that such relations should not be looked at merely through the GSP Plus lens, but their interactions were much broader. About her recent visits to different Scandinavian countries, she elaborated that certain countries had an ageing population and required young people for various sectors. She said opening legal migration of skilled labour to these countries was their primary objective, as Pakistan and these countries did not want to promote illegal migration.

PAKISTAN, SAUDI ARABIA AGREE TO FURTHER BOLSTER BILATERAL COOPERATION

Prime Minister Muhammad Shehbaz Sharif and Saudi Crown Prince Mohammed bin Salman have agreed to expedite the collaborative process in order to further bolster the bilateral cooperation. The understanding to this effect reached during an interaction between the two leaders on the sidelines of the New Global Financing Pact Summit being held at Paris in France. The two leaders also exchanged views on matters of bilateral interest. During the interaction, the Prime Minister expressed his best wishes for Saudi King Salman bin Abdul Aziz whereas Prince Mohammed bin Salman also expressed the sentiments of goodwill towards the government and people of Pakistan.

FRANCE KEEN TO SEE A 'STRONG PAKISTAN': DEPUTY HEAD MISSION

The bond of friendship and bilateral relations between Pakistan and France is very strong because it is decades old and time-tested, a top French diplomat told the audience here at Hafiz Hayat Campus of the University of Guirat on Wednesday. Guillaume Dabouis, Deputy Head Mission at the French Embassy in Islamabad, was addressing a seminar 'A Talk by Deputy Ambassador of France on "Franco Pakistan Relations", organized by the Student Services Centre (SSC), however, stressed that his government was keen to further strengthen these ties because there's a lot more room for further cooperation, especially in the fields of education, trade and economy. Earlier, Vice-Chancellor Prof. Dr Shabbar Atiq gave a warm welcome to the French dianitaries upon their arrival at the campus.

UAE 'KEEN' TO INVEST IN KARACHI PORT TERMINAL OPERATIONS

The United Arab Emirates (UAE) is 'keen' to invest in Karachi port terminal operations, sources said on Wednesday. Sources further said UAE wants to equip Karachi port terminals with the latest technology for the smooth handling of shipments. The sources claimed that the agreement regarding terminal handling with the UAE will be inked before June 30. Finance Minister Ishag Dar and Maritime Affairs Minister Faisal Sabzwari are finalizing the conditions of the agreement with the UAE. Sources said, the panel has been permitted to finalise a draft operation, maintenance, investment, and development agreement under the governmentto-government arrangements with a nominated agency of the UAE for handing over the Karachi port terminals. Earlier this year, the federal government formed an eight-member committee to begin outsourcing three major airports in Pakistan Islamabad, Karachi and Lahore. The committee wrote a letter to managers of all three major airports and directed them to provide data of the airports' aviation ministry. Pakistan is in a financial crisis amid uncertainty over the revival of the \$6.5 billion deal with the International Monetary Fund (IMF).

PHOTOGRAPH CAPTION

At the Lunch of Mr. Nusrat Mirza, Chief Editor, Monthly Interaction & Chairman, Rabita Forum International, in The honour of Mr. Aijazul Haq, newly unopposed elected Secretary General of the CPNE at Bar B Q Tonight restaurant, Karachi.

JPMC'S 'IRON LADY' DR. SEEMIN JAMALI PASSES AWAY

SAMEER MANDHRO

Dr. Seemin Jamali, the former head of Jinnah Postaraduate Medical Center (JPMC), passed away on Saturday after a prolonged illness. The family has confirmed her demise, leaving behind a legacy of remarkable service and dedication to the medical profession. Dr. Jamali, often referred to as the "iron lady of the JPMC", was known for her extraordinary contributions to the field of healthcare in the country. Born in Karachi in 1961, Dr. Jamali dedicated her life to serving others. Graduating from Nawabshah Medical College in 1986, she completed her house job at Dr Ruth Pfau Civil Hospital, formerly known as Civil Hospital Karachi. Her exceptional abilities and unwavering commitment led her to become the longest-serving Grade-21 executive director at JPMC, the city's largest tertiary care hospital. Dr. Jamali's name became synonymous with the JPMC's emergency ward, where she tirelessly served for nearly three decades. Her invaluable expertise and compassionate care played a pivotal role in saving countless lives. She tended to over 200 bomb blast victims, gunshot victims, accident casualties, and patients affected by building collapses and plane crashes. Dr. Jamali's selfless dedication extended to the thousands of people who sought medical assistance at the government hospital's emergency ward. In November 2020, Dr. Jamali was diagnosed with colon cancer. Despite her health challenges, she continued to work while undergoing treatment and emerged victorious in her battle against the disease. Her determination and resilience inspired many, earning her the admiration and respect of her colleagues and patients alike. Apart from her MBBS degree, Dr. Jamali pursued further education to enhance her skills in healthcare management. She obtained a Masters in Primary Healthcare Management (MPHM) from Thailand and a postdoctoral fellowship in Emergency Care from the United States of America. Her thirst for knowledge and desire to improve medical services were evident throughout her illustrious career. In recognition of her remarkable contributions, Dr. Jamali received numerous accolades and awards. The World Health Organisation recognised her as a "global hero" for her exceptional services during the coronavirus pandemic. In 2019, she was bestowed with the prestigious Tamghae-Imtiaz, a civilian decoration honouring individuals who have made significant contributions to Pakistan. Dr. Seemin Jamali retired from her position at JPMC in August 2021, concluding an era of dedicated service. Her retirement did not mark the end of her journey, as she continued to make a difference in the medical field. In October 2022, the Pakistan Army conferred upon her the honourary rank

of lieutenant colonel, recognising her outstanding service and commitment. Dr. Seemin Jamali's passing is a tremendous loss to the medical community and the people of Karachi. Her indomitable spirit, expertise, and compassion will be sorely missed. She leaves behind a legacy of unwavering dedication to saving lives and improving healthcare in Pakistan. She is survived by her two sons and husband, Dr. AR Jamali. As the city bids farewell to this extraordinary medical professional, her contributions will continue to inspire future generations to serve humanity with passion and unwavering commitment.

<u>PAKISTAN</u>

TRANSFORMING HEALTHCARE THROUGH NUCLEAR MEDICINE

SABIHA MEHREEN, RESEARCH OFFICER (CISSS)

Pakistan's peaceful use of nuclear technology has been making significant contribution to the country's healthcare sector. As a developing nation with a large population, Pakistan faces numerous health challenges, including large segments of population deprived of adequate healthcare. The major reasons include limited resources allocated for healthcare in public sector and the increasing cost of treatment, especially chronic diseases and cancer. In this critical situation, Pakistan has strategically employed nuclear technology to address crucial medical needs of its population. This approach has enabled the country to improve diagnosis and provide access to advanced treatment of cancer to even remote areas. In this regard, the support of international organisations such as International Atomic Energy Agency (IAEA) in enhancing Pakistan's nuclear medicine capabilities is equally praiseworthy. The World Health Organization estimates (2021) that about 1.5 million cancer patients reside in Pakistan. This number is increased by approximately 178,000 new cases diagnosed every year, according to the data released by the International Agency for Research on Cancer in 2022. At national level, PAEC shares 80 percent burden of the cancer patients' diagnosis and treatment. It leads the way in the nuclear medicine setups in Pakistan with its 19 Atomic Energy Cancer Hospitals (AECHs). The AECHs are spread across the country ensuring that even remote regions have access to quality healthcare services. The nuclear medicine centres operating under PAEC have integrated state-of-the-art imaging techniques such as Single-Photon Emission Computed Tomography (SPECT) and Positron Emission Tomography (PET) scans. These non-invasive imaging technologies enable early detection and assessment of disease dispersal with an exceptional accuracy, allowing the healthcare professionals to formulate personalised treatment plans. This plays a pivotal role in ensuring appropriate timely intervention to improve the patients' survival rates across the country.

PAEC provides state-of-the-art facilities to patients at AECHs either free of charge or at subsidised rates. Through this, PAEC reaffirms its commitment to ensuring accessible and affordable healthcare for all. Over one million patients on average receive radiation therapy for various types of cancer at AECHs every year.

The nuclear medicine services at these hospitals include crucial treatments for conditions such as thyrotoxicosis, benign and malignant thyroid diseases and palliative care for bone pains. Moreover, PAEC's integrated program in radiotherapy has received widespread acclaim from the public, solidifying its reputation as a reliable and trusted institution in cancer treatment.

PAEC also engages in research and training programs to enhance medical knowledge and expertise in the field of oncology. The AECHs play a central role in the national cancer awareness and prevention program, offering a range of diagnostic studies and therapeutic applications. For this purpose, various events such as workshops, seminars, conferences, and symposiums are being organised in collaboration with medical colleges, NGOs, universities and cancer patients' welfare societies.

Within PAEC, Pakistan Institute of Nuclear Science & Technology (PINSTECH) is a premier Research and Development (R&D) institute working in the domain of nuclear medicine. Among others, PINSTECH's wide-ranging research programme includes isotope production for diagnosis and treatment of cancer and thyroid diseases.

It is crucial to mention here Pakistan's mutually beneficial collaboration with the European Council for Nuclear Research (CERN) since 1994. CERN contributes to the medical innovation through its breakthrough technologies which are being used in areas related to medical diagnostics and imaging, therapy, dosimetry, as well as digital technologies for health applications.

CERN is also home to Isotope mass Separator On-Line Device (ISOLDE), an outstanding facility for nuclear research that has been producing more than 1300 radioisotopes from 73 elements over more than 50 years.

The CERN-MEDICIS (Medical Isotopes Collected from Isolde) facility supports R&D in nuclear medicine using non-conventional radionuclides. It also produces a wide range of high-purity radioisotopes specifically for medical research. Some of these isotopes can only be produced at CERN.

Pakistan's collaboration with CERN is based on the shared ideas of promoting world-class research in fundamental physics and pushing the frontiers of science and technology for the benefit of all.

More importantly, due to the efforts of PAEC scientists, researchers and technicians, Pakistan became the first country from Asia and the second overall to become an associate member of CERN in 2015. Based on such strong credentials, Pakistan now actively participates in international research activities in the nuclear field, accruing medical capacity building, besides expertise in other areas.

Regarding this, the joint effort of PINSTECH and the CERN-MEDICIS is noteworthy which focuses on the production and study of innovative radioisotopes. PINSTECH scientists and engineers have been seconded to the CERN-MEDICIS team for the development of radiochemical activities including a major contribution to the

MEDICIS radiochemistry set up for the purification of medical radioisotopes with both therapeutic and diagnostic properties, called "theranostic" combinations.

The establishment of Pakistan's first theranostic laboratory at the Institute of Nuclear Medicine & Oncology (INMOL) hospital in Lahore is an extension of PAEC's pioneering efforts in the field. This laboratory focuses on the use of Gallium-68 and Lutetium-177 for metastatic neuroendocrine and prostate cancers. The integration of theranostics enhances the effectiveness of the treatment through a patient-centred and targeted approach.

Another notable milestone in Pakistan's nuclear technology-driven healthcare is the inauguration of the Cyber Knife facility at the Nuclear Medicine Oncology and Radiotherapy Institute (NORI) in Islamabad second such facility in Pakistan after Jinnah Hospital Karachi.

This pioneering treatment facility, inaugurated by Director General of the IAEA, Rafael Grossi on 15 February 2023, positions Pakistan as a regional centre for cancer care under the Rays of Hope initiative of IAEA that focuses on prioritising high-impact, cost-effective and sustainable interventions in line with national needs and commitment.

The IAEA's initiative aims to improve radiation medicine capacities and build the cancer care workforce, ultimately increasing access to the chronic disease treatment in low and middle-income countries. While nuclear technology has undoubtedly revolutionised healthcare in Pakistan, the emphasis on safety and stringent regulatory measures remains a top priority.

All medical setups using nuclear medicine are guided by the principles of the IAEA and Pakistan Nuclear Regulatory Authority (PNRA). PNRA is the national body that ensures compliance with international safety standards, oversees the safe use of nuclear technology in healthcare and conducts regular inspections to guarantee the well-being of patients and healthcare professionals.

The establishment of AECHs by PAEC demonstrates Pakistan's commitment to leveraging nuclear technology for peaceful purposes, particularly in the advancement of healthcare. These institutions stand as symbols of hope, offering comprehensive and affordable cancer care to the people of Pakistan and serving as models for the effective integration of nuclear technology in the field of medicine.

Moreover, implementing cost-effective interventions increases Pakistan's capacity in achieving health-related Sustainable Development Goals (SDGs). Sustainable development relies on a healthy population, as much as the healthy population depends on sustainable development.

In an era where nuclear technology is generally associated with defence and strategic applications, Pakistan's pursuit of a robust and cutting-edge nuclear programme through utilising the technology for peaceful healthcare purposes is commendable. As Pakistan continues to invest in this field, the future seems promising for the healthcare sector addressing the critical and life-threatening diseases for the well-being of its citizens.

The Op-ed was first carried by online platform Modern Diplomacy.

PAKISTAN'S COLLABORATION WITH IAEA IN PEACEFUL USES OF NUCLEAR TECHNOLOGY

AREESHA ANWER, RESEARCH OFFICER (CISSS)

During his visit to Pakistan in February 2023, DG International Atomic Energy Agency (IAEA) Rafael Grossi observed that "Pakistan's capacity in establishing new nuclear power plants indicates a promising future for nuclear energy and achieving Sustainable Development Goals." At present, Pakistan is operating six Nuclear Power Plants (NPPs) that come under IAEA safeguards. Four NPPs are located at Chashma (C1,C2,C3,C4) and two are located in Karachi (K1 & K2). The combined power generating capacity of C-series is 1320 MWs, and the total power generating capacity of K-series is 2200 Mws.

Together they produce 3520 MWs of electricity, contributing about 12% in the total energy mix of the country. On 20 June 2023, Pakistan and China signed a Memorandum of Understanding on a NPP to be built at Chashma with 1200 MWs power generation capacity. It will be seventh NPP built in Pakistan with Chinese assistance and fifth at Chashma.

Established in 1956, Pakistan Atomic Energy Commission (PAEC) is the essential driver of peaceful uses of nuclear technology in Pakistan. PAEC contributes towards achieving 11 out of 17 UN Sustainable Development Goals (SDGs). These include (i) Affordable and Clean Energy; (ii) Clean Water and Sanitation; (iii) Quality Education; (iv) Good Health and Well Being; (v) Zero Hunger; (vi) Partnerships for the Goals; (vii) Life on Land; (viii) Life Below Water; (ix) Climate Action; (x) Industry, Innovation and Infrastructure; and (xi) Poverty Alleviation.

PAEC's four agriculture and biotechnology institutes have produced over 140 high-yield, weather-tolerant and highly adapted varities of crops including cotton, wheat, rice, sugarcane, lentils and oilseeds. Climate-resilient cotton plants have provided an impetus to the textile industry of Pakistan.

This became possible through joint collaboration between Nuclear Institute for Agriculture and Biology (NIAB), IAEA and Food and Agriculture Organization (FAO). According to IAEA, "with the collaboration between Pakistan's NIAB, the IAEA and FAO, Pakistani scientists have reached a level of expertise that they can share with other countries."

Recently, NIAB has been designated as an IAEA "Collaborating Centre in Agriculture and Biotechnology". NIAB is also the national laboratory under IAEA's Zoonotic Disease Integrated Action (ZODIAC) initiative which aims to strengthen the preparedness and capabilities of member states to rapidly detect and timely respond to outbreaks of zoonotic diseases and future pandemics.

Pakistan was designated as the regional center for "Ray of Hope" initiative of IAEA during DG Grossi's recent visit to Pakistan. The initiative aims at increasing the availability of radiotherapy facilities in the developing countries. This initiative focuses on prioritizing a limited number of high-impact, cost-effective and sustainable interventions in line with national needs and commitments of participating countries.

Pakistan also collaborates with IAEA in conducting training courses at national, regional and international levels. In 2021, "Practical Arrangements" were signed between Pakistan and IAEA which will help Pakistan to share its expertise in agriculture, human health, training and regulation with member states, especially from Africa.

In 2022, IAEA and FAO developed an emergency support package for the affectees of floods in Pakistan, leading to economic losses of more than \$30 billion. The package aims to assist the country to use nuclear technology to assess the impact of floods on soil, crops and the potential spread of zoonotic diseases. In 2022, IAEA granted Pakistan's National Institute of Safety and Security (NISAS) the status of "Collaborating Center in the field of Nuclear Security". The expertise of the faculty and state-of-the-art facilities of NISAS will be utilized to support implementation of IAEA nuclear security action plan for capacity building of IAEA member states in nuclear security, education, training and technical support.

Pakistan Institute of Nuclear Science and Technology (PINSTECH) is an IAEA partner in the work related to human health, nutrition and water analysis. In addition, under UNDP /IAEA/RCA(Regional Co-operative Agreement) Marine Sub-Project (2002) titled "Management of Marine Coastal Environment and its Pollution (RAS/8/083)", PINSTECH initiated essential field and laboratory activities in collaboration with other key end user institutions for study of various components of marine pollution project. Based on this, the IAEA recognized PINSTECH as a "Regional Resource Unit (RRU)" for UNDP/IAEA/RCA Marine Sub-Project.

PINSTECH offers extensive applied research and training programs and has established specialised labs working indigenously for the peaceful applications of nuclear technology in life sciences, environmental sciences, industries, medical and agriculture. Pakistan Atomic Research Reactor -I (PARR-I) located in PINSTECH was the first research reactor which Pakistan received under the Atoms for Peace Program (1956) from the US. The power generating capacity of PARR-I is 10 MW. PARR-II located in the same facility is a 30 KW research reactor.

These reactors are used for R&D and have helped Pakistan to achieve selfreliance in applications of nuclear technology in many areas. For instance, Molybdenum Production Facility at PINSTECH produces Molybdenum-99 which is used for diagnosis of different type of cancers in hospitals. The marvels achieved by PAEC would not have been possible without the indefatigable efforts and the wholehearted commitment of Pakistan's nuclear scientists and engineers.

PAEC's leading institutes such as Pakistan Institute of Engineering and Applied Sciences (PIEAS), Karachi Institute of Power Engineering (KINPOE) and CHASNUPP Center of Nuclear Training (CHASCENT) collectively provide high quality education and training to its workforce. These institutes also contribute to R&D programs of PAEC.

Nuclear technology can play a vital role in nation's growth and development. Pakistan, with the help of IAEA, has successfully used nuclear technology in a number of fields despite various challenges. Pakistan's nuclear programme has made significant contributions to socio-economic development of the country and welfare of its people. In Pakistan's journey of using nuclear technology for peaceful generating power, China has been a prominent partner. All six NPPs operating in Pakistan have been established in collaboration with China. The new NPP Chashma-5 (C-5) will also be built with Chinese assistance.

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MITIGATING CLIMATE CHANGE IMPACT IN PAKISTAN THROUGH NUCLEAR APPLICATIONS IN AGRICULTURE

RUBIA SHOUKAT, RESEARCH OFFICER (CISSS) & ZEESHAN HYDER, RESEARCH ASSISTANT (CISSS)

It is not a coming-of-age phenomenon that climate change is adversely affecting agriculture productivity. In 2022 International Food Policy Research Institute pointed out that rising temperatures, high humidity levels and extreme weather conditions pose complex challenges for the global food value chain. A 2021 study published in the Science Daily found that climate change has resulted in 21% decline in global agricultural productivity during the last six decades. In 2022, World Bank estimated that food insecurity would continue to grow as 70% more food will be required by 2050 to feed an estimated 9 billion people.

A 2019 special report titled "Climate Change and Land" of Inter-Governmental Panel on Climate Change concluded that, as earth is warming agricultural yields would continue to drop which is worrisome for global food security. Scientists argue that with worsening climatic patterns there is likely to be a significant reduction in global food exports. Climate smart agriculture is therefore the focus of debates on food security.

According to Carbon Brief (2022), almost 0.702 billion world population is living under extreme poverty and facing food security challenges which would become an existential threat by 2050. Competition for land may increase as certain areas might become climatically unsuitable for production. According to the United Nations, if business continues as usual, an area almost the size of South America could be degraded due to Climate Change.

One way to address climate related challenges being faced by global food market is to use nuclear applications in agriculture. According to the UN (2020), "Nuclear technology has been used worldwide to develop new varieties of crops that are more resilient to climate change and meet the needs of growing population." According to Food and Agriculture Organization (FAO), nuclear agriculture relies on the use of isotopes and radiation techniques to tackle pests and diseases, raise agricultural yield, preserve land and water resources, assure food security and boost livestock productivity.

It is further added that due to their cost-effectiveness and high quality, nuclear techniques in agriculture remain an economically viable option, especially for developing countries. A number of developing as well as advanced economies have started using nuclear applications in agriculture which have resulted in stable yields despite challenges from climate change.

At present, seventy countries are benefitting from nuclear applications in agriculture sector. These include: (i) Bangladesh in Rice cultivation; (ii) Benin in Soybean; (iii) Burkina Faso in Livestock; (iv) China in Wheat; (v) Indonesia in Rice and Soybean; (vi) Kenya in irrigation technology; (vii) Madagascar in soil erosion; (viii) Malaysia in Rice; (ix) Mexico in Radiation-based Sterile Insect Technique; (x) Namibia in Cowpea and Sorghum; (xi) Sudan in Drought resistant groundnut varieties; (xii) Tanzania in Rice; and (xiii) Azerbaijan in Cotton. International Atomic Energy Agency (IAEA) has developed over 3400 mutant crop varieties globally. FAO and IAEA have almost 60 years of joint experience in inducing mutations in agriculture in various countries.

According to IAEA, agriculture is the second largest source of Greenhouse Gases (GHGs) emission after energy generation. Growing crops, raising livestock and other forms of land uses are responsible for 23% of human induced GHGs emission. One of the many benefits of nuclear applications in agriculture is that it leads to 50% reduction in GHGs emission as compared to conventional methods of agriculture. Agriculture is the backbone of Pakistan's economy. According to Pakistan Economic Survey (2022-2023), agriculture contributes around 18.23% to the GDP. It employs around 38.5% of the total labor force. However, Pakistan's agriculture sector is faced with a number of challenges. According to Asian Development Bank report (2017), by 2040, agricultural production will decline by 8%-10% in Pakistan due to temperature rise.

Pakistan's National Climate Change Policy 2021 highlights many benefits of nuclear applications in agriculture. The Policy objectives include: (i) To develop climate resilient agriculture and food systems for all agro ecological zones in the country; (ii) To develop varieties of crops which are high yielding, resistant to heat stress, drought tolerant, less vulnerable to heavy spells of rains and less prone to attack by insects and pests; and (iii) To develop salinity tolerant crop cultivars for coastal agriculture. Pakistan Atomic Energy Commission (PAEC) has a long experience in developing mutant crop varieties. PAEC has established four agrobased institutes: (i) Nuclear Institute for Agriculture Tando Jam (NIA), in 1962; (ii) Nuclear Institute for Agriculture and Biology Faisalabad (NIAB), in 1972; (iii) Nuclear Institute for Food and Agriculture Peshawar (NIFA), in 1982; and (iv) National Institute for Biotechnology and Genetic Engineering Faisalabad (NIBGE), in 1994. These institutes are contributing in areas of food security, food safety, sustainable agriculture, high yields despite climatic challenges, cost-effectiveness, guality products, improving farmers' livelihood, corporate linkages, meeting Sustainable Development Goals (SDGs) and biodiversity. Agriculture institutes under PAEC

have developed over 130 varieties of mutant crops, including: (i) Wheat; (ii) Rice; (iii) Cotton; (iv) Sugarcane; (v) Chickpea; (vi) Mungbean; (vii) Lentil; (viii) Oil seeds; (ix) Tomato; and (x) Kinnow.

Sindh was particularly impacted by flash floods in 2022. According to satellite images acquired, between 2228 August 2022, flood water directly inundated about 2.5 million hectares of land (over 18% of Sindh's total area) which resulted in limiting mobility in nearly three-fourths of the province. The province faced crop losses of almost Rs. 364 billion during the floods. Sindh is also projected to suffer due to increase in temperature. According to Climate Change Policy of Sindh (2022), "increase in temperature will increase the evaporation rate of moisture from the soil surface and transpiration from plant tissue in vegetated areas of Sindh."

According to Pakistan Agriculture Research Council (PARC), agriculture sector of Sindh contributes significantly to the national economy. Sindh province accounts for 42% of the rice production, 23% of the cotton production and 31% of the sugarcane production. NIA is an important agriculture Institute under PAEC. The Institute has, over the years, introduced eighteen mutant crop varieties in Sindh. The first mutant variety of wheat was introduced in 1979. The crop seeds produced by NIA are affordable, high quality and address climatic challenges such as heatwaves, land salinity and droughts. This is evident as sales of these seeds from 2005 to 2022 have increased as follows: Cotton by 1,868.9%, Wheat by 380.5% and Rice by 200%. During the last decade, Pakistan has faced serious threats due to Climate Change. Use of climate-smart nuclear applications in agriculture is one way to effectively address climatic threats and food security challenges in Pakistan.

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DID PAKISTAN JUST OVERHAUL ITS NUCLEAR DOCTRINE?

A COMMENT FROM A SENIOR FIGURE ABOUT "ZERO-RANGE" WEAPONS COULD SIGNAL A DRAMATIC AND DANGEROUS SHIFT IN ISLAMABAD'S NUCLEAR STRATEGY SITARA NOOR

As Pakistan celebrated the 25th anniversary of its first nuclear tests last month, it also appeared to share more details than usual about its current nuclear posture. Speaking at a seminar hosted by the Institute of Strategic Studies Islamabad on May 24, retired Lt. Gen. Khalid Kidwai provided new details of Pakistan's otherwise ambiguous nuclear doctrine. What Kidwai says matters because he is currently an advisor to the country's National Command Authority (NCA), which controls research and development and all other policy matters concerning nuclear weapons? He's also the former director-general of the Strategic Plans Division (SPD), which is responsible for formulating nuclear policy and strategy as well as the security of nuclear assets.

During his address, he reiterated some of the long-standing positions of Pakistan's nuclear policy, such as the strength of its nuclear triad based on land, air, and sea-based capabilities to deter India especially the Indian military's so-called Cold Start doctrine, which envisages a limited war through quick mobilization of unified battle groups to conduct operations inside Pakistani territory without crossing Islamabad's nuclear threshold. He also discussed what's known as full-spectrum deterrencea policy aimed at responding to a range of threats from India. But he went further.

Kidwai expanded the scope of this doctrine by explaining what he called vertical and horizontal dimensions. In his words, full-spectrum deterrence "comprises horizontally of a robust tri-services inventory of a variety of nuclear weapons ... that is held on land with the Army Strategic Force Command, the ASFC; at sea with the Naval Strategic Force Command, the NSFC; and in the air with the Air Force Strategic Command, the AFSC." Most striking was his statement that "vertically the spectrum encapsulates adequate range coverage from 0 meters to 2,750 kilometers [about 1,700 miles] as well as nuclear weapons destructive yields at three tiers strategic, operational, and tactical." Reducing the minimum range to 0 meters is unprecedented and, if implemented, points to a major shift in Islamabad's nuclear policy thinking.

Talk of zero-range weapons suggests that Pakistan is either going to develop artillery shells as the United States, Soviet Union, and United Kingdom did during the Cold Warraising questions of whether it is going to be an M28/M29 Davy Crockett-style recoilless rifle system, the smallest weapon in the U.S. nuclear arsenal, developed during the 1950s as a front-line weapon with yields as low as a fraction of a kilotonor it could be a hint that Pakistan could possibly lay nuclear land mines across the India-Pakistan border to deter Indian advances. Observers, especially in India, are left wondering whether this statement is based on some existing scientific research and design testing and necessary doctrinal thought process. Kidwai's statement does not provide any such details, and in the spirit of ambiguity that Pakistan seems to have benefited from, there is unlikely to be a follow-up soon to clear the air.

Indeed, Pakistan has always kept its nuclear policy vague and deliberately ambiguous; nonetheless, its missile ranges are the only aspect that has always been announced publicly through an official press release after every missile test. Prior to Kidwai's statement, the officially announced lowest range in Pakistan's nuclear inventory was the Nasr, or Hatf-9 ballistic missile, with a range of 60 kilometers (about 37 miles). The solid-fueled tactical ballistic missile was projected to be a response to India's Cold Start doctrine. When it first test-fired the Nasr missile in 2011, Pakistan received huge flak from both Indian and Western scholars for its potential security risks and command and control challenges. The purported risks of employing Nasr ranged from the lowering of nuclear threshold to the possibility of an accidental or unauthorized launch if command and control of this short-range missile was delegated to local commanders in the battlefield.

The upper limit of 2,750 kilometers refers to the land-based surface-to-surface medium-range ballistic missile Shaheen-3, which was first test-fired in 2015 with the stated aim to reach the Indian islands of Andaman and Nicobar, thereby denying New Delhi the strategic bases for a potential second-strike capability. The upper limit was carefully restricted to 2,750 kilometers to signal that Pakistan's nuclear missile program is only India-specific and does not pose a threat to any other country in the region and beyond.

Apart from Kidwai's latest statement, there is no other information available to determine whether the zero-range announcement refers to a technical milestone in Pakistan's nuclear development or serves as a rhetorical escalation. As an advisor, Kidwai has an important yet limited role in official policymaking, and there is a possibility that this assertion is a reflection of his personal opinion and not a statement of an official position. However, in the absence of any official statement, his declaration will largely be viewed as a new element of Pakistan's nuclear policy. The bigger question is what strategic objective Pakistan wishes to achieve by going below the already controversial 60-kilometer range to zerorange weapons. As full-spectrum deterrence is aimed at plugging the perceived gaps in Pakistan's deterrence posture, the apparent announcement of a zerorange policy within the scope of full-spectrum deterrence seems to have developed partly in response to a growing perception in New Delhi that India's 2019 airstrikes on Balakot in mainland Pakistan instigated by an alleged Pakistansponsored suicide attack on Indian forces in Pulwama, a small town in Indian-held Kashmir have called Pakistan's nuclear bluff.

It is important to recall that in order to defend Nasr's development and its role in nuclear planning, Pakistani officials have often contended that use of any nuclear weapons on the battlefield would have strategic consequences. While this position might have allayed Western concerns regarding Pakistan's attempt to lower the nuclear threshold, it may also have inadvertently made the use of Nasr less than credible in the eyes of Indian policymakers.

Sitara Noor, a research fellow at HU.

AD NCA

CASS SEMINAR KEYNOTE ADDRESS - 08 JUNE

BLEND OF CHANGING TECHNOLOGIES WITH COMPREHENSIVE NATIONAL SECURITY Air Marshal Farhat Hussain Khan, Air Marshal Ashfaque Arain, distinguished speakers of the Seminar, ladies and gentlemen. It is a matter of great honour for me to have been asked to deliver a keynote address at today's Seminar at the Centre for Aerospace and Security Studies (CASS). I have been following quite closely the high quality academic and intellectual work which has been undertaken at the CASS ever since its inception a few years ago. I am really happy to say that the research work, publications and outreach undertaken at CASS is way up amongst the best in Pakistan; and that too in a very short time.

Frankly I am not surprised given that top quality professionals like Air Marshal Farhat, Air Marshal Ashfaque and their team members have been entrusted by the Pakistan Air Force with this intellectual responsibility. I have had the privilege of working closely with both the senior officers during our respective times at the Strategic Plans Division (SPD) and the Air Force Strategic Command (AFSC). You can't find more dedicated and intellectually gifted professionals than the two Air Officers. They made huge contributions during their tenures at the AFSC, and I think they make a great team here at the CASS.

The topic for today's Seminar has been well chosen. The Role of New and Emerging Technologies in Comprehensive National Security is a subject that is important, but is also at the same time both current and futuristic, as in not too distant a future. These have been around for quite some time now, and is relevant and vital particularly to the security environments of countries like Pakistan which are located in international crush zones and have to bear the brunt of the cross currents of international geo-political power play as these play out in our region even as I speak.

In addition to the interplay of the cross currents of international geo-political power play, Pakistan continues to additionally bear the consequences of the unfinished agenda of the partition of India with a raging unresolved conflict over Kashmir with its eastern neighbour.

Therefore for Pakistan its national security dynamics, or comprehensive national security dynamics, translate into a variety of threat scenarios, ranging from good old fashioned contact warfare to non-contact warfare, and the evolving notions of national security ranging from the traditional to the non-traditional, all of which must be taken into account by Pakistan's national and strategic planners. In this complex mix, we can now add the emergence of exotic and new technologies, as these evolve and unfold year after year not only globally, but more importantly from Pakistan's perspective in the region of South Asia.

Some of you would recall that CASS had organized a Seminar last year in October on "Militarization of Emerging Technologies: Implications on Strategic Stability in South Asia", and had given me the honour to deliver a keynote then too. That Seminar and today's Seminar have one thing in common, that is, the study of the effects that are being generated by the New and Emerging Technologies in different domains and from different perspectives.

The difference to my mind is the focus or the prism through which two different aspects of these emerging technologies are being looked at. In October last year it was the effects or implications of emerging technologies on Strategic Stability in South Asia, and today, it is the role or blend of emerging technologies with comprehensive national security. Therefore, as a recap before proceeding further, I would like to quote briefly from my October keynote in order to illustrate a certain connectivity between the prisms of the two Seminars. I had said then and I quote, "I would like to start by taking a somewhat philosophical and historical view of the term Emerging Technologies. The term Emerging Technologies in recent years has managed to catch the imagination and attention of today's military professionals as something of a new and exotic term of our times.

Perhaps because exotic technologies like robotics, Artificial Intelligence (AI), directed energy weapons, hypersonic weapons, cyber warfare, space capabilities, drones, etcetera, conjure a vision of a star wars like inter-galactic warfare from faraway distances, wherein a faceless adversary can neither be seen nor pin pointed for possible retribution and retaliation.

A video-game like environment where an anonymous individual sitting in Florida playing on his video-screen can blow up with mind boggling precision Ayman Al Zwahiri in the balcony of a Kabul apartment. Or a faceless cyber space hacking operation which can switch off the electricity grid of a mega city plunging life into chaos and inflicting massive financial losses. The effects generated through some of these technologies include shock and awe, surprise and destruction far in excess of conventional technologies as we know them - force multipliers in many ways; warfare without a nametag.

We seem to have latched on to this coinage of emerging technologies with much enthusiasm, awe and novelty as if the development and emergence of technologies before our current era had come to a stop and that it is only of late that technologies have made a breakthrough and started to emerge or reemerge from hibernation.

Philosophically speaking, if we look at technologies in a historical perspective, I would like to submit that for ages past, and for that matter for centuries past, technologies and technological developments in any given era, were always dynamic, progressive and generated profound strategic effects on the strategic stability-instability paradigm in that particular era, time, place and region.

Of course with each passing decade, or a couple of decades, or a century, the complexity and lethality of technologies certainly became more and more challenging in each era than in the eras past but because science and technology are by their very nature progressive, innovative and a marvel, new technologies did not really stop emerging - ever. Technologies remain in an unstoppable race to ever expanding frontiers of excellence, innovation, capabilities and mysteries. It is impossible to tell where and when these would stop, if ever," unquote.

That was in the context of militarization of emerging technologies and their implications for Strategic Stability in South Asia. Today in this Seminar that canvass has been greatly broadened by the sponsors, and rightly so, to discuss and debate the role of New and Emerging Technologies at the level of what is being referred to as comprehensive national security. It is important not only to debate and be clear as to what we think comprehensive national security is, or ought to be in the security environments of today and tomorrow but also the role that

emerging technologies are likely to play in this wider notion of comprehensive national security.

Also, it is not possible to project as to what might be the futuristic reliability and the shelf life of the invention of a particular new technology or innovation as we know these today. How long will the strategic effects of a certain technology prevail or last as a dominant marvel of science and engineering, creating tactical and strategic imbalances in the process, before an antidote in due course of time is discovered or invented and the effects either neutralized or an effective strategic balance of sorts restored? It may not be a bad guess to predict that the timeframe will probably be measured in terms of a couple of decades for a technology to mature, be absorbed by the users in a meaningful way, and become familiarized to play a variety of roles in comprehensive national security of a nation.

In the concept note of today's Seminar, CASS has defined comprehensive national security quite accurately as a state of preparedness for the threats and risks to vital functions of society. It recognises the inherent connectivity between traditional and non-traditional elements of national security and proposes a whole-of-nation approach towards charting a cohesive, unified, and responsive security policy for the future.

In addition to generally agreeing with the definition by CASS, I would like to add or at least make it clear what ought to be obvious that while defining the notion of comprehensive national security of a nation, the fundamental and basic values of three factors, political stability with peace within and peace without, a sound and robust economy, and social cohesion between various segments and communities within a society, will just have to be considered sine qua non, or indispensable pre-requisites for a nation to feel comprehensively secure.

Without ensuring that these three pre-requisites, which I'll repeat for emphasis, political stability with peace within and peace without, sound and robust economy, and social cohesion, are deeply embedded in the life of a nation, the mere possession of some of the fancy state of the art emerging technologies are not likely to go very far in playing a worthwhile role in the provision of comprehensive national security. If this be true, we may like to make an objective internal assessment of the situation around us so as to gauge what might be amiss in our comprehensive national security environments.

Here I would like to say a few words about the changing dynamics of traditional and non-traditional security. We in the military are largely trained to think and make our threat assessments and response options in a bit of a strait jacket; from the early days in our respective training academies to the higher courses at staff and war colleges. In each service, there is a straight forward template of military methodology at each incremental level which trains our minds to arrive logically at feasible military response options to various threat scenarios, the probability and likelihood of some of those scenarios unfolding in a certain order of priority whether on land, air or at sea, with jointness built into plans at a higher level. By and large, following the military methodology template invariably leads one to workable response options and plans which can then be executed as per the unfolding of a particular operational environment or a hypothesis, including variants of all shades.

Now all this is very fine as long as the threat is in the domain of brute force of conventional forces of the adversary being physically pitched against the brute force of our own forces. This is warfare at its oldest and crudest threatening the security of nations in a very traditional form of unleashing violence in pursuit of national policies. From North America to Europe, from Asia to the Pacific, world armies know how to do it, world air forces know how to do it, and world navies know how to do it. As military professionals we are past masters at the job.

But consider now that the arrival of a variety of emerging technologies of our times that widen the canvass of non-traditional response options, or even nontraditional options for initiating operations in a non-traditional manner. Such capabilities will now have to be incorporated and integrated into national security plans in a manner that might be novel and innovative, not necessarily relying on violence as the preferred option, and allowing considerable flexibility of deniability.

Such possibilities are today being enabled by various forms of Artificial Intelligence, cyber warfare, robotics, information wars, and what have you. In the current war in Ukraine, for example, one can find a subtle combination of traditional and non-traditional means at play. Some time back, in the war in Azerbaijan, one learnt about the overwhelming role and employment of drones in quite a non-traditional manner.

As someone who learnt on job how to develop, operationalize and manage Pakistan's substantial nuclear inventory to serve the purposes of national security, as a very basic example, what readily comes to my mind in the context of South Asia is the game changing role that the development and operational induction of nuclear weapons has played in South Asia.

Nuclear weapons, which even though continue to improve qualitatively all the time, are nevertheless based on a technology that emerged a long long time ago and perhaps strictly speaking may not find its place in the current definitions of the term emerging technology. Nevertheless, it is a technology of its time and the mere possession of a triad of operationalized nuclear weapons by both Pakistan and India has seemingly outlawed major wars in South Asia, strategic deterrence is in place and it apparently works; it has controlled a rush of blood on both sides in a number of otherwise haywire situations.

Having said that however, what the deterrence effects of nuclear technology have been able to achieve in South Asia is that having helped in outlawing major wars, these have nevertheless created, what I might call, a strategic deflection effect towards the strategies of lesser wars by other means; meaning other than the means of regulation conventional forces.

They have pushed war towards non-traditional, non-contact means defined by various shades of hybrid war including low intensity conflicts, opening of a variety of inner fronts, intense information war, perhaps water wars in the future,

anonymous cyber-attacks on critical facilities, even aggressive diplomatic and economic policies in Pakistan's traditional areas of influence, etcetera. Consequently, one might ask, what has been at the receiving end? The answer is Pakistan's national security, comprehensive national security.

Sooner rather than later, some of the new and emerging technologies mentioned earlier which are currently going around in the world are bound to find their way, in one shape or another, in the inventories of South Asia too. These will invariably have dual use, or perhaps more accurately, quadruple use; civil, military, positive and negative. As such one should expect that these technologies will have a positive role to play in providing and reinforcing comprehensive national security in non-traditional areas of nation building, in boosting economic growth through a vast variety of civil applications in a large number of trade and economic sectors like finance and banking, stock markets, construction industry, in the energy sector, in the agricultural sector, in Information Technology, in improving and reforming the health and education sectors, in enhancing communications and providing super-fast transportation options for both cargo and human travel. But then the emerging technologies will invariably also carry the potential to enhance military capabilities in the traditional conventional as well as nonconventional strategic forces. What will follow therefore will be the placement at the doorsteps of military and strategic decision makers more innovative and exotic means of pursuing and influencing outcomes in support of a nation's foreign policy goals and objectives; and that too perhaps through an entirely non-violent and surreptitious means with plausible deniability as the benchmarks. Following from the foregoing therefore, I would like here to inject a sense of urgency, a polite respectful word of caution, advice, early warning, call it what you will, to Pakistan's decision makers in the civil public and private sectors, and in the military sector that this is the future. Emerging technologies are here, and here to stay, elsewhere in the advanced countries including China.

It is only a matter of time not too far away in the future, that these applications will surely be inducted in South Asia as well, in the civil public and private sectors for economic benefits, and in the relevant military sector in our neighbour's conventional and strategic inventories. Therefore, the time for Pakistan to get its act together is now; first in enhancing our learning and understanding of these technologies at the technical level, applications level and at the operational level; and then moving rapidly in laying out comprehensive national plans for their induction and application in the relevant areas of our national life in both civil public and private sectors, and the military sector. That to my mind will perhaps be what the sponsors have called a whole-of-nation approach.

If Pakistan does not dive into this critical area without loss of time now, it will struggle in the future when it might belatedly discover the negative effects of time and technology lapses, and try and play catch up; it might be too late by then. The technology gap with the adversary might have widened beyond local repair. And mind you, for Pakistan with our rich and historic experiences of living with denials, sanctions and embargoes, it is not beyond the realm of possibility that the doors and windows to these technologies will start to dry up with time. We in the armed forces and at the SPD are quite familiar with the consequences of such denials, sanctions and embargoes. Therefore, the time to act is now while the doors are still open.

Pakistan has the advantage of a proven and reliable strategic partnership going for it which has stood the test of times at all times in the past; it needs to be tapped urgently in the interest of enhancing and securing Pakistan's comprehensive national security which must include the civil public and private sectors as well as the military sector. Failure to do so would be a dereliction of responsibility. The enormous loss would be of Pakistan in general with serious negative effects on comprehensive national security.

As of today, and for the foreseeable future, to the best of my knowledge, the development and induction of new and emerging technologies are not particularly governed by any specific international treaties or conventions. In fact, there appears to be considerable lack of clarity and confusion on trade, liability, and export control. History nevertheless indicates that at some point in time when a certain technology like, for example, nuclear and missile technology, chemical or biological technology, even some dreadful conventional weapons technology begins to cross certain thresholds of excessive proliferation, or ethical barriers, or some advanced countries consider locking in their technological advantages, countries do come together to negotiate and agree on certain minimum do's and don'ts with much give and take and finally translate into treaties and conventions.

History also shows that such initiatives and negotiations can take a long time in terms of decades with diplomats and technocrats leveraging for advantage while working on texts. As of now, even though there is much chatter, I am not aware of any international or regional initiative in such a direction. Perhaps it will happen at some time in the future.

Therefore, once again as I end, I would emphasise on Pakistan's national leadership to make the most of this diplomatic vacuum and focus our national technology plans on familiarization, development, induction and indigenization of emerging technologies in relevant areas of civil and military applications to serve the purposes of comprehensive national security. An appropriately focused national task force with clearly defined lead agency, mandate, objectives and reasonable resources at its disposal could be a good start point.

I take great pleasure in congratulating the visionary leadership at CASS for focusing national attention on this important subject with Seminars not once but twice within a few months. My hope will be that having taken the initiative and lead in this important direction CASS must continue to follow up and relentlessly pester Pakistan's planners and informed scientific and strategic community till the penny drops, a momentum is built and the fruits of your efforts spread widely to benefit Pakistan.

I thank you.

ECONOMIC BARTERING FOR STABILITY: PAKISTAN'S STRATEGIC INITIATIVES

ANDREW KORYBKO

The details of Pakistan's business-to-business deals with Russia will likely be discussed during its Senate delegation's trip to Moscow this week. The Kremlin can potentially satisfy one-third of its partner's oil needs, but without the cash to consistently pay for this, Islamabad will have to propose a very appealing quid pro quoin order at least partially tap into this opportunity.

Pakistan is on the brink of bankruptcy after its post-modern coup regime proved itself incapable of resolving the country's systemic economic crisis since coming to power in April 2022. There's now a credible chance that they won't be able to receive the rest of the IMF's bailout package before its expiry, which could plunge their already largely impoverished people further into despair. That poses a regional security threat if newly desperate people start doing the bidding of bad actors to make ends meet.

It's in this context that the decision was made to allow barter with Afghanistan, Iran, and Russia. This is by no means a solution to Pakistan's systemic economic crisis, nor a so-called "Plan B" if it fails to receive the rest of the IMF's bailout package. Nevertheless, it could possibly keep average folks' living standards at a comparatively more respectable level than if this arrangement wasn't available since agricultural, pharmaceutical, and textile products can be exchanged for commodities like energy, metals, and wheat.

UNDERSTANDING THE MATTER BETTER

Parts of the real economy could thus remain alive while the authorities race to replenish the state's rapidly depleting funds, which would help avert the worstcase scenario of newly desperate people being exploited by bad actors. All responsible stakeholders have an interest in this, especially since it'll strengthen bilateral ties with those three states that Pakistan just approved bartering with. As regards the Afghan dimension, this might also contribute to easing Pakistani-Taliban tensions too.

The Iranian and Russian dimensions are of similarly strategic importance, albeit in a non-security-related way. Those two are part of the North-South Transport Corridor (NSTC) that aims to connect Russia and India via the Islamic Republic. Former Prime Minister Imran Khan envisaged integrating his country into Eurasia's emerging geo-economic corridors prior to being deposed so there's a chance to explore the partial revival of his plans via Pakistan's barter arrangements with Iran and Russia.

Even if this only goes as far as establishing closer overland connectivity with Iran, the Russian vector could still be advanced via the newly opened direct shipping route between Karachi and St. Petersburg. There's also the chance that this maritime corridor could be expanded to Vladivostok in Russia's Far East considering the Kremlin's interest in having that port play a larger role in its Asian trade. Of course, that would depend on exactly what they end up bartering and on what terms, but it's still worth considering.

The details of Pakistan's business-to-business deals with Russia will likely be discussed during its Senate delegation's trip to Moscow this week. The Kremlin can potentially satisfy one-third of its partner's oil needs, but without the cash to consistently pay for this, Islamabad will have to propose a very appealing quid pro quoin order at least partially tap into this opportunity. One possibility is to give Russian entrepreneurs build-operate-transfer rights in various industries in exchange for fuel.

Unlike Pakistan's traditional Western partners, Moscow has no ulterior motives in doing business with Islamabad and hasn't ever attached political strings to the deals that they've clinched. The Kremlin's sole interests in this proposal are to obtain long-term revenue streams while also averting the worst-case scenario of its non-traditional South Asian partner slipping into instability if no tangible relief for its people is forthcoming in the event that the rest of the IMF bailout package isn't received. From Pakistan's side, it has an obvious interest in receiving that selfsame tangible relief for its people via reliable fuel imports in exchange for giving Russian entrepreneurs build-operate-transfer rights in various industries, which also entails establishing long-term educational and training programs too. Any such deal would therefore be mutually beneficial since Russia's financial interests would be met in parallel with Pakistan's developmental ones.

It's premature to predict whether any associated agreement will emerge from the Pakistani Senate delegation's trip to Moscow this week, but there shouldn't be any doubt that those two's business-to-business ties will figure prominently in their discussions. Pakistan's barter with Afghanistan and Iran is also important for security and connectivity reasons, not to mention meeting the needs of the Pakistani people, but the non-cash quid pro quo that it might clinch with Russia is arguably the most promising.

Andrew Korybko is a Moscow-based American political analyst.

<u>CHINA</u>

THE SECOND CUBAN MISSILE CRISIS

WE COULD REALLY USE JFK RIGHT ABOUT NOW SAM FADDIS

The Chinese are in discussions with Cuba about establishing a joint training facility in that island nation. Given the template the Chinese have used in other nations, this means almost certainly an agreement that will allow for the basing of Chinese military personnel on Cuban soil. Once that occurs and a platform is established, we will have no control over how much this presence expands.

It is completely possible that in a short space of time, a Chinese military presence will grow to include offensive weapons as well. That means missiles. That means aircraft. That means an immediate, no-notice threat to the continental United States. China's new YJ-21 hypersonic missile has a top speed of Mach 10.

That works out to well over 7000 miles per hour. A missile moving at Mach 10 can cross the United States from coast to coast in 30 minutes. Flight time from Cuba to Miami for such a weapon would be two minutes. We will never be able to intercept missiles fired from Cuba in time to prevent them from striking their targets.

We know Chinese hypersonic missiles can carry conventional warheads. We also know the Chinese are working on mounting nuclear warheads on such weapons. We are standing on the brink of a second Cuban Missile Crisis. What we are facing is a mortal threat to our national security.

Since the Monroe Doctrine was enunciated in the early years of the republic the United States has stood steadfast behind the principle that we will not allow foreign powers to intervene in the Western Hemisphere. That two-hundred-yearold doctrine is now being directly challenged.

All of this is occurring against the backdrop of a broader ongoing Chinese attack on the United States. Fentanyl is killing over 100,000 Americans a year. It is "cooked" in Mexico. The precursor chemicals for its manufacture come on an industrial scale from China with the knowledge of the Chinese Communist Party and its at least tacit approval.

Military-age Chinese males are coming across our southern border by the thousands. There is every indication that this is happening with the knowledge and assistance of the Chinese government. The purpose of this remains unclear. The Chinese have established a presence in the Bahamas focused on spying on a secretive American underwater test range where nuclear submarines prepare for deployment.

The intent is obviously to give the Chinese the capacity to track and destroy both our attack and missile subs and thereby gain a strategic advantage in a future conflict. More broadly the Chinese are aggressively expanding the scope of their influence all across Latin America.

Nation after nation is being bought. We are being challenged, repeatedly, on our own doorstep. In 1961 John F. Kennedy recognized immediately that the presence of Russian missiles in Cuba was completely unacceptable. There was nothing to discuss or negotiate.

The Russians needed to withdraw their missiles, and they needed to do it immediately. Kennedy then took the necessary steps to signal that he was prepared to fight in order to compel the Russians to comply. He deployed naval forces. He directed the military to prepare to carry out strikes on targets in Cuba. The Russians correctly assessed that they had misjudged Kennedy and he would do what was required to push them out. The Russians withdrew their missiles. We are back to 1961. A hostile foreign power has signaled that it intends to move military personnel into a nation 90 miles from our shores.

The response that needs to be taken is clear. We must advise the Chinese that we will not tolerate the presence of their military personnel in Cuba. We must

prescribe a fixed time period 72 hours seems reasonable within which the Chinese need to commit to complying and walking away from any stationing of their soldiers on Cuban soil.

And, then, we need to precisely articulate the steps we intend to take if the Chinese do not comply. Those need not be limited to kinetic military actions. The Chinese live or die based on their access to U.S. markets and American investment capital.

If China is cut off from that access their entire economy collapses and in short order Xi Jinping finds himself deposed. We are not powerless. We have a wide range of options. What we lack right now are leaders at the national level who have the backbone and integrity to stand up to the CCP.

<u>RUSSIA</u>

INFORMATION WARFARE WAS KEY TO PRIGOZHIN'S MUTINY AGAINST PUTIN

THE WAGNER BOSS OVERSEES AN ONLINE ARMY THAT HAS PUSHED DISINFORMATION AROUND THE GLOBE, INCLUDING ALLEGED INTERFERENCE IN THE 2016 PRESIDENTIAL ELECTION

ALICE SPERI

Long before he plunged Russia into its most significant political crisis in three decades, Yevgeny Prigozhin, the Kremlin caterer turned mercenary warlord and then mutineer, had built a profitable empire interfering in the politics and crises of countries around the world. Prigozhin's sprawling businesses include not only the Wagner mercenary group that became a household name when it joined Russian forces in Ukraine before launching an armed insurrection against Moscow last week but also an online army that has fought wars over information from Sudan to the United States, where Prigozhin remains under federal indictment over his alleged interference in the 2016 presidential election.

"The misinformation piece is a huge part of the narrative," Raphael Parens, a fellow in the Foreign Policy Research Institute's Eurasia Program who has long researched Prigozhin and Wagner, told The Intercept. He added that influencing public discourse is one of Wagner's "top tools." Prigozhin's brief rebellion and ongoing rhetoric against the government of his once close associate Vladimir Putin played out online as much as on the ground, as he successfully utilized the messaging service Telegram to communicate with the public. Social media's prominent role in the rebellion echoed Prigozhin's earlier online battles, where he often seized on a vacuum of reliable information to seek to control the narrative or actively worked to sow doubt and chaos around what was happening.

Over the weekend, as the world's intelligence agencies and pundit classes scrambled to analyze rapidly shifting developments, Prigozhin himself was often the source of the little information around the attempted coup, which he said was not a coup but a "march for justice." Prigozhin launched his short-lived insurrection against the Russian government in a series of social media posts on Friday, in which he accused Russian Defense Minister Sergei Shoigu of ordering deadly airstrikes on Wagner mercenaries.

(Some analysts concluded that the video he posted purportedly showing evidence of such an attack was likely staged.) He also challenged Putin's official narrative for launching a full-scale invasion of Ukraine last year a significant act of defiance in a conflict Prigozhin and his forces have actively participated in. "There was nothing extraordinary happening on the eve of February 24," Prigozhin said in a Telegram video on Friday. "The Ministry of Defense is trying to deceive the public and the president and spin the story that there was insane levels of aggression from the Ukrainian side and that they were going to attack us together with the whole NATO block."

For the next 36 hours, Prigozhin kept posting online. Telegram channels that often share Wagner-related content circulated videos of Wagner men who had seized control of the southern Russian city of Rostov-on-Don, a key military hub near the Ukrainian border. On Saturday, Prigozhin turned his men around 120 miles outside Moscow after reaching a deal with Putin brokered by Belarus's President Alexander Lukashenko.

For an episode with the potential for monumental global repercussions, accurate, reliable information remained wildly elusive even days after Prigozhin's forces retreated. That is in part due to the Russian government's tight control of the media, with independent outlets forced to shut down or move abroad since last year's invasion and foreign media still in the country operating in extremely difficult circumstances. Within hours of the uprising starting, Russian internet service providers began to block access to Google News, while observers outside Russia rushed to verify whether reports and videos emerging on social media were real. Eventually, Russian officials spoke publicly, with Putin addressing the nation on Saturday and then again on Monday. But by that point, Prigozhin's message had already spread through Russia, where people are increasingly turning to Telegram for alternative if hardly more reliable information than that coming from official state sources.

"He kind of hit this media space that has eroded in the last 10, 15 years," said Parens, referring to a Russian media landscape that has shrunk under Putin's rule, but also to a phenomenon the rise of disinformation hardly unique to Russia. "He and the organization managed to hit a gap in Russian society, and you could also say a gap in Western society and the way that we are able to deal with misinformation."

CRIMINAL TO CHEF, WARLORD TO MUTINEER

Born in 1961 in Leningrad today's St. Petersburg Prigozhin was once sentenced to 13 years in a penal colony following a conviction on charges ranging from armed robbery to fraud to "involving minors in criminal activity," according to a leaked resume published by The Intercept earlier this year. Once released, he launched a fast-food chain that soon boomed into a sprawling catering business serving the Kremlin, which earned Prigozhin the nickname "Putin's chef" and brought him face to face with dozens of heads of state.

As he grew closer to Putin following his 2012 reelection to the presidency, Prigozhin expanded his relationship with the Kremlin by financing the Internet Research Agency, a "troll farm" behind a series of online disinformation campaigns, including a bid to influence the 2016 U.S. election. And he built Wagner a successor of the Slavonic Corps, a paramilitary group involved in the 2014 Russian invasion of Ukraine into an infamous and brutal mercenary force that has been accused of widespread atrocities across multiple continents.

Until last year, Prigozhin denied any involvement in the more shadowy businesses he is today most known for, fiercely fighting U.S. and European Union sanctions against him and suing journalists who reported on his connections to Wagner. But he abruptly switched course last year, as the war in Ukraine raised his global profile and that of his mercenaries. Since then, he has embarked on an intensive media offensive: appearing in videos that showed him recruiting prisoners in Russian prisons, on the battlefield in Ukraine, and alongside dozens of corpses of Wagner fighters whose deaths he blamed on the incompetence of Russian military leadership.

The social media blitz around the weekend insurrection was a culmination of Prigozhin's monthslong campaign to dominate the narrative about Wagner and its role in Ukraine. As his name became as recognizable as Putin's over the last year, leading to speculation that he might be angling to replace him, Prigozhin issued dozens of often bombastic statements to journalists including to The Intercept through the PR arm of his catering business, while also increasingly turning to Telegram to launch screeds against his rivals in Russia and finally, to chronicle his rebellion against them in real time.

"He's certainly one of the people who is more plugged in than others with the Russian government and who has recognized the use of Telegram and social media and that actually uses that to get what he wants," John Lechner, an independent researcher and author of an upcoming book about the Wagner Group, told The Intercept. "Prigozhin has been at the forefront of really effectively using Telegram and social media to advocate for his own objectives vis-à-vis other rivals in the Russian government who either don't have the permission or the ability to pull that off." Prigozhin's online persona and his skill at commandeering attention to himself by frequently issuing over-the-top statements is also a product of the time.

"He likes to be in the limelight," said Parens. "It does feel like he's playing into the whole theater of the moment. In order to get the attention, and in order to get retweets are reposting and all that, you have to kind of go to the extreme. It's the social media effect of the way the military and political spheres look to the public now is just completely different than the way it looked maybe 10 years ago; there's just this need to dramatize things to show your point of view."

PRIGOZHIN'S PLAYBOOK

Prigozhin's mastery of social media to serve his business and political goals goes at least as far back as the 2016 U.S. presidential election. A U.S. federal grand jury indicted him in 2018 in one of the highest-profile prosecutions to emerge from the two-year Mueller investigation. Prigozhin was accused of "conspiracy to defraud the United States" along with 12 other individuals, two companies he controls, and the Internet Research Agency. At a press conference announcing the charges, Deputy Attorney General Rod Rosenstein accused Prigozhin and his codefendants of seeking to spread "distrust towards the candidates and the political system in general."

Last year, Prigozhin boasted of having been involved in that interference. "We did it only because the U.S. boorishly interfered in Russian elections in 1996, 2000, 2008, and 2012," Prigozhin wrote through a representative in an email to The Intercept. "50 young guys, whom I personally organized, kicked the entire American government in the ass. And we will continue to do so as many times as needed." The charges against him remain active, though prosecutors dropped the charges against his companies in 2020.

In several African countries, too, where Wagner has worked with local governments to quash rebellions or political rivalries committing widespread human rights abuses in the process it has also engaged in information warfare. In Mali and the Central African Republic, Wagner has promoted social media pages as well as local radio stations advancing its clients' interests, for instance by amplifying rhetoric against the French and United Nations presence in those countries. "They're very media savvy," said Lechner, noting that those efforts vary from country to country. "They're turning out these narratives that are specifically crafted to the local environment."

At times, Wagner's media campaigns seemed aimed at bolstering its business, creating an opportunity for a formal relationship with various governments. In Mali, for instance, the Foundation for National Values Protection, a Russian think tank under U.S. sanctions over its role disseminating disinformation, released an opinion poll just before Wagner finalized a deal with the Malian government claiming to show widespread popular support among Malians for such an involvement. The think tank, headed by Maxim Shugaley, a close associate of Prigozhin, had run and promoted similar polls in the Central African Republic.

In Burkina Faso last year, hours after a military coup, crowds cheering the takeover waved Russian flags. Months later, Wagner forces were reported to be supporting the military junta in the country. (This year, Burkina Faso's government denied contracting with Wagner, but said it would work with "Russian instructors" to train soldiers using equipment purchased from Russia, a phrase often used by Russian officials themselves to obliquely refer to the mercenaries). In Sudan, before the ousting of former President Omar al-Bashir, Wagner, which had business dealings in the country's mining industry, was also involved in disinformation campaigns against regime rivals. "They're definitely experimenting with disinformation in these different contexts," Parens said, "and trying to figure out how to influence populations."

<u>KASHMIR</u>

LEST THE SACRIFICES GO IN VAIN

SYED SAMIULLAH HASHMI, RESEARCH OFFICER RABITA FORUM INTERNATIONAL (RFI)

Pakistan's foreign policy on Kashmir has been very consistent and balanced in some aspects, but there are many aspects in which there is a serious lack of uniformity and determination. The fact that Pakistan proposes and backs the only peaceful solution to the Kashmir conflict respecting the demands of the Kashmiri people while keeping in mind UN conventions and resolutionshas consistently been praised around the globe.

However, Pakistan's ties with India have suffered a number of setbacks in this regard. Although it is true that India has not acknowledged the right of Kashmiris to vote and has not accorded importance to the UN resolutions in this respect, but Pakistan has also been unfortunately unable to maintain the same consistency in its strategies to successfully handle the issue at hand.

When the heroic hearts destroyed Indian fantasies about Kashmir in 1948, we returned to a ceasefire at the request of Jawaharlal Nehru. Nehru promised to uphold Kashmiris' right to self-determination, but then backtracked on excuses. Operation Gibraltar and Operation Grand Slam were carried out under Ayub's reign, although neither was successful.

But, according to Qudratullah Shahab, we squandered the opportunity to attack in 1967, during the Sino-Indian conflict. In contrast to that, evaluating Nawaz Sharif's three terms reveals a friendly hand of goodwill towards India. but it also went in vain every time because whenever Pakistan initiated a dialogue for reconciliation, skirmishes, wars, explosions, and attacks in the Indian territory happens, which consequently ends with severity in the relationships between the two countries. Additionally, the diplomatic road gets blocked because India frequently accuses Pakistan of being responsible for all adverse events that occur on her soil. Pakistan's policy is incompatible throughout the entire episode of the narrative. We often remain at the mercy of Indian attitude. We have not adequately implemented our policy, nor have we picked a single course of action.

When we need to be hawks, we transform into doves. On the other hand, if we examine Indian policy, we can observe enormous adventurism. They have a strong sense of ownership over Kashmir and have been working hard to seize control of the region since day one. One of India's staggering attempts to include Kashmir in her constituency was the presidential order of August 5, 2019.

Though the attempt hasn't got acceptation around the world and Pakistan is persistently condemning it but India seems very determined in perusing her wicked goals. In order to project a feeling of normalcy in the current situation, India opted to host the third G-20 tourism working group conference in Srinagar.

She hasn't been able to do this because of the boycotts by China, Turkey, Saudi Arabia and other countries after Pakistan's position on the matter, but Indian intransigence and arrogance are still at their pinnacle.

J. Shankar even asserted that Pakistan has no link to the G-20 and Kashmir, indicating that they are still seeking to advance for the confirmation of their heinous expansion to the area in the future. Now Pakistan must figure out how to handle the situation and put India on the offensive lines because, if Pakistan does nothing extraordinary, it is likely that the land will fall into Indian control and I think no one is oblivious of the fact that Kashmir is like a lifeline for Pakistan. Kashmir at any cost cannot be allowed to fall under the hostile occupation of India. Additionally, In order to force India to get back of her harsh stand and come to the table for a sustainable solution to the issue, Pakistan must exert strong efforts at all levels. A failure to do so would imply that we have not only forgotten the hands of the subsequent generation.

<u>INDIA</u>

SORRY, AMERICA INDIA WILL NEVER BE YOUR ALLY

BARKHA DUTT

Narendra Modi, once denied a U.S. visa, is now poised to be a showstopper at the White House. The Biden administration is sparing no effort as it prepares to welcome the Indian prime minister later this week at a state dinner, only the third under the current president. As Modi gets set to address Congress for a second time, it might look as if India is pivoting to the United States. But don't be naive, my dear American friends. India will never be your ally. And this won't change whether Modi or one of his rivals wins next year's election. India's collective memory of the indignities of colonization creates wide public support for an independent path. India's policy of nonalignment began with a refusal to be entangled in the Cold War. Today this has morphed into aggressive multilateralism. Foreign Minister S. Jaishankar says India should benefit "from as many ties as possible."

So if you're expecting monogamy, prepare to be disappointed. India has reserved the right to flirt with Russia, Iran and even China if its national interests dictate such a need. After the 9/11 attacks, Washington asked New Delhi to dispatch troops to Afghanistan. The Indian military vetoed the request. When the United States invaded Iraq in 2003, then-Prime Minister Atal Bihari Vajpayee withheld military support despite pro-U.S. Indian media urging him to get "on the right side of history" a phrase often used today in the context of the Russian-Ukraine conflict. Resisting pressure from the George W. Bush administration was a brave move and, as it turns out, the morally superior one. These days, New Delhi similarly refuses to toe the American line on the Russian invasion of Ukraine. India's

import of cheap Russian oil continues to break records. Anyone who wants to see Indian leaders stand up and publicly assail the Kremlin one of their main suppliers of weaponry and a valuable source of raw materials is in for a long wait. India has criticized the U.S. decision to block Iranian and Venezuelan oil from the open market. The government in New Delhi has actively worked to bring Iran into the Shanghai Cooperation Organization (SCO), a multilateral forum created by Russia and China in 2001.

In May, India hosted the SCO foreign ministers amid border tensions with China and continuing antagonism with Pakistan. A fortnight later, unapologetic about the seeming contradiction, Modi and President Biden were hugging and laughing for the cameras at a meeting of the Quad, a loose security partnership that also includes Australia and Japan. Of course, India's growing cooperation in the Quad raises hackles in Beijing. And yes, India's issues with China are grave. Just three years ago, India lost 20 soldiers in a deadly mountain clash with Chinese troops along their common frontier in the high Himalayas. But don't think for a moment that India will take its cue from America on China; New Delhi wants to manage the relationship on its own terms.

Indians have held 18 rounds of talks with the Chinese to resolve the border dispute. Meanwhile, India remains a key participant in the Beijing-backed Asian Infrastructure Investment Bank. As a founding member, India holds the secondlargest number of voting shares after China, which at 30 percent effectively enjoys veto rights.

There's no question that the United States and India have much in common. They are both open and argumentative societies. Diversity is the strength of both nations. Even so, it's not the romance of shared values that is bringing the two countries together. It's the reality check of geopolitics. India will agree that there is a strategic and urgent need to contain the spread of China, which is already throwing money at smaller countries in South Asia Nepal, Sri Lanka, Bhutan to buy influence. China is also flexing its muscles in the Indian Ocean NewDelhi's strategic cooperation for a long-term alliance. In a multipolar world, India will look to be a pole, not an exclusive partner.

INDIA STRATEGIC PARTNER OF USA?

NUSRAT MIRZA

American writers believe that since the past two decades, Washington has made an enormous mistake in the Indo-Pacific treating India as a key partner to help the United States in its geopolitical rivalry with China. From George W. Bush onward, successive U.S. presidents have bolstered India's capabilities on the assumption that doing so automatically strengthens the forces that favor freedom in Asia. Now, Americans have realized that India has not reached the level of competing with and or encircling China as per the ambition of the US. Further, American standards of freedom, democracy, and human rights violations have been compromised in India. It is a general feeling in India that once China accepts US primacy it will abandon India as it did with Pakistan.

Further, Washington is not convinced that India is a true strategic partner of the USA. India is sailing in two boats Russia and USA. Russia is the major arms supplier to India and the USA trying at the highest level to bring India into its bond fully as India has kept its freedom of buying arms from all over the world and has become the top importer of arms of the world. In Pakistan's point of view, these arms may be used against Pakistan because India for the time being has accepted China's position over the Line of Actual Control (LAC) in spite of the humiliating defeat at eastern Laddakh, Pangong Tso Lake on 15 June 2020 with unconventional weapons of the stone- age. 20 Indian soldiers were killed and 10 were taken as prisoners of war.

To the great surprise of the world, India has vacated, unconditionally, Kailash strategic range which was captured by its forces. The humiliation of India was at its peak when India accepted that China has not captured any piece of land of India. While the fact is that more than 1000 Kilometers of Indian-claimed eastern Ladakh land has been taken by China into its possession. Galwan river valley, Hot Spring, and Gogra including one state of India are other regions of India. China has also built watch Towers in this area. An America writer Ashley J. Ashley Tellis has written an article in Foreign Affairs on 1st May 2023, "The fundamental problem is that the United States and India have divergent ambitions for their security partnership. As it has done with allies across the globe, Washington has sought to strengthen India's standing within the liberal international order and, when necessary, solicit its contributions toward coalition defense.

Yet New Delhi sees things differently. It does not harbor any innate allegiance toward preserving the liberal international order and retains an enduring aversion toward participating in mutual defense. It seeks to acquire advanced technologies from the United States to bolster its own economic and military capabilities, and thus facilitate its rise as a great power capable of balancing China independently, but it does not presume that American assistance imposes any further obligations on itself.' Further, it is known to the world and United States of America that India is not capable of doing any substantial activity against China that USA expects from India. It seems that there is no match between China and India. Though, this realization about the capabilities of India was discussed in United States of America. US nevertheless, was working with India with different facilities and offering military hardware but perhaps Indian fox does understand Indian importance and compulsions of US.

The cultural difference between India and USA is another factor that hinders the relation of both countries to grow. Americans are used to working with countries like Pakistan which has given many favors to America, keeping its own interest first. India is a different country aspirant to become world power having 600 billion dollars reserve. Indian fox is not ready to be part of any expedition of USA. Barkha Dutt, one of the star television Anchor, expert on International relations and close

to India power structure has said in one of the article "Sorry, America. India will never be your ally" She has written in her article "As Modi get set to address Congress second time, it might look as if India is pivoting to the United States.

But don't be naïve, my dear American friends. India will never be your ally. This won't change whether Modi or one of his rivals wins next year's election. India's collective memory of the indignities of colonization wide public support for an independent path." This is a very interesting scenario and a developing story for the United States and a lesson for Pakistan on how to tackle America. At this stage when American primacy has really been challenged, is an opportunity for Pakistan to come out of American influence. US may not get support from India as rightly said by American writers that it was a bad bet for America to choose India as its ally rather strategic partner.

MANIPUR VIOLENCE THE RESULT OF RSS LED GOVERNMENT'S HINDUTVA PLAN I

DR. SYED MEHBOOB

India is burning by hatred campaign and plan to convert it to mono-religious country. RSS which killed Mahatma Gandhi and distributed sweets over his death and celebrated it as its big success is now ruling India.

Although Indian economic growth is dazzling, its IT industry is source of attraction but behind these cosmetics there is a draconian India, a night mare and worst place for minorities. After Muslims and Sikhs now, Christians are target of RSS led hate mongers. Gandhi's tolerance, peace loving philosophy is completely buried in India. Manipur is the recent example.

India always hides its ugly face behind its economic development, its advancement in information technology, its aggressive foreign policy, its weapon of mass disinformation means its media and film industry, and it takes advantage of being the biggest consumer market. It is also a strategic ally of United States of America.

So, despite gross human rights violation, killings, biased policy, Hindutva policy, RSS dominant government, so called human rights champions who have dual standards of human rights and had given license to Isreal and India to do whatever they want. Some slight tone reports they think are enough for them.

No sanctions, no penalties rather they encourage them in one or other way. It is a fact that India is the worst place for minorities on the earth. The ruling party and its Prime Minister have a history of violence, hatred and anti-minorities policies.

It is worth mentioning that once Narendra Modi was banned in USA at that time he was called, "The Butcher of Gujrat" who was involved in genocide of Muslims and his hands are red with the blood of thousands of innocent people including women, children and elderly people. Narendra Modi is darling of America but history would not forget those who are ignoring the atrocities of Indian government, its forces against minorities. Previously Muslims and Sikh were prime target of extremists but now it is the turn of Christians. RSS Philosophy is in full swing in India. Gandhi's India has sunk under the burden of Hindutva Titanic and now on the surface it is RSS and Nathuram Godse's India.

For the last one month there is worst violence continued in Manipur where three hundred churches burned to ash or razed to ground. Manipur after Kashmir is the second most violent hit area in India. It is the second biggest law and order failure in India.

The situation is turning worst in the eastern border state which is surrounded by Myanmar and China. Situation is so worst that even Schools, hospitals and ambulances were not spared. Although Hinduism like other religions does not teach violence and the father of India Mohandas Gandhi preached nonviolence and "Ahansah" but the current Indian government is the follower of killer of Gandhi. Meitei Christians are pressurized by extremist Hindus to convert back to Hinduism or to traditional Meitei religion.

This is the ugly, fierce and dirty but the real face of India, which now cannot be hidden behind its development drum beat. When you lose humanity, you lose everything and mark my words your development can not save you. It is the sunnah of Almighty Allah. Gandhi knows it but present rulers of India don't.

According to "Bibles for the world" 1,900 houses had been attacked and destroyed. More than 300 churches were destroyed. Manipur Hindu majority people group and Christian's tribal minorities have lived in tension. Modi's government and Hindutva's followers threw fuel into it. Over 45,000 people took refuge at various camps and safe places. RSS, BJP and Hindutva followers want India free from all minorities including Muslim, Sikh and Christians.

The situation in Manipur is the worst as various types of diseases and pandemic broke out in affected areas. Manipur Christians are considered as the worst enemies and BJP and RSS are fully back this perception. It is well planned and organized butchery. It is a campaign of cleansing minorities.

On 4th June, 2023 alone, 15 villages, 15 churches and 11 schools in the Sungnu areas in Manipur were set ablaze by extremists. Earlier on 30th May, 2023 eight villages, in Chandel and seven villages in Kongpokpi were burned down.

Surprisingly, licensed guns that were initially submitted to the concerned districts superintendent of Police officers were found to have been used by Arambai Tenggol in the attack on the Kuki Zo community. This indicates that police is helping extremists. Everything which has a Christian identity or Christian marks was attacked by the majority community in Manipur. Lord Altom of Liver Pool raised this issue in UK before its government. Bishop Truro described it "genocide of Christians".

A few days before a mob attacked at Manipur University which is administered by Christians Kukis, free hand was given to extremists they killed people mercilessly. It is a barbarism and the Christians are surprised why UNO, USA, EU and international community is silent over their genocide. Manipur is a hill state in north east India, bordering Myanmar to its east and south, the central inhabitable are is the Imphal valley occupying about 10% of the land area of the state, which is mainly populated by the Meitei people. The surrounding hills are inhabited by hill tribes, who are classified as Kukis in the Southern portion and Naga in the northern portion.

The Meitei's who are largely Hindus, but also have Muslims and Christians and Buddhist are also reside there represent 53% of the population. The tribal population consisting of predominantly Christians, Kukis and Nagas form 40 % of the state's 3.5 million population. The Mitie dominate politically in the Manipur Legislative assembly out of 60 seats 19 are reserved for scheduled tribes i.e. Naga and Kuki.

Remaining 40 are general seats out of which 39 are occupied by Mitie. To counter RSS and Hindutva philosophy and hatred three militant organizations are working there, among them Kuki National Army (KNA) and Zoni National Evolutional Army (ZNRA) are working.

On 20 April, 2023 a judge of Manipur has given a verdict and directed the state government to give Mitie a schedule caste status while they are in majority and have political and economic dominance.

The Kuki feared that the Schedule Tribe Status (ST) would allow the Meitei's purchase land un the prohibited areas. A widespread protest was started and violence broke out. On 28th April, 2023 curfew was imposed, internet supply was cut off in eight districts of Manipur.

Numerous witnesses and members of security forces have put much of the anti-Kuki violence on two Meitei extremist organizations called 'Arambai Tenggol' and 'Meitei Leepun'. An army officer likened them to the Hindutva organizations behind the Ram Navami procession violence in other parts of the country, and stated them to be responsible for setting homes, businesses and churches on fire. The officers also alleged that the organizations had the support of the state government, and that they had marked Kuki homes with red paint in advance in order to be able to identify them. These groups are said to have formed 23 years earlier, and were linked to the chief minister Biren Singh and the Member of Parliament Leishemba Sanajaoba. On 28 May, a fierce gunfight was reported between militants of surrendered Valley-based Insurgent Groups (VBIGs), now operating under the Arambai Tenggol banner, and a unit of Assam Rifles.

MISCELLANEOUS

EXPANSION OF UNITED NATIONS SECURITY COUNCIL

NUSRAT MIRZA

When house of Lords of Great Britain was making problem for the crown, it was decided to expand in large quantity that House of Lords lost its importance. Applying the same tactics USA and its allies are trying to reduce Chinese and

Russian influence by increasing the number of their friends in UN Security Council and further restrict the Russian and Chinese to use the veto.

USA is interested in giving permanent seats to Japan, India and others while Pakistan being a nuclear power in Islamic world at this of time. In any case as nuclear power Pakistan is eligible to be permanent member of UN Security Council. In this case, India North Korea and Israel could also be considered.

The things are being complicated and the countries of the world have kept under puzzle, pressure and keeping them busy for useless discussion. As a discussion point, the Biden administration also must navigate a host of competing proposalthat illustrate. But complexity of global coalition-building for any cause. A Uniting for Consensus proposal - backed by countries including Italy, Argentina, South Korea and Pakistan that could lose out to regional rivals in the French- and Britishsupported plans - would add nonpermanent seats but no new permanent members.

This has been discussed by Pakistan's permanent member in United Nation Munir Akram who has rightly said "This is undemocratic; it is unequal; it is contrary to the principle of sovereign equality of states which is part of the U.N. charter." He further said that Pakistan particularly opposes the appointment of its adversary India as a permanent member.

We don't think that it is a good principle that you put a country permanently on the Security Council, because then it is not held accountable for the way it behaves Akram said. If we look the Russian and Chinese point of view: The Russian position is a UN reform should provide greater and more equal representation of all the countries and regions, above all the developing states.

In other words, Russia comes out for a reform, including the enlargement of the UN SC (with the preservation of veto by the permanent members), but it sees the consensus approach, without the sidelining of dissenting states, as the key to transformations.

According to the formal rules a two-thirds majority is required, but the presence of big regional players in the opposition troika would have a negative impact on the functioning of the entire Organization. When it comes to reforms of the United Nations, it is indispensable for China and Russia, as long-time UN champions and supporters, to take the lead in promoting bottom-up approach to UN reforms.

Moscow and Beijing have already accumulated a lot of experience in working together in drafting UN Security Council (UNSC) resolutions, in setting agendas for UN General Assemblies and in interacting with various groups of UN member states.

When some talk about how to make the UN more efficient and more relevant in global politics, they usually focus on reforming the UNSC. There is no shortage of ideas and even detailed plans of how to expand the composition of UNSC and how to modify the veto power rules within the body.

It is hard to argue against the need to introduce changes to the UNSC current mode of operations. And, the Council demonstrates difficulties to jointly approach some of the most devastating and dangerous conflicts faced by the world-be it in Africa, in the Middle East, in South Asia, in Latin American and in Europe and elsewhere.

The current international environment, however, does not appear conducive to launching any far-reaching UNSC reforms today or tomorrow. An enlargement of UNSC would make the difficult task of reaching consensus in the United Nations Conference Building in New York City even more challenging; new permanent members would come with their own agendas, priorities and-alas!-with their prejudices and biases.

The idea of a veto power abolition would undoubtedly meet fierce resistance from the P5 permanent group members. Does this mean that one should put all the plans to enhance the United Nations on the back-burner? Not at all. Contemplating an enhanced UN, one has to keep in mind that the United Nations is much bigger than its Security Council, all the importance of UNSC notwithstanding.

Under the contemporary unfavorable circumstances, a bottom-up approach to the UN reforms might turn out to be more practical and more productive than a top-down approach. The United Nations is a graphic illustration of how the 20th century modernist institutional culture confronts the 21st century post- modernist international realities.

The needed adjustment is huge, even without touching the Security Council for the time being. There is an urgent need to provide for more targeted coordination among numerous UN agencies, in particular-to overcome the existing gap between the UN security agenda and its development agenda.

There is a clear necessity to produce a new set of KPIs (Key Performance Indicator) for the vast UN bureaucracy, which is quite often too much focused on formal report writing. One should think about how the United Nations could make more use of the global civil society and independent expert knowledge.

The United Nations should modernize and upgrade its peace-keeping capacity in view of the changing nature of modern conflicts and to move from mostly reactive to proactive approaches to conflicts. UN has to address in a more energetic and systematic ways pending problems of red-tape, bureaucratic duplication, excessive administrative costs and so on.

For an intellectual, the question why five members have veto power? One answer that they are nuclear power and that they formed United Nation. In expansion of UN Security Council, the simple formula could be that those countries which are nuclear power should be given permanent Seat in the Security Council with veto power and then should divide the seat on region basis. Otherwise UNO will face difficulties or will breathe its last like League of Nations.

THE ROAD TO BALANCE IN ASIA PACIFIC GEOPOLITICS OF AMERICAN RE-BALANCING AND CHINESE BELT AND ROAD INITIATIVE, DR. ATIA ALI KAZMI

SYED SAMIULLAH HASHMI, RESEARCH OFFICER, RABITA FORUM INTERNATIONAL (RFI)

The relationship between the United States (US) and China has a complex history, with both adversarial and cooperative roles in the Asia-Pacific region to safeguard their interests. Dr. Atia Ali Kazmi, a Senior Research & Policy Analyst at NUST Institute of Policy Studies, emphasizes the need for a nuanced and adaptable coexistence between the two powers due to their hegemonic influence and interdependency.

The author argues that these intricate relations have the potential to shape or disrupt the global order. The book delves into the historical context and explores the geopolitical aspects of the American Rebalance and the Chinese Belt and Road Initiative (BRI), examining their impact on China-US relations, regional power dynamics, and the Asia-Pacific region as a whole. The book is divided into seven extensive chapters:

In the first chapter "A Walk through the History of China-US Relations," the book explores the historical background of the bilateral relationship between China and US. It begins by examining the significant Wangxia Treaty signed in June 1844, which marked a pivotal moment in their interactions.

Despite their political, economic, military, and ideological disparities, the two states, as emphasized by Dr. Kazmi, maintained relevance to each other in the pre-rapprochement era due to enduring connections among their people and corporate groups. The author also highlights the role of President Nixon's visit to China as the catalyst for rapprochement, leading to the establishment of formal diplomatic relations in 1979 (p.15).

However, in the post-rapprochement period events such as Chinese President Jiang Zemin's visit to the US and North Korea's Nuclear Program etc., brought them closer together, while episodes like the Tiananmen Square incident and US arms sales to Taiwan strained their relations to a nadir.

The book's second chapter, titled "The Harvest of Détente," examines the period following China-US rapprochement and showcases various instances of their interactions. Notably, the establishment of platforms like the China-US Joint Economic Committee in 1979, the Joint Commission on Commerce and Trade in 1983, the Global Issues Forum in 2005, and the Sino-American Strategic and Economic Dialogue in 2009 are highlighted as positive advancements.

However, contentious issues of Taiwan, global outreach, human rights, the environment, and cyber security continue to create tensions between the two powers. Despite these conflicting interests, Dr. Kazmi elaborates that both the powers have deliberately avoided inciting conflicts, recognizing that cooperation and a mutually beneficial partnership are the only viable paths towards progress(p.52).

Chapter three of the book, "America's Return to Asia Pacific," explores the United States' revitalized presence in the Asia-Pacific region through the notion of rebalancing. The goal was to assume a greater role in the region's power dynamics. Dr. Kazmi highlights that the US broadened its focus by fostering extensive cooperation on geopolitical, geo-economic, and geostrategic grounds with the key regional players such as Japan, South Korea, Singapore, Australia, India, and ASEAN states. The Obama administration aimed to maintain a balance of power, promote regional stability, facilitate trade and investment, and uphold American core values and democratic principles, all while safeguarding its own political, economic, and strategic interests.

Chapter four, "Regional Power Dynamics and Imperatives of American Rebalancing," expands on the previous chapter to explore the complex security challenges that emerge from the American rebalancing in the Asia Pacific region. Dr. Kazmi specifically focuses on territorial disputes in the South China Sea and the threat posed by North Korea's nuclear program. By integrating historical context and contemporary events, the author emphasizes the need to address these challenges promptly and highlights the potential consequences of inaction. In the fifth chapter, "Belt and Road Initiative: Policy and Outreach in Asia Pacific," Dr. Kazmi offers a detailed examination of China's Belt and Road Initiative (BRI) and its impact on the Asia-Pacific region. The chapter explores the BRI's policy pillars and connectivity structure, which involves 356 international transport routes established through 100 bilateral agreements with 47 regional countries (pp. 169-170).

It also investigates related sectors such as energy, telecommunications, and trade with an estimated value of over USD 2.5 trillion by 2025, fostering multi-lateral cooperation for collective growth in the region and beyond. The author argues that despite the ongoing border conflicts, the BRI has been embraced by significant regional actors which is helpful in enhancing China's connections with Southeast Asian countries.

Chapter six, titled "Regional Impact of Belt and Road Initiative," explores China's commitment to promoting peace, prosperity, and communal growth through the Belt and Road Initiative (BRI). The author contends that the BRI can bring about significant positive changes in the region's political, diplomatic, and social dynamics if key regional players collaborate effectively.

The chapter assesses the success of the BRI, analyzes China's increasing influence in different areas and regions, and discusses how American policymakers and academics perceive the initiative as a challenge. It emphasizes that the evolving China-US relationship will be influenced by the responses and strategic actions of BRI stakeholders (p.247). Additionally, the chapter addresses various mechanical, structural, political, security, and strategic challenges that the BRI might have to get the best of.

The final chapter, "At the Crossroads", examines power dynamics in the Asia Pacific region, focusing on the US pivot to Asia policy and China's Belt and Road Initiative. The author suggests that the US's rebalancing of power may lead to other states gaining regional significance, potentially forming major powers. The author anticipates that rather than engaging in wars and conflicts, the states would choose to develop mutually beneficial strategies to coexist in a multi-polar world.

In conclusion, "The Road to Balance in Asia Pacific" by Dr. Atia Ali Kazmi is an insightful and a well-researched exploration of power relations between Washington and Beijing, focusing on economic, political, and security challenges. The book offers a deep understanding of these challenges and proposes potential strategies for achieving balance. It explores lesser-known aspects of China-US relations and countries' policies in the Asia Pacific, emphasizing cooperation and healthy competition rather than escalating conflicts. Dr. Kazmi's unbiased approach ensures an objective perspective on the diverse topics covered. Overall, "The Road to Balance in Asia Pacific" is a valuable resource for individuals seeking to enhance their understanding of the Asia Pacific region and its future prospects.