I: LAL BAHADUR SASTRI

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A member of Mahatma Gandhi's noncooperation movement against British government in India, he was imprisoned for a short time (1921). Upon release he studied in the Kashi Vidyapitha, a nationalist university, where he graduated with the title of *shastri* ("learned in the scriptures"). He then returned to politics as a follower of Gandhi, was imprisoned several more times, and attained influential positions in the Congress Party of the state of the United Provinces, now Uttar Pradesh state.

Shastri was elected to the legislature of the United Provinces in 1937 and 1946. After Indian independence, Shastri gained experience as minister for home affairs and transport in Uttar Pradesh. He was elected to the central Indian legislature in 1952 and became union minister for railways and transport. He gained a reputation as a skillful mediator after his appointment to the influential post of minister for home affairs in 1961. Three years later, on Jawaharlal Nehru's illness, Shastri was appointed minister without portfolio, and after Nehru's death he became prime minister in June 1964.

INDO-PAK WAR, 1965

The 1965 war between India and Pakistan was the second conflict between the two countries over the status of the state of Jammu and Kashmir. The clash did not resolve this dispute, but it did engage the United States and the Soviet Union in ways that would have important implications for subsequent superpower involvement in the region.

The dispute over this region originated in the process of decolonization in South Asia. When the British colony of India gained its independence in 1947, it was partitioned into two separate entities: the secular nation of India and the predominantly Muslim nation of Pakistan. Pakistan was composed of two noncontiguous regions, East Pakistan and West Pakistan, separated by Indian territory. The state of Jammu and Kashmir, which had a predominantly Muslim population but a Hindu leader, shared borders with both India and West Pakistan. The argument over which nation would incorporate the state led to the first India-Pakistan War in 1947–48 and ended with UN mediation. Jammu and Kashmir, also known as "Indian Kashmir" or just "Kashmir," joined the Republic of India, but the Pakistani Government continued to believe that the majority Muslim state rightfully belonged to Pakistan.

Conflict resumed again in early 1965, when Pakistani and Indian forces clashed over disputed territory along the border between the two nations. Hostilities intensified that August when the Pakistani Army attempted to take Kashmir by force. The attempt to seize the state was unsuccessful, and the second India-Pakistan War reached a stalemate. This time, the international politics of the Cold War affected the nature of the conflict.

The United States had a history of ambivalent relations with India. During the 1950s, U.S. officials regarded Indian leadership with some caution due to India's involvement in the nonaligned movement, particularly its prominent role at the Bandung Conference of 1955. The United States hoped to maintain a regional balance of power, which meant not allowing India to influence the political development of other states. However, a 1962 border conflict between India and China ended with a decisive Chinese victory, which motivated the United States and the United Kingdom to provide military supplies to the Indian Army. After the clash with China, India also turned to the Soviet Union for assistance, which placed some strains on U.S.-Indian relations. However, the United States also provided India with considerable development assistance throughout the 1960s and 1970s.

U.S.-Pakistani relations had been more consistently positive. The U.S. Government looked to Pakistan as an example of a moderate Muslim state and appreciated Pakistani

assistance in holding the line against communist expansion by joining the Southeast Asia Treaty Organization (SEATO) in 1954 and the Baghdad Pact (later renamed the Central Treaty Organization, or CENTO) in 1955. Pakistan's interest in these pacts stemmed from its desire to develop its military and defensive capabilities, which were substantially weaker than those of India. Both the United States and the United Kingdom supplied arms to Pakistan in these years.

After Pakistani troops invaded Kashmir, India moved quickly to internationalize the regional dispute. It asked the United Nations to reprise its role in the First India-Pakistan War and end the current conflict. The Security Council passed Resolution 211 on September 20 calling for an end to the fighting and negotiations on the settlement of the Kashmir problem, and the United States and the United Kingdom supported the UN decision by cutting off arms supplies to both belligerents. This ban affected both belligerents, but Pakistan felt the effects more keenly since it had a much weaker military in comparison to India. The UN resolution and the halting of arms sales had an immediate impact. India accepted the ceasefire on September 21 and Pakistan on September 22.

The ceasefire alone did not resolve the status of Kashmir, and both sides accepted the Soviet Union as a third-party mediator. Negotiations in Tashkent concluded in January 1966, with both sides giving up territorial claims, withdrawing their armies from the disputed territory. Nevertheless, although the Tashkent agreement achieved its short-term aims, conflict in South Asia would reignite a few years later.

II: INDIRA GANDHI

The Congress Party came to power when her father took office in 1947, and Gandhi became a member of its working committee in 1955. In 1959 she was elected to the largely honorary post of party president. She was made a member of the Rajya Sabha (upper chamber of the Indian parliament) in 1964, and that year Lal Bahadur Shastri—who had succeeded Nehru as prime minister—named her minister of information and broadcasting in his government.

On Shastri's sudden death in January 1966, Gandhi was named leader of the Congress Party—and thus also became prime minister—in a compromise between the party's right and left wings. Her leadership, however, came under continual challenge from the right wing of the party, led by former minister of finance Morarji Desai. She won a seat in the 1967 elections to the Lok Sabha (lower chamber of the Indian parliament), but the Congress Party managed to win only a slim majority of seats, and Gandhi had to accept Desai as deputy prime minister.

INDO-PAK WAR, 1971

Indo-Pak War 1971 Background

- At the time of Indian independence from Britain in 1947, the country was also partitioned into India and Pakistan, the latter as a Muslim country.
- At that time, Pakistan was composed of two units, West Pakistan and East Pakistan which was the Muslim-dominated part of the erstwhile Bengal province. Soon after the formation of Pakistan, however, the Bengalis were under-represented in the national government and there were said to be racial tensions between both groups.
- Bengalis felt that their culture was being belittled by the national government. There were movements for the declaration of Bengali as an official language in Pakistan along with Urdu.
- Sheikh Mujibur Rehman, the premier Bengali nationalist leader, had announced his six-point programme for provincial autonomy for East Pakistan.

- In the 1970 elections in Pakistan, Mujibur's party East Pakistani Awami League won a landslide victory losing only 2 out of the 169 seats in the East Pakistan Assembly. This victory also gave the party a simple majority in the central Pakistani Assembly.
- The West Pakistani establishment, instead of allowing Mujibur to form government, called upon the military to crush dissenters in East Pakistan.
- There were protests in East Pakistan in support of Mujibur and a brutal crackdown was initiated by West Pakistan led by Tikka Khan in March 1971. His army let loose a reign of terror in East Pakistan engaging in widespread atrocities against dissenters. He thus earned the nickname 'the Butcher of Bengal'.
- During this time, Mujibur had been arrested and taken to West Pakistan. Several Awami leaders had fled to India seeking protection. There was also a huge inflow of refugees to India and this was proving to be an economic strain on India.
- On 26 March 1971, Major Ziaur Rahman, a veteran of the Pakistani army declared the independence of Bangladesh on radio.
- The government of India under Indira Gandhi was outspoken in its support of the nationalist leaders of East Pakistan and appealed to the international community for help in the crisis.
- GOI also supported the Multi Bahini or the people's army in East Pakistan. India was giving training to the East Pakistani Bengali nationals in the refugee camps.
- The state governments of West Bengal, Tripura, Bihar, Assam and Meghalaya set up refugee camps along the border.
- On 3rd December 1971, Pakistan launched pre-emptive strikes on Indian airfields including in Agra. That same evening, Indira Gandhi declared on radio that the strikes were seen as a declaration of war against India. This was India's entry into the war.
- That same night, India responded with retaliatory air strikes against Pakistan.
- There were coordinated air, land and sea assaults on Pakistan from all fronts. The intent in the eastern front was to capture Dhaka as it was the nerve-centre of the action. The objective on the western front was the prevention of Pakistanis from entering Indian soil.
- The war lasted only 13 days and it ended with the surrender of the Pakistani army on the Eastern front on 16 December 1971.
- The Instrument of Surrender was signed between the commanding officer of the Indian Eastern Command Lieutenant General Jagjit Singh Aurora and his Pakistani counterpart Lieutenant-General A.A.K. Niazi.
- After the surrender, over 90000 POWs were taken by India, the largest surrender since the Second World War. Among them also included some Bengali nationals who had been loyal to West Pakistan.
- The war was a decisive victory for India and it established the military dominance of India over Pakistan.
- Pakistan suffered a humiliating defeat and it also led to the country being stripped of over half of its population. The new country of Bangladesh was established. Pakistan released Mujibur who became the first President of Bangladesh.
- In 1972, the Shimla Agreement was signed between India and Pakistan by which in lieu of the return of the Pakistani POWs, the Pakistan government would recognise the independence of Bangladesh.
- In July 2011, the Bangladesh government posthumously bestowed the Bangladesh Freedom Honour to Indira Gandhi.

III: JANATHA GOVERNMENT

Janatha government was formed in 1977 after the emergency under the leadership of Moraji Desai. Morarji Desai was the first leader of sovereign India not to represent the long-ruling Indian National Congress party. The son of a village teacher, Desai was educated at the University of Bombay (now the University of Mumbai) and in 1918 joined the provincial civil service of Bombay as a minor functionary. In 1930 he resigned to join Mohandas Gandhi's civil disobedience movement and spent almost 10 years in British jails during the struggle for independence. During the 1930s and '40s he alternated prison service with ministerial posts in the government of Bombay, rising to the chief ministerial post in 1952. He gained a reputation for administrative skill as well as for harshness.

In 1956 Desai was named commerce and industry minister in the Indian government, for which he worked in high capacities until 1963, when he resigned. He became deputy prime minister in 1967. In 1969 he again resigned to become chairman of the opposition to Indira Gandhi and the Congress Party. He was arrested in 1975 for his political activities and detained in solitary confinement until 1977, whereupon he became active in the Janata Party, a coalition of four smaller parties. That same year, Prime Minister Indira Gandhi unexpectedly held elections after a 19-month suspension of political processes, and Janata achieved a surprising and overwhelming victory. Desai was chosen to be prime minister as a compromise candidate among Janata's leaders. After two years of political tension, the Janata coalition began to unravel. Desai announced his resignation on July 15, 1979, after numerous defections from the coalition in Parliament, to avoid a vote of no confidence.

IV: DEVELOPMENT OF SCIENCE AND TECHNOLOGY

Introduction

India ranks third among the most attractive investment destinations for technology transactions in the world. Dr Harsh Vardhan, Union Minister of Department of Science and Technology, has reiterated that technology is a strong priority area for the Government, and it aims to make people science centric. Modern India has had a strong focus on science and technology, realising that it is a key element for economic growth. India is among the topmost countries in the world in the field of scientific research, positioned as one of the top five nations in the field for space exploration. The country has regularly undertaken space missions, including missions to the moon and the famed Polar Satellite Launch Vehicle (PSLV).

India is likely to take a leading role in launching satellites for the SAARC nations, generating revenue by offering its space facilities for use to other countries.

Market size

In September 2020, India moved four places up to reach the 48th rank and made to the top 50 countries in the Global Innovation Index (GII) for the first time. India ranks in the top 15 for indicators such as ICT (Information and Communication Technology) services exports, graduates in science and engineering, government online services and R&D-intensive global companies.

India ranked 52 in Global Innovation Index (GII)-2019. It moved up to fifth rank in Global R&D Funding Forecast 2020.

The Government is extensively promoting research parks technology business incubators (TBIs) and (RPs), which would promote the innovative ideas till they become commercial ventures

India's gross expenditure in R&D was forecast to reach US\$ 96.50 billion in 2020. By 2022, R&D expenditure is targeted to reach at least 2 per cent of the country's GDP.

India's National Artificial Intelligence Strategy prepared by NITI Aayog outlined a way forward to harness the potential of Artificial Intelligence (AI) in different fields. Accenture offers a framework for assessing the economic effect of AI for selected G20 countries in its

latest AI research studies and forecast that AI will raise India's annual growth rate by 1.3% points by 2035.

Developments/Investments:

With support from the Government, considerable investment and development has incurred in different sectors such as agriculture, healthcare, space research, and nuclear power through scientific research. For instance, India is gradually becoming self-reliant in nuclear technology.

Recent developments

Some of the recent developments in the field of science and technology in India are as follows:

- In December 2020, Ambassador of France, Germany and the European Union announced that they will together work out a detailed plan to fund more eco-friendly projects in Kerala in the coming years.
- In November 2020, the Engineering Exports Promotion Council India and the National Institute of Design collaborated to promote and upgrade designs and technology for the medical devices industry, enabling it to meet the emerging needs of the country's health sector, particularly in the aftermath of COVID-19.
- In November 2020, Union Cabinet, chaired by the Prime Minister, Mr. Narendra Modi signed a memorandum of understanding (MoU) between the Indian Institute of Astrophysics (IIA), Bengaluru, and the Instituto de Astrofisica de Canarias (IAC) and the GRANTECAN, S.A. (GTC), Spain to develop scientific and technical collaborations in astronomy field.
- On October 10, 2020, Council of Scientific and Industrial Research (CSIR) and KPIT successfully ran trials of India's first hydrogen fuel cell (HFC) prototype car running on an indigenously developed fuel cell stack at CSIR-National Chemical Laboratory, Pune.
- On October 8, 2020, the Union Minister of Education, Mr. Ramesh Pokhriyal 'Nishank', inaugurated the Gyan Circle Ventures, a MeitY funded Technology Business Incubator (TBI) of Indian Institute of Information Technology, Sri City (Chittoor), Andhra Pradesh, to foster innovation and entrepreneurial spirit in institutions.
- On October 6, 2020, Indian Farmers Fertiliser Cooperative Limited (IFFCO) and Prasar Bharati signed a MoU to broadcast and promote new agriculture technology and innovations.
- In October 2020, Department of Science & Technology (DST) and IBM India announced collaborations to scale two DST initiatives—Vigyan Jyoti and Engage with Science (Vigyan Prasar)—that are aimed to increase the number of women working in technology fields.
- In October 2020, in line with Atmanirbhar Bharat to achieve complete self-reliance, C-DAC signed a MoU with National Supercomputing Mission Host Institutes to establish supercomputing infrastructure in various premier institutions across India and accelerate the pace of research and innovation using computational science techniques.
- In October 2020, Prime Minister, Mr. Narendra Modi, inaugurated RAISE 2020, a mega virtual summit on Artificial Intelligence (AI), to exchange ideas on using AI for social transformation, inclusion, and empowerment in areas such as healthcare, agriculture, education and smart mobility and others.

| • | In October 2020, Ministry of MSME implemented artificial intelligence (AI) and |
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| | machine learning (ML) on its robust single window system, 'Champions', to provide |
| | assistance and solutions to issues. |
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