



# T N E M E C O O D



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# Editor's Note: A Special Issue

Happy Independence Day to all you readers!

August 15th, 1947 is the birthday of free India. It marks for her the end of an old era, the beginning of a new age. Over the last 75 years, India has grown significantly across all sectors. To commemorate this great achievement of free India, the government has initiated an intensive country wide campaign known as, 'Azadi Ka Amrit Mahotsav'. This campaign emphasizes on citizen participation, to be converted into a 'Janandolan', where small changes, at the local level, will add up to significant national gains. The Mahotsav will showcase India's accomplishments since 1947, instilling a sense of pride. India's development has been remarkable and holds great promise for the future. From space and technology to health and education, India's growth story has been impressive and innovative across all sectors.

The August 21 issue of the 'Document', is Centered on the subject, 'Accomplishments since 1947', which incorporates canvases, Business and general mindfulness articles relating to some eminent achievements made our country since its Independence. The editorial board of the e-magazine has undertaken the selection and review process of the articles included in the current issue with greater attention. We have committed this issue in explicit to help the Government of India's drive in recognizing the 75 years of India's Independence as "Bharat Ka Amrit Mahotsav".

Lastly, a big thank you to all our submitting authors, who have toiled in the production of their valuable work.

*Let us enjoy the blessings of Independence given to us...*

*Let us do our part, and work hard to protect it.*

# How Tata Built India

**By Chandrupal Shankar Hazarika, BBA 'E', Second Year**

It's very, very unlikely that we haven't heard of the brand 'Tata.' Tata is so ubiquitous that we would have used their products or services one way or the other. Right from the time we were born in the Tata Memorial Hospital, we went on to school. So now, we take the school bus manufactured by Tata. We might have cars made by them. We have at least once had food in the luxurious Tata restaurants and stayed at their hotels. We go to Starbucks for a cup of Coffee, again Tata's.

Similarly, Tata Chai or Tetley. We have Tata Namak on their kitchen shelf. We have Voltas ACs, Tata Sky installed in their homes. We have flown with Air India. Then we end up growing up to a marriageable age. We go to Tanishq or Titan to buy wedding jewellery.

So you see, no matter their demography in India or their financial status, we have constantly been exposed to Tata.

Since its inception in 1868, the Tata group has formed the backbone of India's growth story with sweeping yet invisible contributions. For the last 150 years, Tata companies have been an invisible force driving progress for the nation, as well as the aspirations of India's billion-plus people.

With 500,000 orders being executed per second, the Bombay Stock Exchange (BSE) is the fastest globally. The Operating Drivers, systems, and the software used by India's largest stock exchange and one of the top three bourses in the world by value of transactions, the National Stock Exchange, are provided by Tata Consultancy Services (TCS).

## **Economic backbone**

The Tata group's influence on India's economic backbone is similarly unseen but significant. It all starts with our wallets: Tata designed the facility that prints the 2,000 notes. Fun fact: Almost all of the United Kingdom's 1, 2, 5, and 10 pence coins have the Tata touch, as they are manufactured of their steel. And it extends to the country's finances, which they assist by offering an e-filing mechanism for import taxes. Tata firms contribute to the nation's prosperity by paying taxes of Rs. 47,196 crore (2.24 percent of total collection in 2017) to the Indian government. More than 100 banks, including the country's largest, use their technology to power their digital network. They supply core banking solutions to over 750 million accounts at the SBI alone, which is more than double the population of the United States.

## Sinews of steel

"Jamsetji Tata's vision in many ways determined India's future," says Peeyush Gupta, vice president, Tata Steel. "The consumption of steel, a key ingredient in agriculture, industry, and infrastructure, is linked closely to the economic development of a country."

By the 1930s, Tata supplied 72 percent of India's steel needs, with projects ranging from defense to railways and famous structures like the Howrah Bridge. Jamshedpur supplied 23,000 tonnes of steel or nearly 85% of the steel necessary to construct the bridge that characterizes the Kolkata skyline to this day.

This role intensified after 1947. A newly independent India needed an agricultural and industrial revolution, neither of which could happen without machinery and power or their steel.

Steel was essential to manufacturing agricultural tools. It was crucial to rapidly scale down the import of capital goods needed to industrialize India from a brutal 90 percent in 1950 to about half of that in the 1960s. It was essential to building factories, dams, and power plants.

Take, for instance, the fact that they moved India forward. Quite literally.

Their steel and critical components are in every model of Boeing and Airbus civil airliner in production today.

It is in two-thirds of the country's metro rails, flyovers, and bridges, including landmark ones like Kolkata's second Hooghly bridge and Mumbai's Bandra-Worli Sea Link.

Two-thirds of metro rail in the country are made with their steel. Key metro networks like Delhi, Mumbai, Lucknow, Ahmedabad, Chennai, and Kochi have also been built with their expertise.

## Powering India

As the country has grown, they have ensured that electricity, the force that powers the nation, has always been available to fuel development.

The Tata group, alone, has built 13,000 km+ of transmission lines, the backbone of India's high-capacity power transmission. They have been responsible for linking the southern grid with the central and the eastern grid with the northern.

They have played a potent role in powering India's financial capital. Or unique islanding system, which gives an assured and uninterrupted supply of electricity, has powered Mumbai's growth for most of the past century. It helped bring electrification to Mumbai's lifeline and railways and supports key installations like the Bhabha Atomic Research Centre.

Their power generation and distribution arms also serve Gujarat, Rajasthan, Maharashtra, Delhi, Haryana, Punjab, West Bengal, Uttar Pradesh, Odisha, Madhya Pradesh, Jharkhand, and Bihar.



"Electricity is essential to build a fast-growing economy," says Praveer Sinha, CEO, and MD, Tata Power, "As India looks towards rapid digitization, industrialization, and a growing population, they have looked to shape the future."

## Defending India



Historically, the Tata group had done several things World War I, when their steel helped build arms and ammunition. Today, they play an essential role in shoring up India's defenses across the land, water, and air. They have been developing weapons systems and control systems for all the big artillery guns. They have also contributed to the design and development of Combat Management Systems for the Medium Range Surface-To-Air Missile technology. They have done mission-critical software development for electronic warfare for all branches of the armed forces, executed the Indian Navy's Surface Surveillance Radar project, and delivered machinery control systems for the Indian Navy and the Integrated Materials Management Online System for the IAF.

## Cleaner future

With this in mind, the Tata group has already taken the lead in clean and sustainable ways of generating and consuming power. They are not only India's most significant integrated solar player, but they have also designed 80 percent of the nuclear power projects.

Forty percent of their current generation portfolio is from clean energy spheres. Clean energy will be a vital feature of the future smart cities, which is also being led by the Tata group. Their work on India's first smart city, the Gujarat International Financial Tech, is still considered a benchmark in terms of futuristic cities. As you read this, 12 more cities will have access to smart living through the brilliant city plan they engineered. These include Guwahati in Assam; Raipur in Chhattisgarh; Bhopal and Satna in Madhya Pradesh; Ahmedabad, Surat, Vadodara, Gandhinagar, and Dahod in Gujarat; Shivamoga in Karnataka; Agartala in Tripura; and Rtheirkela in Odisha.

This report shows how Tata has contributed to the growth of India. Tata has always worked towards how they can make the life of an ordinary man more convenient. Be it launching the world's cheapest car, making transport buses, or laying the tracks and manufacturing trains. Indian Airways happened because of the Tata Group. This has led to an incredible number of employment opportunities, massive boosts because of logistics for supplies; this only evidences the value of this brand in the whole economy of the nation.

# Service Before Self

By Swathi Goud, BCom 'A', Second Year

"Either I will come back after hoisting the Tricolour, or I will come back wrapped in it, but I will be back for sure" - Captain Vikram Batra.

"Army Officer, 3 Soldiers Killed In Action; 3 Terrorists Shot Dead In J&K Encounter".

"Colonel, 2 Jawans Killed in Ladakh Face-Off, Casualties "On Both Sides"

"Colonel, Major Among 5 Killed In Action In Encounter In J&K's Handwara"

Every day numerous jawans die fighting for the sake of their mother nation, providing security and a tomorrow for the people of the country. One of such greatest moments of the Indian Army was the Kargil war of 1999.

July 26, the day the Indian Army recaptured all the Indian posts in Kargil, occupied by Pakistan's Army. Even after Independence, the Army has always been on its feet, shielding our nation against the many terrorists who linger the borders waiting to pounce at the chance. Since then, July 26 has been observed annually to commemorate the sacrifices made by soldiers in this war. This is only one of the many battles fought by our Indian Army and where we lost the precious lives of the soldiers. Kargil Vijay Diwas is observed on July 26 annually to commemorate the sacrifices made by the soldiers in the Kargil War. In the war, 'Operation Vijay' was launched by the Indian Army to recapture the Indian territories from Pakistani intruders in the Kargil-Drass sector in 1999. 'Operation Vijay,' an Indian Army mission, achieved ultimate success for India and the Air Force called the mission 'Operation Safed Sagar.'

It took place between May and July in the year 1999 in Jammu and Kashmir's Kargil district. Amidst the high altitudes and chilled atmosphere, the troops are being readied to handle destructions and defend the boundaries. All the scouts have been warned about the upcoming dangers. Even residents were alarmed by the situation and were advised not to light the lamps in the Kargil station. The residents were on high alert along with the soldiers and were very aware of unexpected firings and damage.

In March 1999, India and Pakistan signed the Lahore declaration to resolve bilateral issues. Yet the attacks weren't put to rest, and the Pakistan government declared these attacks weren't related to any of their conducts. The conflict is believed to have been orchestrated by the then Pakistan army chief General Pervez Musharraf without the knowledge of the then Pakistan Prime Minister Nawaz Sharif. But for India, the war had already begun.

The militants' goal- 'jihad.' Their prime enemy- 'The Indian army.' It began with the infiltration of both Pakistani troops and terrorists into Indian territory. The enemy looming over the region was able to prevent the national highway making the movement of vehicles difficult.

So our officers began their missions at Chorbat La, usually used as a gateway for invasions by the Ladakhi king. The scouts started their patrols in the bone-freezing cold, looking out for any suspicious activity.

And the next day, at the brink of dawn midst the rugged range, they found their enemies crawling up their area, and the scouts took them down meticulously. Simultaneously the scouts guarding the other base were attacked out of nowhere and were stuck in morbid conditions for four days and were fortunately sent recruitments after. And they were ordered to proceed further for infiltration where the enemy struck a soldier down. All of them were helpless as several enemies were ambushing them; even the slight movement would kill them. Their fellow soldier has been shot down, on the brink of death, bleeding his life out, and the firing continued for another half hour, and then he was dead.

This did not sway the courage of our Army any bit; they were ready to avenge their compatriot and go with a modified plan. They plotted to trap their enemy from two sides. They split their group into two and commenced their deadliest trek. Plodding in the snow with a storm looming ahead, amidst the firings with nerve-numbing frost, but this soon turned into our victory when they spotted the enemy and frightened the opponent with continuous firing, where the rivals fled the camps they set. Thunderous echoes of success resounded across the valley, announcing our triumph!

The Pakistani terrorists have been conspiring for a long period; they positioned themselves at the highest altitudes, which worked as an advantage against us since it's easier to shot down from higher up. Considering the overall casualties, this is the least of the gore mentioned above.

This is just a snippet of what went on throughout the Kargil war. India lost more than 500 military men on the Kargil territory, while reports from Pakistan claimed that more than 3000 of their soldiers, mujahideen, and infiltrates died.



Are we doing justice for the soldiers who sacrifice their breaths on the field just so that we can have a sense of peace? Do we even give a thought about the mother whose son's life is at stake for fighting for harmony? Behind every soldier, be it a man or a woman, stands a strong mother, a brave father, a caring sister, a proud brother, a compassionate wife, supportive friends, and loving children.

Even after all the gore they endured, the officers claimed they have no regrets and would join the Army if he was given a chance in his next life. The Army teaches the greatest lesson of our life- that life is beyond earning money. When we see around, we find people fighting about trivial matters and are stuck in the rat trap of life, ignoring the fact that life is beyond money and stop appreciating little things. Some of the greatest achievements and victories: The Indian Army is the fourth-largest Army globally with 3 million active military personnel, after the US, Russia, and China.

As per the Defence of Japan 2019 report, India has become the world's largest ground force leaving China behind. The Indian Army is the only one to handle the highest battlefield of Siachen Glacier, which is above 5000 meters from the mean sea level. India has fought five wars, namely, the Indo-Pak war in 1947, the Indo-China war in 1962, the Indo-Pak war in 1965, the Indo-Pak war in 1971, and the Kargil war in 1999, none initiated by India. The Indian Army has also undertaken several operations putting up a tough fight with the enemies and the terrorists, be it the very recent surgical strikes like the Balakot airstrike of 2019, Operation Vijay of 1999, or Operation Meghdoot of 1984.

The Indian Army started inducting women officers in 1992, initially commissioning them for five years. In February 2020, the Supreme Court of India granted 'Permanent Commission' (PC) to female officers belonging to the 'Short Service Commission' (SSC) in the 'Service Arms' and 'Combat Support Arms' streams with the same terms as applicable to male officers.

In 2020 again, the Ministry of Home Affairs decided to induct transgender people into a paramilitary force. The recent turn of events, the situation in Afghanistan concerning the Taliban, has been an eye-opener about how important an army in any country is. Let's not forget the sacrifices of these men/women and be thankful for these brave and selfless hearts. Jai Hind!



# Economics Of The White Revolution

By Srikruth K. Reddy, BBA, 'F', Second Year

## How India went from a milk deficient nation to a world leader in milk production.

India is the world's largest producer of milk in the world today, producing over 198.4 million tons of milk in 2019-20. It is a remarkable triumph; nevertheless, this wasn't always the case. Post-independence, India found itself in a milk crisis; there wasn't enough to go around. This era was marked with a severe lack of technical comprehension and production inadequacy in most sectors, political and military crises added to this predicament.

This milk conundrum drove India's White Revolution.

Plans for the White Revolution were laid in 1964 as a part of the Intensive Cattle Development Program (ICDP), which included a package for cattle owners to improve animal husbandry and milk production in India.

Subsequently, in 1970, India's National Dairy Development Board introduced Operation Flood to escalate White Revolution's impact (NDDB). The mission hoped to emulate the success of India's illustrious 'Green Revolution' and establish a nationwide milk grid.

Operation Flood's primary objectives were increasing milk production, offering fair prices for consumers and producers, and augmenting rural incomes. It also empowered dairy farmers to direct their development to construct a national milk grid, which helped link milk producers and consumers all over the country. This operation also aided in reducing price variations induced by seasonal and regional factors.

Amul (Anand Milk Union Limited), a Gujarat-based co-operation, mightily assisted the project's success. Verghese Kurien, the chairman and founder of Amul, was later named the chairman of NDDB by then Prime Minister Lal Bahadur Shastri. He is often regarded as the architect and father of India's White Revolution.

Operation Flood was implemented in three phases.

Phase 1 began in 1970 and ended in 1980; this was financed by selling skimmed milk powder and butter oil which the European Union donated through the World Food Program.

Starting in 1981, Phase 2 lasted till 1985. This increased the number of milk sheds from 18 to 136 and created self-sustaining systems that included over 43,000 village cooperatives and 42,50,000 milk producers.

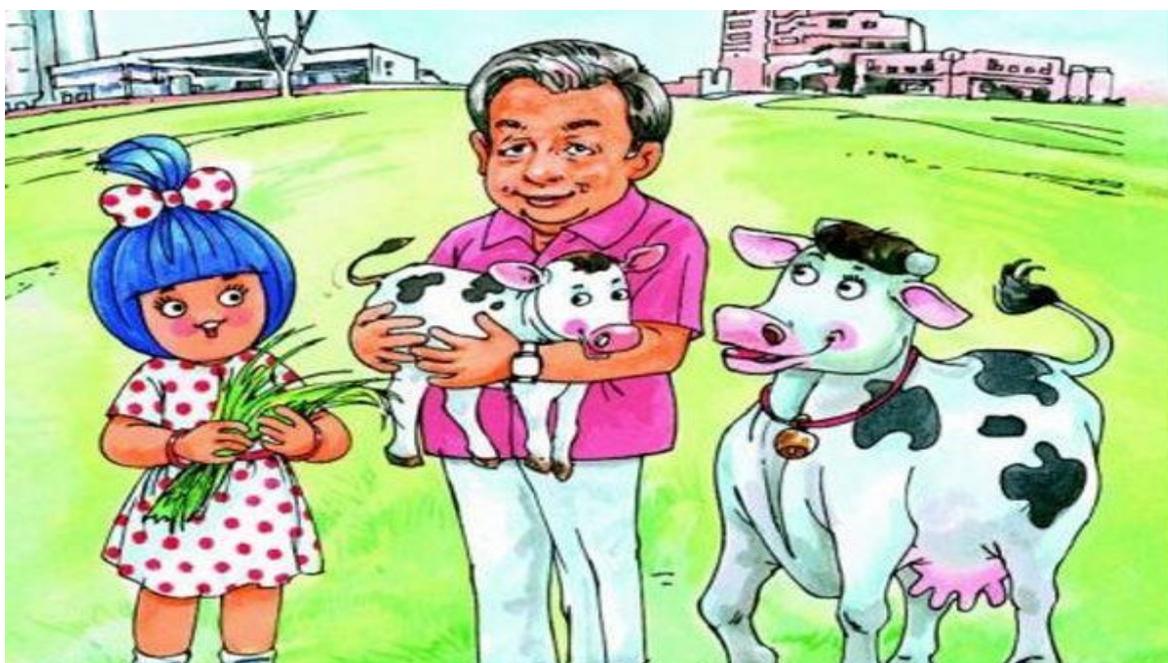
Phase 3 of Operation Flood from 1985 to 1996 enabled dairy cooperatives to expand. It also saw the bolstering of infrastructure required to market the rapid growth of milk production.

Towards the end of the operation, there were 73,930 dairy cooperatives and over 3.5 crore dairy farmers as part of the milk grid. Some statistics pertaining to this phenomenal program:

- The White Revolution significantly impacted rural masses, encouraging them to take up dairy farming as a subsidiary occupation.
- India went on to become the leading producer of milk in the world. Milk production, about 17 million tons in 1950-51, rose to over 112 million tonnes in 2009-10. The production has gone up by over six times when paralleled with the Independence situation.
- The per capita availability of milk per day today is at 263 gm as against 125 grams prior to White Revolution.
- The import of dairy products and milk production has been significantly reduced.
- Small marginal farmers and landless laborers have benefited the most from the White Revolution. About 1.4 crore farmers have been under the ambit of 1,35,439 village-level dairy cooperative societies.
- To guarantee the success of Operation Flood, research centers have been set up at Anand, Mehsana, and Palanpur. Moreover, three regional centers are functioning at Siliguri, Jalandhar, and Erode.

According to the NDDDB, demand for dairy products is expected to increase at a compound annual growth rate of 5%, from 130 million tons in 2014 to 200 million tons in 2022.

This move, towards value-added dairy products offers higher margins than liquid milk for the Indian Milk Industry. In retrospect, the White revolution made dairy farming India's largest self-sustainable rural employment generator. It is quite amusing to note how India went from a milk deficient nation to the world's largest dairy producer with about 22% of global output, which is 30 years doubled milk available per person. This successful undertaking testifies the wonders that can happen when unanimity, integrity, and robust leadership amalgamates.



# A Path Towards Shaping India's Foreign Policy

By Catherine Gerard, BCom 'A', Second Year

Foreign relations in India date back to the colonized period in the 1800s. In 1834, the British Empire created a Foreign and Political Department. During British rule, it is no secret that British interests always prevailed over Indian interests. The department was set up primarily to ensure the smooth operation of British economies. Later on, their primary functions were to deal with the princely states and handle trade in the vicinity of India and the Gulf. There was no Indian perspective in the British policies, which helped India later on when it came to formulating its foreign policies post-independence.

Once India became independent, it did not forget its history of subordination and exploitation. As a result of fighting off invaders for thousands of years, India has developed an identity of self-importance, which forms the basis for its foreign policies. Immediately after independence, India's foreign policy aimed to transform the country from a poor and backward nation to a country that could provide for the development of all its people. Increasing capital flows, advancing science and technology, and modernizing infrastructure and security were on the agenda. The goal is very different from what foreign policy means to India today. Today's world is focused on security, prosperity, nation-building, military relations, peace, harmony, etc.

We can see two approaches to foreign policy in post-independent India: idealism and realism. It has evolved from idealism to realism. In the early years of Indian independence, The First Prime Minister of India, Jawaharlal Nehru, created a foreign policy with an idealistic approach. He promoted three ideological policy stances:

- The drive to make the UN.
- The non-aligned movement.
- The crusade for nuclear disarmament.

He thought that India had the potential to be a great power, so he tried to lead from the standpoint of the international community rather than starting with the interests of the nation. Krishna Menon assisted Jawaharlal Nehru in formulating the foreign policy. Amid the Cold War, it was crucial to develop policies that would help our country. He disliked the Cold War, and he believed it would deteriorate India if India became involved. In this period, he led the non-aligned movement, a movement of 120 countries that did not wish to align with either side of the Cold War, securing the national independence and security of non-aligned countries in their struggles against imperialism, racism, colonization, etc. In 1942, India also became one of the original members of the UN that signed the Declaration by the United Nations. The shift in the policy happened when the Panchsheel Treaty, developed from Buddhist thinking, was signed in 1954. This was for developing a good relationship with China.

Following are the Five Principles of the Sino-Indian Agreement 1954;

- Coexistence
- Respect for the territorial and integral sovereignty of others
- Nonaggression
- Non-interference with the internal affairs of others
- Recognition of the equality of others.



Creating this helped newly independent countries establish a principled approach to international relations. This was the first step towards realism in the foreign policy of India. During Nehru's rule, Soviet Union was India's biggest trading partner. They had very close ties. Meanwhile, the US and Pakistan grew closer, and the US began to favor Pakistan over India.

With Indira Gandhi taking over from 1966 onwards, she did not entirely rely on idealism, but in fact, adopted a more realist approach. Her emphasis was on the country's interests and benefits more than playing an international role. During her rule, India conducted the first successful nuclear test in 1974. 1980 was the first satellite launch in India. Both the economic content of the foreign policy and the military content changed drastically.

Additionally, she had also hosted and attended international meetings. There were underlying tensions between the USA and India during the Bangladesh liberation war as the USA supported West Pakistan while India supported East Pakistan. The tensions started to ease when Indira Gandhi met Ronald Reagan in 1982. Their meeting led to the Tarapur nuclear plant contract and a successful agreement on science and technology cooperation. Shri Yashwant Sinha, External Affairs Minister, had said in 2002 that during Indira Gandhi's rule, "she did a lot of things that put India on the map."

The relationship between India and South East Asia was relatively poor during the Cold War. After the cold war, when the Soviet Union collapsed, Prime Minister Narasimha Rao announced the 'Look East' initiative to strengthen the commercial, military, and diplomatic ties with South Asia. It was to demonstrate the fact that India was inclined toward Asianism rather than an American capitalist model.

The ASEAN countries welcomed these Indian reforms, which allowed collaborations in both business and technology. After the end of the Cold War, South East Asia became India's largest trading partner. In 2014, PM Narendra Modi rebranded the Look East Policy as the Act East Policy. With this, India seeks to expand competitive markets and increase connectivity between the region and Southeast Asia to achieve more profound economic and political development. Current infrastructure initiatives include the India-Myanmar-Thailand trilateral highway.

India has also established friendly relations with neighboring countries over the years. India is Bhutan's largest trading partner in terms of mineral products, machinery, and equipment. Both nations also cooperate in the hydropower sector. The bilateral relations between Nepal and India are also quite strong. India-Sri Lanka relations have undergone a qualitative change over the years. Indo-Afghan relations are also strong. As part of Afghanistan's reconstruction efforts, India has provided immense assistance to the country. Myanmar and Bangladesh also have relatively steady and favorable relations, except for some minor issues. Maldives and India remain close and friendly with assistance provided for infrastructural development aimed to improve tourism in the Maldives.

Coming to India's involvement in international organizations, India was among the first members of the United Nations in 1945, even though it was not yet an independent nation. In 1947-48, independent India raised concerns about decolonization, apartheid, and racial discrimination in the UN. India became a republic member of the Commonwealth of Nations in 1949. India is also a part of G4, aiming for permanent member seats in UNSC, G15; focuses on the developing countries in investment, trade, and technology, G20. Significant issues like climate change, sustainable development, financial stability, G24; focusing on issues relating to international finance and monetary matters and G77; a forum for developing countries to promote their economic interests. As part of BRICS, India is also one of five emerging economies; Brazil, Russia, India, China, and South Africa. Since 2009, they have held annual summits, which has significantly influenced them regionally. Besides these, India is a member of many other organizations such as SAARC (South Asian Association for Regional Cooperation), the World Trade Organization, the International Monetary Fund, the International Committee of the Red Cross, etc.

Despite the state at which India was left, despite the looting of \$45 trillion from India and its resources being exploited, India was still able to achieve and cultivate diplomatic relations with other countries, including many international organizations. This success would not have been possible if it weren't for the hard work of the entire defense sector of India as well as all the officers within the Indian Foreign Service, the ambassadors, and the diplomats in different capitals of the world, building relationships and enhancing our culture.



# *The Evolution Of Indian Banking Sector-Flashes Of Banking History*

**By Ms. Urmila M S, Assistant Professor, DOC, MAHE**

"You have to know the past to understand the present." – Carl Sagan.

No other quote can be more accurate to understand the Indian banking system and its evolution. To know how far banking has grown in these 75 years of independence, we must travel back to see how Indian banking was before a century. When we speak of the history of the Indian banking system, most of it starts from the Presidency Banks, their amalgamation, and transformation to the new State Bank of India. But the real history lies in the banks that cropped up like mushrooms without adequate capital in densely banked areas, the drought of banking in rural areas, the meagre support lent to agriculturists, and the almost non-existent international trade.

Indian banking history is peppered with incidents such as the winding-up of East India Company, the supremacy of the British Empire, tried and failed attempts in setting up a central bank, the formation of Reserve Bank of India like a toothless toddler, world wars, wars with our neighbors and an extremely volatile money market. All this while the country's majority depended upon indigenous bankers, money lenders, nidhis, and chit funds to keep them afloat. While these were the external difficulties, what about internal ones?

Though the first bank in India was formed in 1806, it was not until 1949 that the Banking Companies Act was formed, giving clear-cut guidelines on what a banking company is and what should be the pre-requisites to open one. Hence, until 1949, there was no clarity or supervision on what a bank must do and must not. This led to new banks opening with capital as less than 2 lakh, existing banks opening branches in densely banked areas, and industrial houses trying their hands at holding banks to regulate interest rates according to their benefits and utilize the funds mobilized from the public for their benefit. If these difficulties were not enough, the Indian banks were also compressed between RBI and the Government regulations, with monitoring of lending rates and deposit rates, lending being directed towards under-developed sectors by the Government, and the RBI breathing down their necks over the rising NPA levels.

The banks did not have the autonomy to function, which proved detrimental in the long run. The rising inflation levels, fluctuation in currency values further added their part to the problem kitty of the banks. Nationalization of banks though done with the motive to reach out to the unbanked areas of the country, mostly became an additional burden for the Government, with the latter having to bail out the banks at every sign of a looming crisis.

The economic reforms during 1991 also paved the way for the study of deficiencies and implementation of various reforms in the Indian banking sector to support the major reforms in the country. The entry of the private sector into the banking system jerked awake the sleeping banks and pushed them to update, evolve and transform themselves to survive. Recruitment started after years of being minor or none, new technology was adopted, branches opened, new business ideas, products, and services were offered, and the entire banking service experience changed into a world-class banking experience. The Indian Banking System now sits on a solid foundation, centuries of experience, and a whole new world of technological evolution to aid its walk-in-stride.

And that is how, from having to travel all the way to a specific branch of a bank to get his service within a specified time, you are now able to access your bank at any time of the day without even having to get up on your feet.



# ISRO: Taking India's Pride to the Mars

By Vipul Kumar, BBA 'E', Second Year

The national space agency of India, ISRO (Indian Space Research Organization), headquartered in Bangalore, has been a reason of immense pride and global recognition to the country since its Independence. What started as Indian Committee for Space Research (INCOSPAR), established in 1962 by Jawaharlal Nehru on the suggestion and urging of Vikram Sarabhai, soon grew and became ISRO by 1969. Today, it stands among the six government space agencies globally that possess full launch capabilities and can operate large fleets of artificial satellites. Although in the earlier days of its operation, ISRO faced criticism by many people who questioned the need for a space research organization in a newly independent nation that faced more serious concerns such as battling hunger and the menace of not so friendly neighbours, Pakistan and China. The vision of the top Indian leaders and scientists was evident, and today we can confirm that their decisions paid off well for the future generations of our country. Once ridiculed by the New York Times in 2004, ISRO had left the western elites awestruck only a decade later, in 2014.

History was made in 2013 when ISRO launched its Mars Orbiter Mission. The Mangalyaan, India's first interplanetary mission, reached Mars on September 24, 2014, and has remained in the planet's orbit ever since. This mission set the record for any nation to reach Mars in its first attempt. Over the years, ISRO has also proved itself to be one of the most cost-effective space organizations in the world. For instance, Mangalyaan cost just 11% of its American counterpart, NASA's MAVEN orbiter. "A one-km auto rickshaw ride in Ahmedabad takes Rs 10, and India reached Mars at Rs 7 per km, which is amazing", PM Narendra Modi further explained later. Once ridiculed by the New York Times in 2004 for its bold ambitions, ISRO left the western elites awestruck just a decade later in 2014.



ISRO is also making a significant contribution towards enhancing India's soft power potential by regularly launching satellites for foreign customers on a commercial basis. The PSLV (Polar Satellite Launch Vehicle) is one of the most reliable launchers in the world. Given the global reputation, nations capable of

launching their own satellites are also opting for ISRO's partnership in their missions. Several countries like Germany, France, the UK, USA, Canada, Japan, South Korea, to name a few, have availed the facilities of ISRO's PSLV launcher. This also helps earn a lot of revenue that is reinvested in Research and Development purposes for India's growth in the space arena. India's satellites developed and launched help us keep an eye on any national security threats and monitor our hostile neighbors. Another interesting aspect of the satellites is that they help forecast natural calamities and avert threats to human lives, a recent example being Cyclone Fani. The satellites launched by ISRO tracked the advancing cyclone and sent data every 15 minutes to the Indian Meteorological Department (IMD). With the assistance of highly precise data, officials were able to evacuate more than 11.5 lakh people in West Bengal, Odisha, and Andhra Pradesh, a feat that was lauded by the United Nations too.

Most importantly, ISRO has been the source of inspiration to millions of kids in India, proving to the world that Indians can be as advanced as the most developed and powerful countries in the world when it comes to space and technology. It brings immense pride and cheers to everyone when we see the live telecast of ISRO launching yet another critical space mission. That night of September 2019 is etched forever in our memories when the nation stayed awake till dawn to watch the Vikram Lander mission. Although it failed, we were filled with enthusiasm when we saw the secretary of ISRO, Mr. K. Sivan, in tears and being consoled by our country's top leaders. Everyone knew ISRO had struck an emotional chord with every Indian, and rightfully so.



# India: The Land Of A Billion Emotions

**By Kelvin Thomas Kurian, BCom 'A', Second Year**

For a country that relies heavily on agriculture, the dreamers and the idealists have come a long way to see the rise of the virtual and the real, Media world. What better way to depict a billion emotions than the media? The Indian Media and Entertainment industry is considered a sunrise sector for the economy and is making significant strides.

From its humble origins, print media to the internet, Indian media truly is a spectacle to behold. It is the 5th largest media globally and consists of several different types of communications: print, radio, television, cinema, and Internet-based websites. Let's look at how different segments of the Indian media started and how it has progressed through the years.

The Print media started in 1780, and the 1st newspaper was the Hicky's Bengal Gazette. Today, there are almost 143,423 registered publications, and that is excluding the thousand other magazines. The newspaper revenue of 2020 was estimated to be nearly 184bn INR. Despite the rise of the internet age, print publications have seen a significant surge in revenue, making it the largest global market.

Radio broadcasting began in India in June 1923; the Radio Club of Bombay made it the first-ever broadcast in the country. India's public national radio broadcaster, All India Radio (AIR), also known as Akashvani, is the oldest broadcaster in the country and is almost 85 years old. The number of Private FM Radio Stations data was reported to be 367,000 Unit in December 2020. However, daily radio consumption amounted to about 16 minutes on average across India in 2020 and showed a decline.

Television in India began with a test transmission on 15 September 1959. Doordarshan was India's first-ever Television channel founded by the Government of India. In 1982, under Prime Minister Indira Gandhi, color television arrived in India. In 1991, CNN dramatically changed the Indian television culture by broadcasting the Gulf War live into Indian homes. In the same year, the government opened the economy and allowed private satellite television channels to air, which allowed Indian viewers the chance to watch non-Doordarshan shows. Today there are 892 satellite television channels and more than 380 news television channels. The value of India's television industry was estimated to reach 13.6 billion U.S. dollars in 2021. It was valued at around 11 billion dollars in 2019. Republic TV is the leading English news channel across India.

Indian cinema first came into the picture in 1912, which was way before television entered the Indian market. The first-ever Indian film released in India was Shree Pundalik, a silent film in Marathi by Dadasaheb Torne. The industry witnessed immense growth, especially from 1917 to 1932, but movie production declined during the Second World War and later returned in the 50s.

India is currently the most significant cinema market in the world. Bollywood dominates the sector, whereas international movies struggle to make an impact. The thousands of single-screen cinemas that traditionally dominated the Indian market are beginning to disappear due to the multiplex boom. While there is still a considerable population that loves to watch movies in theatres, the OTT platforms pose a threat like no other to the theatre owners. The Indian film industry in 2020 was valued at 183bn INR while the newspaper industry was valued at 184bn INR; interesting, isn't it. The revenue shortage in 2020 was mainly caused because of the pandemic. Digital and OTT platforms, however, appeared to be the most resilient segment of the Indian film industry. Forecasts for both digital rights and OTT video revenues predicted an upward trend from 2021 onwards.

In 2020, India had over 749 million internet users across the country, and this figure was projected to grow to over 1.5 billion users by 2040, indicating an enormous market potential in internet services. In 2019, India was ranked as the second-largest online market worldwide, coming second only to China. India's telecom sector, the second-largest globally, deserves the credit for providing affordable and quality networks. Internet penetration in India is 45%, and Delhi was the region with the most internet penetration.

Most of you might be wondering, what's all this got to do with a billion emotions? Well, when the print media started, it technically became the resilience to our fight for independence. Many writers and publishers of that time were beaten up and banned from writing propagandist pieces. The radio brought together the entire nation culturally. The television entry into post-independent India showed the world that we weren't to be left out of the global economy and politics. Cinema created a fascination for every Indian to dream even after seeing reality. The internet era has now presented every Indian who owns an internet facility to raise their voices and concerns about society and celebrate freedom differently. The media industry is not given much prestige and is taken for granted most of the time. However, it's high time to emphasize its due importance in our lives. Our generation didn't have to dream for a better tomorrow by surveying the newspaper, turning on the radio, or contemplating the news. We have everything at the tip of our fingers; however, it helped our forefathers and parents dream of the world we live in. So this independence day, let's celebrate their imagination, our reality, by remembering the media and the people who cultivated a billion emotions.



# Featured Artwork

By Mrs. Suman D'lima, Asst. Professor, DOC

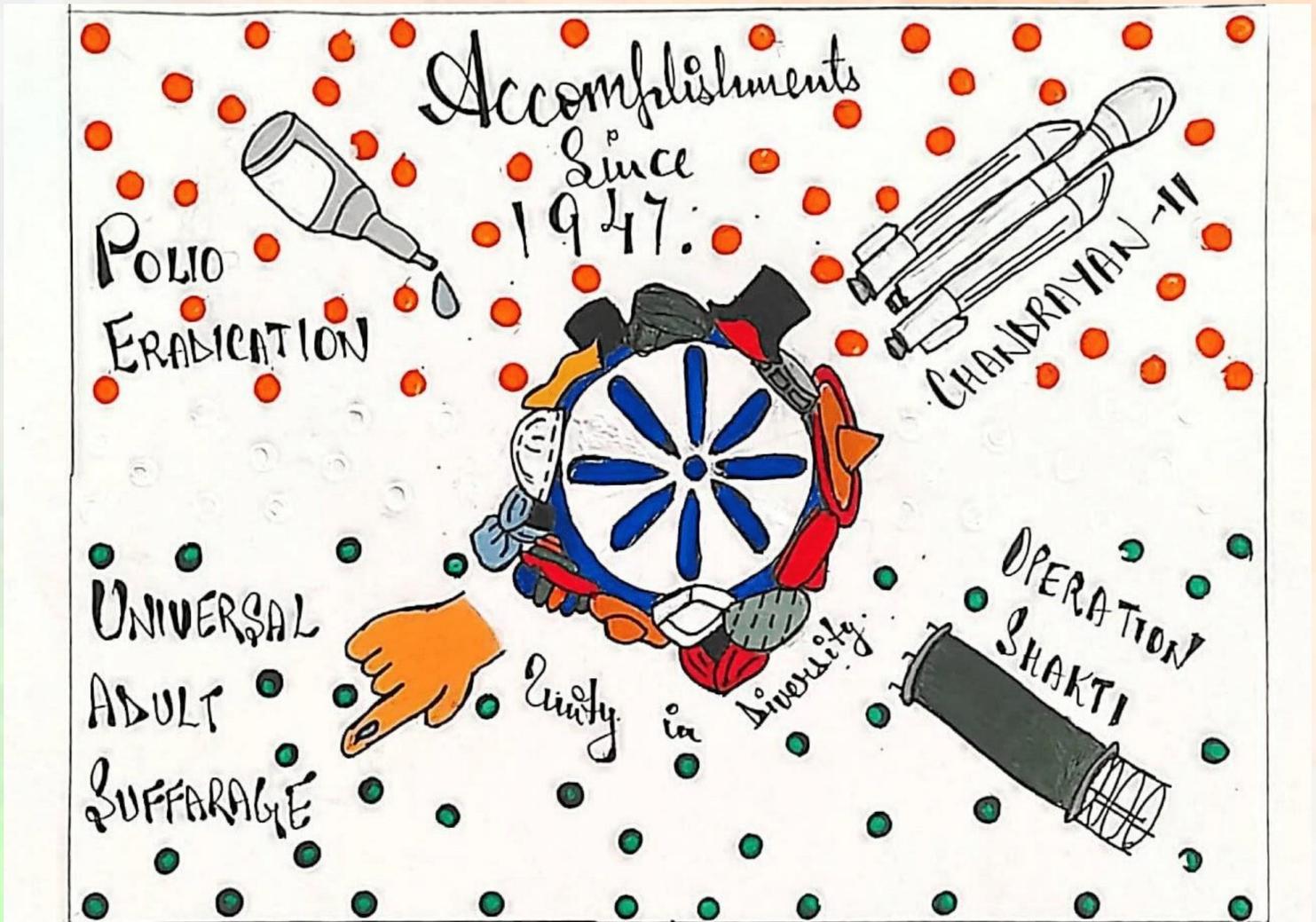
## Pichwai painting of a Holy Cow

Pichwai is a style of painting that originated over 400 years ago in the town of Nathdwara, Rajasthan. The term "Pichwai" has come about because these artworks are hung literally "piche" or behind the temple deity and "wai" literally means a textile hanging. Originally crafted to decorate the temple of Shrinathji (Shrinathji ki Haveli) in Nathdwara and used for story-telling in villages – Pichwai art is now found in temples of the region and is purchased by art connoisseurs and devotees for display in their homes and home temples.



# Featured Artwork

By Aakanksha Verma, BBA 'A', Second Year



# Credits

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