

INDIA-US TRADE DEAL

India’s patience and perseverance in keeping up with the whimsical ways of the US President Donald Trump have paid off. Despite Trump’s provocative statements, Indian leaders choose not to react to the 25 percent effective and 50 percent proposed tariff on Indian goods, or show any panic. India had a strategy – the one of continuing to grow and work in the interests of the country’s 1.7 billion people. Knowing its strengths as the fastest-growing economy, the largest market and a growing skilled and knowledge economy, the Indian leaders worked on their negotiations on striking trade deals with other countries. The India-UAE trade deal, the one between India and the UK and above all, the mother of all trade deals happened between India and the European Union. All these developments did not happen overnight and were the result of structured and protracted negotiations. Along with this, India was also working on striking a deal with the USA. Now these deals are not titled as both parties tend to gain through these. Firstly, Indian leaders held their heads high and showed that there is no compromise on the nation’s pride. Keeping this principle in mind, the Indian leaders refused to take the bait of reacting violently to President Trump’s provocations and pursued the negotiations for a trade deal. While the details of this deal would be clear soon, as per both sides, India will face the lowest -28 per cent – tariff from the US, and there will be a reciprocal response. At the end of this, the fact is that President Trump referred to PM Narendra Modi and his dearest friend and Modi too reciprocated the gesture with a thank you note on social media. Both leaders spoke with each other on the telephone. External Affairs Minister Dr S Jaishankar is headed to the US for a crucial meeting on critical minerals, and he is expected to meet the US leaders. The bilateral relations have moved back to normal. Again, this is a lesson for all nations and leaders in conducting bilateral relations.

Indu Bhushan| Poulami Sanyal

Lead metal exposure poses a threat to India’s demographic advantage and its long-term economic growth. Despite being entirely preventable, lead remains an overlooked public health and economic quandary that undermines human capital formation. Urgent policy action is required to safeguard the nation’s youthful workforce and convert its demographic dividend into a sustainable opportunity.

The World Health Organisation recognises lead as one of the largest quantifiable environmental health threats worldwide, contributing to over 1.5 million deaths annually through neurological, cardiovascular, and developmental damage, particularly among children and pregnant women. This toxic metal infiltrates air, water, soil, and consumer products, causing irreversible harm that spans generations

and commands a global economic toll estimated in trillions, equivalent to 7 per cent of global GDP. In low and middle-income countries, where regulatory gaps persist, lead exposure disproportionately burdens vulnerable populations, amplifying health disparities and stunting development. India bears a disproportionate share of this crisis. The 2022 CSIR-NITI Aayog assessment attributes 230,000 premature deaths each year to lead poisoning. The Institute for Health Metrics and Evaluation (IHME) reports that in 2019, 21.7 million disability-adjusted life years (DALYs) were lost globally due to lead exposure, with India accounting for 4.6 per cent of this total. Furthermore, India accounts for 20 per cent of predicted global IQ losses in young children due to lead. This results in an economic cost of \$259 billion, 9 per cent of 2019 GDP, through lost productivity and health expenditures. These

figures reveal a silent epidemic that rivals major health challenges but receives far less attention.

Impacts on Human Capital Exposure robs children of IQ points, severely impairing cognitive abilities essential for learning and problem-solving. This translates to reduced educational attainment, as affected children struggle with reading and abstract thinking, creating the context for lifelong disadvantages. Behavioural issues, such as increased aggression and attention deficits, compound these effects, leading to developmental impairments that persist into adulthood and limit personal potential.

India’s population structure amplifies these risks, with 65 per cent under 35 years old, representing a demographic dividend poised to drive economic expansion. Lead-induced cognitive deficits erode this advantage by diminishing workforce productivity, as

lower IQ correlates with poorer job performance and innovation capacity. The situation will perpetuate reduced economic mobility and trap families in poverty.

Economic Consequences Cognitive impairments from lead will directly suppress labour productivity, resulting in lower lifetime earnings and widespread wage suppression across skill levels. Aggregate human capital formation will suffer, as millions enter the workforce with diminished capacities, which will slow overall economic output. If these losses compound over decades, they will be enough to divert India from its projected high-growth trajectory.

Sectors reliant on knowledge, technology, and innovation, such as IT, manufacturing, and services, will face severe constraints from a cognitively compromised workforce. Poor health indices as a result of lead exposure will discourage investment. The crisis

will inflate public health costs, with resources shifted from preventive investments to chronic treatments like chelation therapy. This diversion will strain the economy, particularly in resource-limited settings, and will perpetuate poverty with increased out-of-pocket expenditure as well.

Policy Imperative Lead exposure is entirely preventable through proven interventions, yet India’s current trajectory risks transforming its demographic asset into a liability. Immediate steps are essential to avert this scenario and safeguard the demographic dividend. A robust monitoring framework is required through data-driven surveillance systems to identify exposure hotspots, implement stringent regulatory enforcement to eliminate sources, and adopt equity-focused measures ensuring access for vulnerable groups like children, women of reproductive age, informal sector workers, and urban slum

dwellers. This multisectoral approach will integrate health, environment, and the economy for maximum impact.

To tackle lead poisoning nationwide, it is necessary to roll out continuous and periodic surveillance programmes tracking lead levels in air, soil, and water, and biomarkers including blood, zeroing in on hotspots for data-driven action and swift policy adjustments. Tougher rules would ban lead paints, tainted spices, and toys while cracking down on rogue battery recycling, matching international benchmarks through smart incentives and fines to boost adherence. Mass awareness drives across TV, schools, and factories would educate parents, teachers, and labourers, especially youth, on job hazards, sparking demand for safer habits and production. Bolster healthcare with cost-effective and accessible medical tests, iron-calcium nutrition boosts to curb uptake, and chelation treatments to take

preventive steps towards safeguarding children’s future potential and productivity. Train workers for green jobs in clean recycling, waste handling, and lead-free factories, fostering employment that meets global eco-standards. Invest more and team up industries and universities for breakthroughs like substitute paints and batteries, merging growth with safety. Finally, weave lead risks and workplace safeguards into school lessons and trade courses, empowering young people to drive lasting change.

Consequences of Inaction Families will experience decreased productivity from members with health challenges, and lower educational outcomes will push many into unskilled jobs. Suppressed wages will restrict upward mobility, while ongoing health burdens will strain household budgets, creating tough choices between medical care and essentials like education or savings.

Sanskrit: The language that shaped a civilisation

Raghvendra Singh

Sanskrit means ‘perfectly made’. It is a language of extraordinary precision. Sanskrit is one of the oldest recorded languages. It developed a most comprehensive linguistic system very early in history so that it could easily be committed to memory. The earliest writings in Sanskrit, the Rig Vedic hymns, are in the form of poetry.

Before the development of script, India relied on oral transmission to preserve and disseminate knowledge, including scriptures and philosophical teachings. The Vedas, Brahmanas, Aranyakas, Upanishads and early Puranas were passed on orally from teacher to disciple, the ‘Guru-Shishya parampara’, over generations. This knowledge was considered Shruti, that which is heard, emphasising its oral origins. The oral transmission of knowledge in Sanskrit was a highly disciplined and precise process. The emphasis was not only on memorisation, but also on accurate pronunciation and intonation. Even after the introduction of scripts, the oral tradition of learning and reciting Sanskrit texts continued to be an integral part of the Indian educational system.

The Sanskrit texts were set into two categories: Shruti and Smriti. Shruti literally meant “heard” or “revealed”. The authority of these texts was of the highest order. They were considered eternal and unchangeable. The most important and foundational Shruti texts are the Vedas. Smriti, on the



other hand, meant “remembered”. These texts were human compositions. Unlike Shruti, Smriti texts were regarded as secondary to the Vedas in terms of authority. The Smriti texts include the Epics, the Puranas, Dharmashastras and other scriptures dealing with customs, moral codes et al. Smriti literature also provides practical guidelines and interpretations of the principles found in the Shruti texts. As has been said, one of the oldest and most important Shruti scriptures, the Rig Veda, is a collection of hymns dedicated to deities and natural forces. It was composed not less than four thousand years ago. It is in Sanskrit. The hymns are highly poetic and profound. The importance of both the Shruti and the Smriti texts is historical and cultural. They have played a crucial

role in shaping the Indian ethos. The Vedas have survived over millennia. The reason for it is the language of it. Vedic Sanskrit was far simpler than Classical Sanskrit. The use of phonetic patterns, metre and rhythm made memorisation and recitation easier. The use of metrical verses made them more rhythmic and melodious, aiding memorisation. The Vedic tradition included a detailed study of phonetics, which helped in preserving the correct pronunciation and accentuation of the Vedic texts. The fact that these texts were highly revered also helped them remain relevant.

Panini, the famous grammarian, created, in about 40 pages, the most complete linguistic system in history. His masterwork, ‘Ashtadhyayi’ (eight chapters), made Sanskrit the lingua franca

of the Asian continent for more than a thousand years. His work was one of the most astonishing intellectual achievements of the human mind. Panini lived around the 5th-4th century BCE in a town near Taxila. Ashtadhyayi is quite clearly the work of a single individual, fascinated with reconstructing things to understand how they worked. What Panini took apart and reconstructed, as per the rules he created, was Sanskrit, the language of the Vedas. The sacred hymns and the language itself were analysed by him. It was nothing less than grasping the nature of the cosmos. Just as in yoga, wherein we are mindful of our breath, so was the case with Panini, who became mindful of what we spoke.

What made Sanskrit perfect? Why was it a language of extraor-

inary precision? In English, the noun can usually be understood from the context. But in Sanskrit, eight different suffixes are used to embed meanings into the forms of words. From a single Sanskrit noun in isolation, one can tell its syntactical function. The features of Sanskrit are an expression of subtlety. Panini set out to capture in exacting detail how Sanskrit worked. To do this, he needed a meta-language. His meta-language had to be concise, to be committed to memory, and to be passed on orally. The Sutras that Panini created describe Sanskrit’s chronology, morphology and syntax. The word used to describe Panini’s work is “Vyakaran”. Vyakaran is seen as the paradigm for other major themes of enquiry in ancient India, such as astronomy and philosophy. The derivational qualities of Panini’s grammar can be compared to the deductive principles of Euclid’s geometry.

Sanskrit gradually took wing. It became a language in which great works were composed. As it spread in the centuries after Panini, Sanskrit helped give India a cultural and social position that no political entity would be able to establish. It made India an exporter of cultural capital. From the start of the Common Era, and for well over a millennium thereafter, Sanskrit bound together a huge civilisational territory, continental in scale. At its peak, a quarter of the world’s population lived within it. Sanskrit became the sign across this vast space of a particular style of polity, civility and beauty, from Afghanistan to Java.

THE HIDDEN BLUEPRINT OF HUMAN BEHAVIOUR

Rajyogi Brahma Kumar Nikunj Ji

More than half the population of the world believes that consciousness is an essential and inherent attribute of an entity called the ‘soul’. They have the faith that the soul, by its very nature, is an entity different from inorganic and organic matter, and from the body and the brain.

It is a fact that we all live as long as we keep on breathing; that is why the phrase ‘till the last breath’ is used very often by us in our day-to-day life. However, we tend to forget a very important fact: that the body remains alive so long as the soul resides in it. The presence of the soul automatically sustains the functioning of the body, so much so that the breathing process continues even while a person is in deep sleep. Hence, in actual sense, it is the soul that performs all its activities through the body. However, the world is divided into two major groups as far as the existence of the soul is concerned. One of these consists of people who believe in the existence of the soul and are called religious people, and the other consists of people who do not believe in its existence and are called non-religious people.

Religious people are further divided



and subdivided into various sects and cults, depending upon what details they believe about the soul and the Supreme Soul. True knowledge of the soul, however, is not a matter of superficial importance, nor is it to be left to philosophers or religious scholars to discuss. Since each and every one of us is a constant being, it concerns us all individually and severally. So, to deny ourselves the true knowledge of consciousness is to deny ourselves the right and the duty of living a meaningful life. It would be incomplete if we did not touch upon the views of a well-

known psychologist on the soul or consciousness. He did not believe in the existence of the soul as an entity different from the body and the brain.

He considered ‘the unconscious’ as comprising mainly repressed desires which manifest themselves in dreams and find expression in the form of neurotic habits and phobias. He called this the Id (or instincts and drives) and said that man’s desires were censored by his superego, and those desires which were considered as not conforming to social norms or to accepted ethical standards were repressed. It was Freud who was the first in the West to draw the attention of people towards ‘the unconscious’, even though his explanation of

‘the unconscious’ is incomplete and has some errors. On the other hand, in the East, religious people of India have, since very ancient times, believed in sanskaras, which are to some extent like ‘the unconscious’ of Freud’s theory, because these do not form the content of the conscious mind, as a person is normally not aware of them or their sources, even though his personality and behaviour, at all times, are influenced by the sanskaras that he possesses. His sanskaras do not leave him even in his dreams or his spiritual efforts.

Research into, or an in-depth study of, sanskaras and the methods of change will provide mankind with the essential tools for improving relationships among human beings and for making this world a better place to live in. Remember! Without the knowledge of ‘the unconscious’, all the inventions of science and technology will not make the world peaceful, even though they may make it comfortable. All scholarship, erudition, religious rituals and mantras will also not help to lead man to peace unless and until there is a change for the better in man’s sanskaras. And that is why we must strongly work towards changing our sanskaras if we want to have a good and better sansar.

How lead exposure may cost India its demographic potential advantage