The auspicious day of Makar Sankranti in the year 1863—January 12—became a momentous day in the annals of modern history as the most adorable son of our motherland, Swami Vivekananda, was born on this day. He was a scientific visionary and envisioned a constructive development of masses, especially the underprivileged people, by enabling them with the tools of progressive science of the modern world. Further, he envisaged a confluence of spiritual and material sciences as basis for reshaping the future world. This aspect of his life and work was rightfully acknowledged by one of the renowned historians of the modern era, A L Basham. At the time of Swamiji’s birth centenary in 1963, he observed, “Even now a hundred years after the birth of Narendranath Datta, who later became Swami Vivekananda, it is very difficult to evaluate his importance in the scale of world history. It is certainly far greater than any Western historian or most Indian historians would have suggested at the time of his death. The passing of the years and the many stupendous and unexpected events which have occurred since then suggest that in centuries to come he will be remembered as one of the main moulders of the modern world.”

To understand the importance of life and work of Swami Vivekananda and his scientific vision about social development, it is essential to know the historical and social background of India and the situation prevailing at the time of his birth. The country was hit hard by repeated onslaughts of invaders for centuries together. The subsequent defeats because of internal rivalries weakened the country further. Social ills proliferated on one hand, and, on the other, rampant loot by barbarous invaders impoverished a prosperous nation. A historically vibrant and progressive society became stagnant and gradually went into isolation from all world affairs. At this juncture (1757), came the British invasion causing additional and multifarious damage.
Flames of the first war of independence in 1857 against the British rule were on the verge of subsidence at the time of Swamiji’s birth. Though not succeeded in achieving its goal of independence, the war was successful in arousing unrest in the minds of people in almost all parts of the country. The British rule, having understood a restive mood, adopted a strategy of displaying their superiority by establishing technological advances like Railways, Post & Telegraph, Western medicines, etc. providing comfortable facilities to people. This was something unprecedented, which overwhelmed people creating an aura around the British Raj. Along with this, a new system of education was established to cultivate Western ideas and ideals in people’s mind. The veiled purpose of colonisers was to cultivate their culture and civilisation and make natives forget their national identity under the awe of modern superiority.

The collective Indian consciousness arising in the aftermath of the war of independence responded to this British offensive by adopting various means and ways. The sensitive minds, who were aware of the glorious past, were searching for the causes behind defeat, utter impoverishment and severe social degeneration. Though this response to colonial rule came in diverse ways, there was a common opinion that social weaknesses and vulnerabilities needed to be removed by inculcating scientific and rational thinking to ready the countrymen for national resurgence. Mainly, there were two categories of responses. A class of newly educated people sought to bring reforms from outside as they chose the Western ideas upon which to graft native ideas. This concept swiftly attracted many young intellectual minds in its initial phase but could not sustain long as it was basically imitative in nature. Another class sought transformation from within and was organic in nature as it was closely related to Indian ethos and culture. This was upheld by people and continued for long. Swami Vivekananda was the iconic figure of this class.

Swami Vivekananda at the Parliament of the World’s Religions, Chicago, 1893

During college days, he started searching the meaning of life and the reality of this entire creation or a creator

The genius and versatile Narendra grew in this setting in his childhood, understanding and absorbing the nuances of the eastern and western currents of thoughts. Youthful and energetic Narendra was a born rationalist and looked at everything from the lens of reason. During college days, he started searching the meaning of life and searched intensely to know the fundamental truth or reality of this entire creation or a creator. This search ended when he met a great spiritual master, Shri Ramakrishna Paramahansa. Shri Ramakrishna was not a philosopher; he was a seer as he simply believed in what he saw. He revealed all the secrets of ultimate reality to Narendra and this transformed Narendra’s perception towards life and creation. Narendra did taste the absolute truth or divinity and further realised that it is not at all a mere abstraction, but, it manifests in innumerable forms in this creation. The Master’s message to Narendra was — the Creator and Creation are essentially one. To help man to realise his essential divinity became a life mission of Narendra. He understood that serving poor and downtrodden is the noble way to realise God.

After Ramakrishna’s departure to the divine abode, Narendra took sannyas, renouncing the life of senses, as per the Master’s wishes. A young sannyasin set out on the journey as a parivrajaka — a wandering monk — with only a begging bowl and staff. During this travel, Narendra turned into Swami Vivekananda. Wandering made him aware of the situation of his subjugated country and countrymen. This acquaintance was essential to draw a plan to accomplish the life mission. He said once, ‘I have a great mission to fulfil... My guru asked me to dedicate my life to the regeneration of my motherland. Spirituality has fallen to a low ebb and starvation stalks the land. India must become dynamic again and earn the respect of the world through her spiritual power.’

The experience of widespread impoverishment, starvation and a resultant stagnation of masses evoked severe pain and passion in Swamiji’s heart. The ideas about the regeneration of his motherland started maturing in mind. He sincerely felt the need of scientific and technological knowledge, as that
of the West, to improve material conditions of people on one hand; and on the other, he felt the rejuvenation of rational spiritual knowledge necessary to enhance confidence in masses.

Swamiji’s mind was working on several plans. He envisioned a confluence of material and spiritual science. San­nyasins should teach secular subjects along with spiritual preaching was his opinion. He expressed this in a letter to Maharaja of Mysore, ‘The one thing that is at the root of all evils in India is the condition of the poor... The only service to be done for our lower classes is to give them education to develop their lost individuality... They are to be given ideas; their eyes are to be opened to what is going on in the world around them; and then they will work out their own salvation. That is what is to be done in India. ... If the poor boy cannot come to education, education must go to him. There are thousands of single-minded, self-sacrificing Sanyasins in our country, going from village to village, teaching religion. If some of them can be organized as teachers of secular things also, they will go from place to place, from door to door, not only preaching, but teaching also. ... Suppose two of these men go to a village in the evening with a camera, a globe, some maps, etc.’

Another interesting interaction Swamiji had was with Jamsetji Tata, regarding the overall development based on science — in 1893. Though it was their first and last meeting, Swamiji’s ideas about the rejuvenation of India with integration of asceticism and science made a lasting impression on Jamsetji’s mind. Details of this meeting came to light through Jamsetji’s letter to Swamiji five years later (November 23, 1898), in which he made an earnest and sincere request to Swamiji to apply himself to lead the process of cultivation of sciences — natural and humanistic — along with asceticism to earn good name for the motherland. Being a monk, Swamiji could not accept this proposal but supported wholeheartedly a cause of establishing a university of science by Tata. Swamiji responded to the request by an appeal made public through Prabuddha Bharat journal — ‘We are not aware if any project at once so opportune and so far-reaching in its beneficent effects was ever mooted in India, as that of the postgraduate research university of Mr Tata. The scheme grasps the vital point of weakness in our national well-being with a clearness of vision and tightness of grip, the masterliness of which is only equalled by the munificence of the gift with which it is ushered to the public. ... If India is to live and prosper and if there is to be an Indian nation which will have its place in the ranks of the great nations of the world, the food question must be solved first of all. And in these days of keen competition, it can only be solved by letting the light of modern science penetrate every pore of the two giant feeders of mankind: agriculture and commerce.’

This response precisely captures the essence of Swamiji’s vision to utilise S&T for the overall social development. The post-graduate research university was established at Bangalore in 1908 which is well-known worldwide as the Indian Institute of Science.

In general, the scientific vision of Swami Vivekananda is not much known to people. Deeper engagement with his scientific thoughts and ideas will guide us to be a developed country.

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