BOOKS & AUTHORS

Biographer Who Hoisted JC Bose to a Deserving Pedestal

The 100-year-old biography of Acharya Jagadis Chandra Bose by Sir Patrick Geddes, unusual for its age when published, is a worthy chronicle of the life of an Indian genius



Jayant Sahasrabudhe

E a living Indian scientist, Acharya Jagadis Chandra Bose, in an act highly unusual for the times. The biographer was Sir Patrick Geddes, who went on to have an abiding love for India.

Geddes' biography of Bose, the first Indian scientist of the modern era, was published in October, 1920. It was titled, *The Life and Work of Sir Jagadis C. Bose* along with a significant introductory line — 'An Indian Pioneer of Science'. Both, the writer and the subject, were passionately linked to each other. This inspiring tale of Acharya Bose was not only important then, a century ago, but has become even more relevant today when Indians are aspiring to make the country a world leader in the field of science and technology.

AN AUDACIOUS VENTURE

A well-known English man of science and a polymath, narrating the life-story of a legendary Indian scientist, that too during the British Raj, was an audacious venture. This apparently contrasting setting raises a couple of questions. What pulled Geddes towards Bose? Why did he write this fascinating bio-sketch and a scientific summary together so passionately? Answers to these questions are not only interesting, but truly motivating.

A FIRM CONVICTION

Geddes introduced Bose as 'An Indian



Sir Patrick Geddes

Pioneer of Science', with a well-reasoned conviction. However, it seems, this introduction was not received well as the British then had a prejudice that Indians were incapable of exact science. It appears that Geddes faced criticism with skewed questions for the same reason. But he responded boldly with a tremendous sense of certitude as evident in the opening lines of his preface: "I am asked whether the title of this book means especially a pioneer in science, who happens to be an Indian, or a pioneer of science in and for India. The answer is — Both."

WHEN GEDDES MET BOSE

Swami Vivekananda's disciple Sister Nivedita introduced Geddes to Bose at the Exposition Universelle 1900 at Paris. Geddes was at this exposition to organise a summer school and propagate his ideas on urban planning. Bose was present as a delegate to the International Conference of Physicists where he presented his pathbreaking discovery of existence of life in inorganic matter. Though their first meeting was brief, it proved effective.

WHAT ATTRACTED GEDDES TO BOSE?

The attraction between the two great minds was the coherence of their thoughts and world views. Geddes, an evolutionary biologist, sociologist and urban planner of global repute, had a holistic view of life because of his scientific and sociological research. Once he said, "Our greatest need today is to see life as whole, to see its many sides in their proper relations; but we must have a practical as well as a philosophical interest in such an integrated view of life."

Geddes' world view resonated perfectly with that of Bose who demonstrated the unity of life through his innovative experiments. In London, at a lec-dem at the Royal Institution on May 10, 1901, Bose said in his peroration, "... Her (science) advances have been always towards a clearer perception of underlying unity in apparent diversity. It was when I came upon the mute witness of these self-made records, and perceived in them one phase of a pervading unity that bears within it all things - the mote that quivers in ripples of light, the teeming life upon our earth, and the radiant suns that shine above us - it was then that I understood for the first time a little of that message proclaimed by my ancestors on the banks of the Ganges thirty centuries ago - 'They who see but one, in all the changing manifoldness of the universe, unto them belongs Eternal Truth, unto none else, unto none else!'." The main bond between the two was this integrated view of life.

INTRODUCTION OF GEDDES TO INDIA

Another factor which prompted Geddes to write on Bose so passionately, was his empathy with India. He got connected to India and its philosophy through Swami Vivekananda and Sister Nivedita. They first met in America in March 1900. Sister Nivedita dedicated her 1904 book *The Web of Indian Life* to Geddes.

Geddes had an interaction with

Swami Vivekananda at the Paris exposition where the latter was invited as a speaker to the Congress of History of Religions. Later on, he wrote the preface to the French translation of Swamiji's book, Rajayoga. Thus, Geddes had developed intimacy with Indian thought long before his actual arrival in India in 1914. He was invited by Lord Pentland, the Governor of Madras province, to guide newly developing urban areas, and stayed till 1924. Lord Pentland also introduced him to the governors of Bombay and Calcutta. Because of the invitations from several princely states, Geddes embarked on a nationwide tour, which allowed him to understand India and its life from close quarters. During the journeys, Geddes also met his old friend Bose.

THE BIOGRAPHY

Geddes got an opportunity to see and understand the remarkable scientific work of Bose and he realised how the scientist overcame obstacles and adverse attitude of the British authorities, to attain rare heights. Geddes noted that Bose's scientific achievements had not only changed the direction of science and furthered its progress but had also won recognition for his countrymen their capacity for exact science. He understood the indomitable spirit of Bose to stand up to the British. This was one of the major factors the unyielding patriotic attitude that won Geddes' heart and prompted him to write on Bose.

These experiences proved to Geddes that Bose was unique and his audacious saga needed to be recorded in the annals of science, of the world and India. Ego did not deter him, even though Bose was five years his junior, and Geddes himself was a man of international repute.

EPILOGUE

Indeed, it was the rarest of honour for Acharya JC Bose as he was blessed with a most able biographer who wrote a story of his life and work while he was alive. We, as Indians, owe a lot to Sir Patrick as this biography will remain forever a source of inspiration to rising India.

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The Uncrowned Trailblazer

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singlehandedly, against considerable scientific opposition in those times.

SETTING UP OF BOSE INSTITUTE

While Bose Institute was inaugurated on November 30, 1917, its idea was conceived from the time Bose faced discrimination against Indians by the colonial authorities during his tenure as faculty in Presidency College, Calcutta, after returning from Cambridge. Being an Indian, he was offered much reduced salary compared to that drawn by Europeans. His refusal to accept the salary, yet work full-time without pay for three years, seems to have triggered the germination of his urge towards establishing a science research institute. In 1897, he was invited to deliver a talk at The Royal Institution, London. The greatly stimulating ambience of this historical institute further ignited in him the zeal for establishing in his own city a similar place of learning, research and demonstration of scientific achievements. To put it succinctly, Bose's mission

The idea of the institute was born when Bose faced discrimination against Indians by colonial authorities

was, in his own words, "... I shall make the path of those who are to follow me less arduous ... "

Crucial support was provided by none other than Rabindranath Tagore alongside Sister Nivedita, who was encouraged in this effort by Swami Vivekananda, thereby facilitating the process of obtaining funds from various sources including the Maharaja of Tripura, Maharaja of Patiala, Maharaja of Kasimbazar and Maharaja of Baroda. In particular, in response to Sister Nivedita's passionate appeal, Sara Chapman Bull provided substantial contribution towards purchasing land for the



Image

Sir JC Bose (centre, back row) with his pupils at Bose Institute

Institute. In this endeavour, Bose's wife Abala played a pivotal role as the couple bequeathed nearly all their properties for the setting up of the Bose Institute. Further, Bose worked hard, lecturing widely for raising the required funds.

Sri Ramakrishna expressed, "Some have heard of milk, some have seen it, and some have drunk it. The Vijnani has drunk milk, enjoyed it, and been nourished by it."

"A *jnani* is like one who knows beyond a doubt that a log of wood contains fire. But a Vijnani is he who lights the log, cooks over the fire, and nourished by the food."

JC Bose knew knowledge, generated knowledge and consumed knowledge by making instruments;

therefore, truly, Bose is such a Vijnani (Scientist) as mentioned above.

As we remember the great scientist on his birth anniversary, it seems fitting to recall the touching tribute Rabindra Nath Tagore gave to him on his 70th birthday: "In the darkest hour of our national life, he has set a fire aflame which shows us the path to a greater future. His spirit of deep scientific inquiry, his profound love of universal humanity, his serene hopefulness have ever been a source of inspiration to all who have come near him ... "

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