LEAD Indian -Abdul Kalam

Former president and the great Indian scientist Abdul Kalam doesn't need any introduction. India felt proud to elect him as the president. He is the inspiration and role model of Indians, mostly children. As a scientist and as a leader, his work is innovative.

Avul Pakir Jainulabdeen Abdul Kalam, usually referred to as APJ Abdul Kalam was born on 15th October, 1931 in Rameswaram, Madras Presidency, British India. After graduating in Physics from St. Joseph’s College in Tiruchirapalli, Abdul Kalam graduated with a diploma in the mid-1950s from Madras Institute of Technology specializing in Aeronautical Engineering. As the Project Director, he was deeply involved in the development of India’s first indigenous Satellite Launch Vehicle (SLV-III). As Chief Executive of Integrated Guided Missile Development Programme (IGMDP), he also played a major role in developing many Indian missiles including Agni and Prithvi. He was the chief scientific adviser to Prime Minister and secretary of Department of Defense Research & Development from July 1992 to December 1999. Pokhran-II nuclear tests were conducted during this period, and were associated with Kalam although he was not directly involved with the nuclear programme at that time.

Kalam continues to take an active interest in development in the fields of science and technology. He proposed a research programme for developing bio-implants. He is a supporter of open source software over proprietary solutions and believes that the use of open source software on a large scale will bring the benefits of information technology to more people.

Ever since Dr. A.P.J. Abdul Kalam became the President of India (July 25, 2002), he spearheaded a socio-economic movement of igniting the young minds with positive thoughts and of propagating the “Developed India by 2020” vision with constructive mission modes. PURA (Providing Urban Amenities in Rural Areas) is the major component of President’s Dream for a developed India. It differs from the conventional ideas of economic development of rural areas in many ways, such as visions for: a comprehensive and composite rural development, government investment at urban levels in rural programmes, reverse rural-urban migration, the prerequisite quality infrastructure, supportive modern industry, investment in social and commercial service, and private enterprise initiative. PURA habitat design depends upon the infrastructural ring road linking a loop of villages and the interfacing of four interconnected aspects: physical, electronic, knowledge, and economic—to enhance rural prosperity. The model should enable proper selection of village clusters and deployment of the youth in different areas of rural development to make this programme a reality.

Under PURA, President Kalam envisages self-sustaining rural clusters which are well-connected by roads and fibreoptic cables for high-bandwidth telecommunication. PURA aims to provide “knowledge connectivity” through education, vocational, and entrepreneurial training for farmers, craftsmen, etc. It also aims to improve healthcare and sanitation facilities in these village clusters. The project aims at creating economic opportunities outside the cities by providing urban infrastructure and services in rural hubs, such as electricity to each household, roads, potable drinking water, telecom services, proper healthcare, and education. Abdul Kalam felt the scheme can also address the problem of rural poverty.

According to Kalam’s plan, the PURA communities must run as economically viable businesses financed and managed by entrepreneurs, local people, and small-scale industrialists. This is because they involve education, healthcare, power- generation, transport and management. Dr. Kalam spoke of 4 types of PURAs – Plain terrain PURA, Coastal PURA, Hill PURA, and Desert PURA. He emphasized on the fact that energy was what drove the rural economy and hence it was important to explore energy options such as solar, wind, bio-fuel, bio-gas, energy from municipal waste, etc.

Kalam has written several inspirational books, most notably his autobiography Wings of Fire, aimed to motivate the Indian youth. Another one of his books, Guiding Souls: Dialogues on the Purpose of Life reveals his spiritual side. He wrote several poems in Tamil as well. It has been reported that there is considerable demand in South Korea for translated versions of books written by him.

The Government of India has honoured him with the nation’s highest civilian honours: the Padma Bhushan in 1981; Padma Vibhushan in 1990; and the Bharat Ratna in 1997 for his work with ISRO and DRDO and his role as a scientific advisor to the Indian government. On April 29, 2009, he became the first Asian to be bestowed the Hoover Medal, America’s top engineering prize, for his outstanding contribution to public service. The citation said that he is being recognized for making state-of-the-art healthcare available to the common man at affordable prices, bringing quality medical care to rural areas by establishing a link between doctors and technocrats, using spin-offs of defense technology to create state-of-the-art medical equipment and launching tele-medicine projects connecting remote rural-based hospitals to the superspecialty hospitals. It added that he was a pre-eminent scientist, a gifted engineer, and a true visionary, who is also a humble humanitarian in every sense of the word.

*Information till Nov-2010