ASPECTS OF SERICULTURE IN PRE-COLONIAL ASSAM

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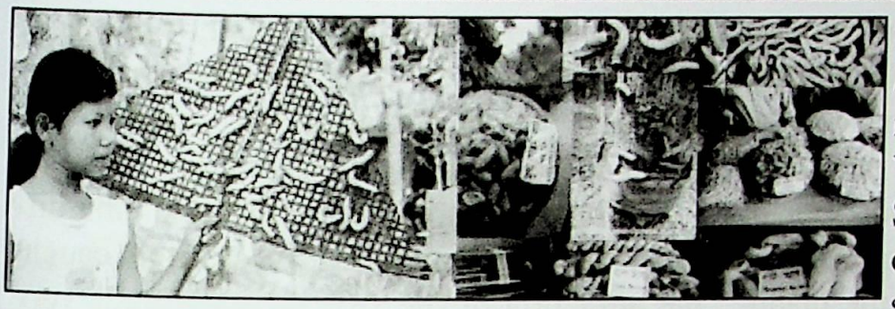
Silk is a natural filament created by the silkworm. Silkworm is reared on large scales by different techniques with great care in natural and controlled condition in different parts of the world for large-scale production of fine silk. This is known as sericulture. 'Seri' is a Latin word which means 'silk' and 'culture' is to 'rear'. Therefore, literarily sericulture means the raising or rearing of silkworms for the production of silk. Pre- Colonial Assam refers to the period in Assam history from the earliest time till the entry of British.

Assam is ideally suited for sericulture with the regrion possessing a suitable natural environment for rearing a variety of silkworms on a commercial scale. Sericulture in Assam comprises of mulberry *(pat)* and non- mulberry *(endi* or *eri, muga* and *tasar)* silkworm culture. *Endi* and *muga* silk are considered to be of indigenous origin and found only in Assam. *Tasar* existed in wild state from ancient times, but was not reared. Its commercial rearing is a post-colonial (after (1947) development. The *Pat* is of non- indigenous origin and its rearers; the *Katonis* entered Assam in the 12th century A.D and flourished under the Pala Kings of Kamrup (ancient name of Assam).

Actually, obscurity is still there regarding the origin of silk industry in Assam. But it is almost certain that the industry is an antique one. Since time immemorial, a flourishing industry had existed in the manufacture of *pat, muga* and *eri* and these have been a part of the cultural heritage of Assam. P. C. Choudhury in his book, *The History of Civilisation of the People of Assam to the Twelfth Century A.D* observes, "The art of sericulture and rearing of cocoons for the manufacture of various silk clothes were known to the Assamese as early as the *Ramayana and* the *Arthasastra"*. Both Kautilya and Banabhatta spoke highly about the silk manufactures of Assam. The royal presents offered by King Bhaskaravarman of Kamrup to King Harshavardhana of Thaneswar included *ksaumani* and *dukula,* both cloths made of silk.

Excellence of sericulture work and silk products of Assam too had caught the attraction of foreigners who visited Assam at different times and noted it down in their records. Periplus refers to both raw and manufactured silk of Assam. Pliny speaks of silk trade between China and India carried on through the Brahmaputra Valley. Ralph Fitch praises the silk industries of western Assam during his visit there in the last part of the 16th century. Tavernier, a French traveler of the 17th century, has noted that silk in Assam was locally produced on some trees and its stuffs were very excellent. The Mohammad historian compares the silk of Assam with that of China because of its excellence.

However, in ancient times silk culture was



not popular among all sections of the population of Assam. The Hindus of Assam were reluctant in silk culture because it was a degraded one in the estimation of the Aryan Hindu society. The manufacture of silk was an economically gainful pursuit with the silk cloth accepted in the royal treasury as payment of revenue as coin circulation was not widespread. So, it any way got spread among the tribals and low castes of the Aryanised Hindus in Assam. The kings of ancient Assam patronised the silk craft. There was bulk purchase of silk clothes from the weaving families by the state and it was recognised as a substitute of monetary payment of revenue.

Under the Ahoms, during medieval period of Assam history the sericulture witnessed greatest development. The Ahom rulers extended the manufacture of silk cloth to all sections including the upper castes. A department of weaving was established by the Ahom kings and silk weavers were maintained to supply clothes to the royal wardrobe. The weavers received rent-free lands and other favours in return for their services. Arrangements were made for keeping the Royal store sufficient with different varieties of silk clothes for presentation to foreign courts and dignitaries.

Sericulture as a profession on the basis of caste grew in Assam in the medieval period. Silk-worm rearers and silk weavers were regularly taxed and were categorised into specific *khels* or groups for assignment to the nobility including the king's household and the *Satradhikaras* or heads of the *Satras* to produce for them their necessary silk cloths. The great Vaishnava reformer of Assam, Srimanta Sankardeva himself acted once as the headman of a professional weavers' guild at Tantikuchi in Kamrup.

Momai Tamuli Barbarua, an official of the Ahom King Pratap Singha (1603-1641 A.D.) made it compulsory for every women of Assam to spin at least two bundles of silk thread per head each night before going to bed. For execution of this order weekly and bi-weekly vigilance was enforced. The system subsequently proved its usefulness. It kept the families self sufficient in their garment requirements and the surplus substituted the payment of revenue to the state by coins and widened the scopes of income by trade.

Amongst the Ahom kings, it was Suhungmung (1497-1539 A.D.) who first provided facilities to the artisans for rearing and manufacturing of silk in order to solve an economic dead lock in the Ahom kingdom. He encouraged the artisans to produce more silk cloths which would solve the problems of constant supplies of uniform to the troops and payment of revenue to the state under a money short economy.

Then Pratap Singha played an instrumental role in raising the commercial value of the *pat, eri* and *muga* silk transforming it into a commodity of trade. By issuing a circular, he entrusted fifty families of weavers in Sualkuchi to produce finest silk for the Mughal Emperor of Delhi. Silk tradition thus began to grow by leaps and bounds in Sualkuchi and in present time this place is a top most centre of Assam silk.

Rudra Singha (1696-1714 A.D.), the il-

lustrious Ahom king of Assam took further measures for the development of silk industry in Assam. He discouraged the dependence of Assam for specialised royal robes on distant provinces. lnfact, he prohibited importation of any kind of silk garments in Assam. He then made necessary arrangements for the manufacture of best quality of silk and tailoring of royal robes. This provided an incentive to the silk weaving families as it was lucrative to supply royal robes. The weavers and manufacturers of silk and silk robes attained a great proficiency and started to compete with their rivals of China, Tibet, Bhutan and Burma. Kamaleswar Singha (1795-1810 A.D.) even deputed an envoy to the Deva Raja of Bhutan with presents that included fine quality of silk and silk robes.

Most vital importance of sericulture in pre-colonial Assam was that it provided the basic need of clothing to every section of the Assamese society. There was some kind of restriction on the wearing of silk cloths with the upper classes wearing the dresses produced out of the *pat* and *muga* silk. The lower classes mostly used to cloth themselves with the silk of coarse variety, the *endi* or *eri* which was also the cheapest. Muga too was greatly exported from Assam as it was not produced anywhere else. Actually the major portions of silk were woven for domestic consumption with only the surplus being traded.

The commercial potentiality of the different varieties of Assam silk definitely caught the attraction of the British since their very contact with the medieval kingdom of Assam. Towards the latter half of the 18th century, the British authorities at Fort William too showed interest in developing a trade in raw silk which they could export to Britain. Hence soon after the occupation of the region, David Scott, Agent to the Governor General, North-East Frontier, had written to the government that he felt that of all the commodities available in Assam, silk was likely to be most profitable.

The sericulture in Assam progressed a lot in the pre-colonial times under a favourable geographical situation, active participation of the common masses and patronage of the ruling class. Development in the field of sericulture led to the production of finest quality of silk and silk products which have earned name and fame worldwide. This too could be one of the vital reasons behind the British annexation of Assam as English East India Company was basically a trading concern.

কৌতুক

গ্রাহক ঃ দাদা বহী আছে নেকি ?
দোকানী ঃ অ, বহি আছো।
গ্রাহক ঃ নহয় দাদা কপি আছে নেকি ?
দোকানী ঃ ক'ত মোক কঁপি থকা দেখিলি ?
গ্রাহক ঃ নহয় দাদা আপোনাৰ দোকানত বহী আছে নেকি ?
দোকানী ঃ মোৰ দোকানত বহি নাথাকি তোৰ বাপেৰৰ দোকানত বহি আছো নেকি ?

সংগ্রাহক
জ্যোতি প্রসাদ ৰয়
স্নাতক চতুর্থ যান্মাসিক (কলা শাখা)

Dudhnoi College, Past, Present & Future

(3rd prize winner in spot article writting competition, arranged by college Megazne section during college week.)

Jyoti Saha
B.Sc. 2nd Semester

Dudhnoi College was established in 1972. The First honorable principal of this college was Lt. Karuna Kanta Rabha. Our present respected principal is Dr. Gopal Phukan. Our college has innumerable proffesors assigned for different subjects. Each subject has a well maintained department. The college is well maintained and also has a good educational background. The student of our college produces good results with the guidance of the teachers.

The natural beauty of our college is also worthy to be seen. The college has a pond with a beautiful aquatic scenery. Various sight can be seen at the different corners of the college. It also has a large field.

Our College has been well developed by our present principal. He takes a good notice of the environment of the college, now if it is in the educational field, economical field or in any other aspects.

Our college respects every culture and celebrates various traditional programmes. We celebrate every Divas, Saraswati puja, traditional events etc.

Our College also organises many functions. Artists of high profile are invited for our entertainment.

The College has developed much more from how it has been in the past. And in the future it is expected to be even more.

I feel proud that I am a student of this college.

সাথৰ

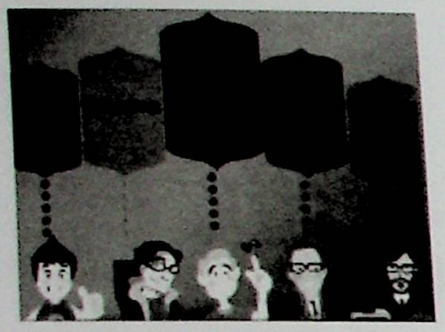
ক) এখন পিঠা তিনিটা ফুটা, খাব কিন্তু নোৱাৰি, পিন্ধিবলৈ মজা।
ঃ চেণ্ডেল

খ) এখোজ দুখোজ যায়, মূৰ ডাঙি চায়।
ঃ বেজী।

গ) খালে থিয় হৈ থাকে, নাখালে শুই থাকে।
ঃ বস্তা।

ঘ) গৰু নহয়, ঘাঁহ খায়, পখী নহয় উৰি যায়।
ঃ ফৰিং।

সংগ্ৰহ, **সুস্মিতা সাহা**
উঃমাঃ দ্বিতীয় বৰ্ষ (কলা শাখা)



Entrepreneurship as a career

" The true entrepreneur is a doer, not a dreamer " -- Nolan Bashnell

Ms Ankita Jain
Assistant Professor (Part time) ,
Commerce stream

The term entrepreneur refers to an independent minded or innovative business person who is interested in doing something on their own rather than following someone else's leadership. An entrepreneur can be an artist, a cook, a writer or an inventor. What defines an entrepreneur is the desire to work on his/ her ideas instead of working for others.

Finding the money to start a business is often the first challenge faced by a new entrpreneur, but due to the positive effect entrepreneurs have on the economy efforts are made by both private and government lenders to supply promising professional with inexpensive capital.

A number of initiatives are being practiced to encourage growth of new ventures. A ministry of skill development and entreprpreuship has been formed by the current government, educational institutes are providing courses on entrepreneurship and large numbers of mentors and investors have come up to boost entrepreneurship.

Entrepreneurs are job creators rather than job seekers. They create products and services. Entrepreneurs start new businesses and take on the risks and rewards of being an owner. One of the best things about pursuing a career as an entrepreneur is the wide open Possibilities. The possibilities in enterpreneurship are endless. The rewards can be high, and the risks are undoubtedly high too. But if one has drive, creativity and the desire to be his/her own boss, this may very well be the career for all. To be a successful entrepreneur one has to find something that he/ she is passionate about. There are days sometimes where everything is going the wrong way, and unless one really like what he/ she does, it will be hard to keep going with it.

Lastly, as Peter Drucker said, "the best way to predict the future is to create it." Which is true for entrepreneurs. Entrepneurship is full of uncertainty, but if one is ready to accept it, success is assured.

কৌতুক

বজ্রপৰি মৃত্যু হোৱাৰ পিছত এজন মৃতকৰ আত্মাক যমৰাজে সুধিলে —
যমৰাজ ঃ তুমি মৰাৰ সময়ত কিয় হাঁহি আছিলা।
আত্মা ঃ মই মোক কোনোবাই ফটো তোলা বুলিহে ভাবিছিলো।

Kindness Rewarded

Rashmi Ahmed
B.A. 3rd Semester.

One day a thirsty bee went out in search of water. It soon saw a tank full of water and decided to quench its thirst by drinking from it. The tank was huge and the bee was too small. It could not have drunk water by sitting on the side so it plunged into the water to take a sip. Once it tumbled in, it could not keep itself afloat.

It was beginning to drown when a dove flying overchead saw its plight. Realising the danger the Bee was in, the dove quickly flow to a neighbouring tree from where it plucked a leaf and dropped it on water next to the bee.

The bee climbed on to the leaf, dried its wings and flew away to its hive full of gratitude to the dove who had saved its life.

A few days later, the bee was returning to its hive after a long and hectic day when it saw a young boy aiming his gun at the dove sitting on the branch of a tree.

"What a cruel boy he is! What harm had the poor dove done to him that he wants to shoot it down. I must not let the naughty boy get away with this. I must do something to save the dove."

And so the bee flew down and sat on the boys wrist and stung him just as he was going to release the trigger of his gun.

"Aah! the boy cried out and sat writhing in pain. the gun fell down from his hands.

The dove heard the noise. It soon realized the danger it was in. It quickly flew away to safety.

The bee was happy. It had been able to repay the kindness of the dove which had saved its life one day.

Tilinga Mandir (Bell Temple)

Selja Ramchiary
B.A. Sem V
English Department

The Tilinga Mandir, a famous Shiv's temple is situated in Bordubi, a small town in Tinsukia District of Assam. It is about 20 K.M. away from Tinsukia town and about 7 K.M. from Duliajan. As the name suggests itself it means a temple of Bells. It is very unusual to see the bells everywhere in the mandir, in copper, brass and aluminium sizes in small as pebble and same others quite big and solid. All are stringed together in heaps from iron bars. Our eyes are not ready for such unintentionally sculptural bouquet and tunning us with a visuals. The belief is that when a bell is hung a wish its fulfilled. Nowadays, people are coming to know about its magical power. The most important thing about this temple is that there are no statues or idols. It is unbelievable that a temple that exerts such a powerful influence among millions is located in a tea territory with no extravagant physical . Not only these, there are no crowds, no commercial shops and no traffic jam.

So, how did this temple and the belief around it happen?

The story goes that nearly half a ecntury ago, in 1965, the tea garden workers noticed a black rock in the sahape of Shiva Lingam emerging from the ground near a Banyan tree.

Over the years people have discovered its mysterious power-make a wish and will be granted. For these, a bell was hung on the bar. For many years, bells were tied around the branches of the big banyan tree where one is amazed by the sheer volume of bells dangling from everywhere. But when the tree could not carry its weight it started to die and ra enviranmental aitierte stepped in and from then an, people have been tying around the bare.

A Visit to this Temple makes one feel tranquiled and amazed. Unlike a North Indian Temple this one is nt drapped in silk and gold and ritual beliefs.

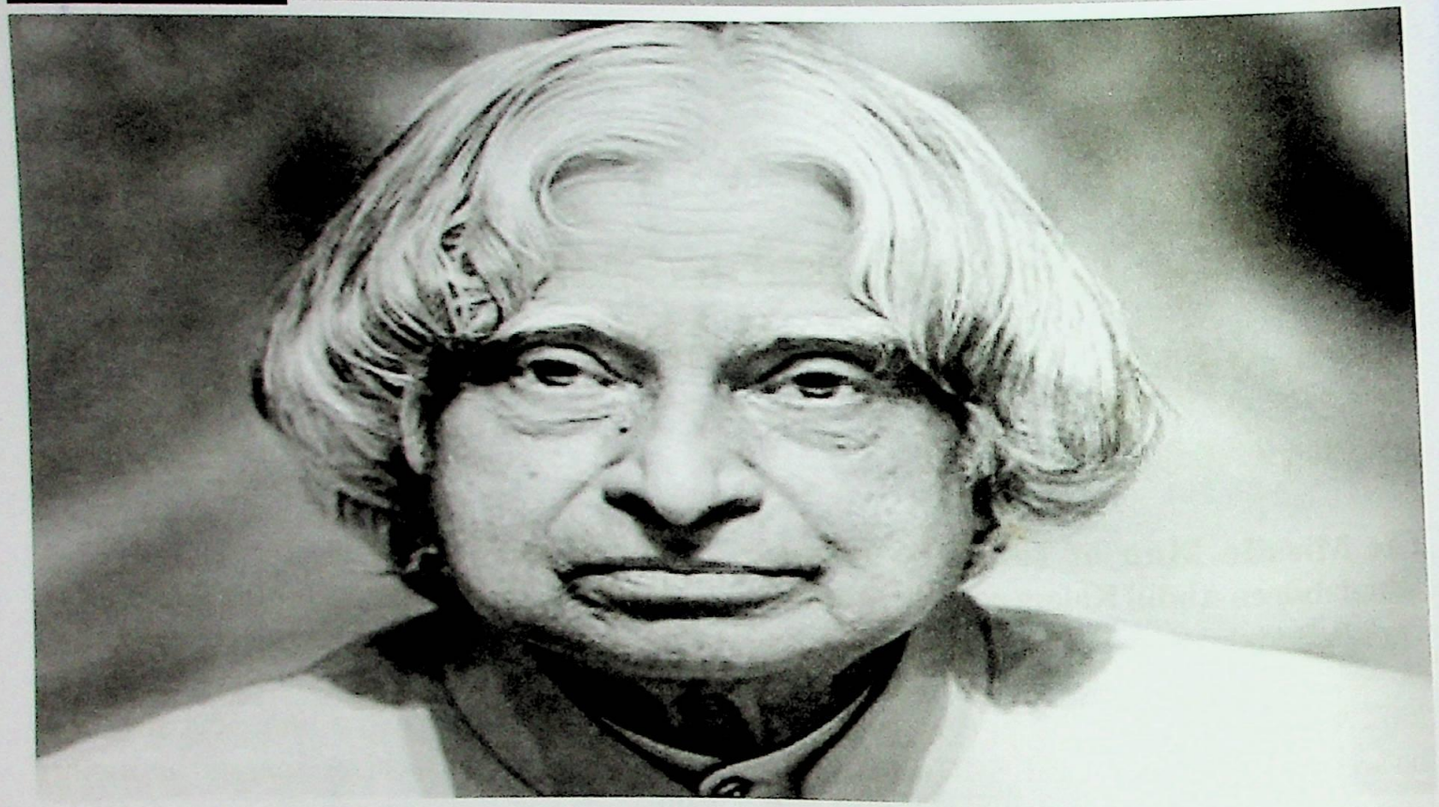
Scientist turned politician : The Missile Man of India

Abdul Kader
Associate Professor,
Dept of Physics,

The Missile Man of India, Avul Pakir Jainulabdeen Abdul Kalam popularly known as Dr. A.P. J. Abdul Kalam was the 11th President of the Republic of India for the period of 2002 to 2007. The names of the earlier Presidents of India are: Dr. Rajendra Prasad, S. Radhakrishnan, Dr. Zakeer Hussain, Fakuruddin Ali Ahmed, V. V. Giri, Neelam Sanjeev Reddy, Gyani Zail Singh, R. Venkataraman, Dr. Shankar Dayal Sharma and K. R. Narayanan. Some of them rose even from much humbler beginning than Dr. Kalam. It is very significant that Dr. Kalam is the first scientist to occupy the Rashtrapati Bhavan, Delhi. He is a man with a vision. A career scientist turned politician, Dr. A. P. J. Abdul Kalam was born and raised in Rameswaram in the state of Tamil Nadu. He studied on physics and aerospace engineering. After completing the course, he spent the next four decades as a scientist and science administrator, mainly at the Defence Research and Development Organisation (DRDO) and Indian Space Research Organisation (ISRO). He was involved in India's Civilian Space Program and Military Missile Development Efforts. He worked on the development of Ballistic Missile and Launch Vehicle Technology. In 1998, Kalam also played a pivotal organizational, technical, and political role in India's Pokhran-II nuclear tests. He was a renowned scientist and is considered to be the main brain behind India's Space Launch Vehicle (SLV) and Missile Programme.

Family and Education:

Dr.A.P.J.Abdul Kalam was born on 15 October, 1931 in the pilgrimage centre of Rameswaram on Pamban Island in the State of Tamil Nadu. His father Jainulabudeen was a little educated boat owner and imam of a local mosque and his mother Ashiamma was a housewife. To quote from his autobiography Wings of Fire: "I was born into a middle-class Tamil family in the island town of Rameswaram in Madras state. My father, Jainulabdeen, possessed neither much formal education nor much wealth; despite these disadvantages, he possessed great innate wisdom and a true generosity of spirit. He had an ideal helpmate in my mother, Ashiamma. I do not recall the exact number of people she fed every day, but I am quite certain that far more outsiders ate with us than all the members of our own family...We lived in our ancestral house, which was built in the middle of the 19th century. It was a fairly large pucca house, made of limestone and brick, on the Mosque Street of Rameswaram. My austere father used to avoid all inessential comforts and luxuries. However, all that was needed was provided for, in terms of food, medicine or cloths. In fact, I would say mine was a very secure childhood, both materially and emotionally." To quote him from his autobiography : "Every child is born, with some characteristics, into a specific socio-economic and emotional environment, and trained along the way, in certain ways by figures



of authority. I inherited honesty and self-discipline from my father; from my mother, I inherited faith in goodness and deep kindness as did my three brothers and sisters. But it was the time I spent with Jallaluddin and Samsuddin that perhaps contributed most to the uniqueness of my childhood and made all the difference in my later life. The unschooled wisdom of Jallauddin and Samsuddin was so intuitive, responsive to nonverbal messages that I can unhesitatingly attribute my subsequently manifested creativity to their company in my childhood." It may be noted that Ahmed Jallaluddin was a close friend of Dr. Kalam and Somesuddin was his first cousins. Dr. Kalam's father owned a ferry that took pilgrims back and forth between Rameswaram and Dhanushkodi. Dr. Kalam was the youngest of four brothers and one sister in his family. Their business had involved trading groceries between the mainland and the island and to and from Sri Lanka, as well as ferrying pilgrims between the mainland and Pamban. By his early childhood, Kalam's family had become poor. So at an early age, he sold newspapers to supplement his family's income.

Dr. A. P. J. Abdul Kalam was average grade student in school life but was described as a bright and hardworking who had a strong desire to learn. He spent hours to hours on his studies, especially on mathematics. After completing his education at the Schwartz Higher Secondary School, Ramanathapuram, Kalam went on to attend Saint Joseph's College, Tiruchirappalli, then affiliated with the University of Madras. In 1954, he took the graduate degree in physics from Saint Joseph's College.

Contribution to the Nation:

In 1955, he moved to Madras to study aerospace engineering in Madras Institute of Technology (MIT). In 1960, after completing the course from the Madras Institute of Technology, he joined the Aeronautical Development Establishment of the Defence Research and Development Organisation (DRDO) as a scientist. In 1969, Kalam joined to the Indian Space Research Organisation (ISRO). He received the government's approval and expanded the programme to include more engineers where he was the project director of India's first Satellite

Launch Vehicle (SLV-III) which successfully deployed the **Rohini** satellite in near-earth orbit in July 1980. He visited NASA's Langley Research Center in Hampton, Virginia; Goddard Space Flight Center in Greenbelt, Maryland; and Wallops Flight Facility in 1963-64. Within the long period 1970 to 1990, Kalam designed an effort to develop the Polar Satellite Launch Vehicle (PSLV) and Satellite Launch Vehicle-III (SLV-III) projects, both of them were proved to be successful.

Dr. A. P. J. Abdul Kalam also introduced and directed two projects, Project Devil and Project Valiant, which sought to develop ballistic missiles from the technology of the successful SLV programme in 1970. Despite the disapproval of the Union Cabinet, the then Prime Minister Smt. Indira Gandhi allotted secret funds for these aerospace projects through her discretionary powers under Kalam's directorship. Kalam also played an important and integral role to convince the Union Cabinet to conceal the true nature of these classified aerospace projects. His confidence, perseverance, research and educational leadership brought him great laurels and prestige in the 1980s, which prompted the government to initiate an advanced missile programme under his directorship. He was appointed as the chief executive by the then Defence Minister R Venkatraman for develop the Integrated Guided Missile Development Programme (IGMDP) mission. He had to serve as the Chief Scientific Adviser of Prime Minister and the Secretary of the Defence Research and Development Organisation from July 1992 to December 1999. During this period he conducted the Pokhran-II nuclear tests in which he played an intensive political and technological role. Kalam also worked as the Chief Project Coordinator along with Rajagopala Chidambaram during the testing phase. In 1998, he developed a low cost coronary stent along with cardiologist Soma Raju, which was known as the "Kalam-Raju Stent". In 2012, the duo designed a rugged tablet computer for health care in rural areas, which was named the "Kalam-Raju Tablet".

Presidency:

Dr. A. P. J. Abdul Kalam was elected as the 11th President of India, a man of scientist turned politician. He won the 2002 presidential election with an electoral vote of 922,884, surpassing the 107,366 votes won by Lakshmi Sahgal. His term lasted from 25 July 2002 to 25 July 2007. On 10 June 2002, the National Democratic Alliance (NDA) which was in power at the time, expressed that they would nominate Dr. Kalam for the post of President and both the Samajwadi Party and the Nationalist Congress Party backed his candidacy. After the Samajwadi Party announced its support for Kalam, the then President, K. R. Narayanan chose not to seek a second term in office, leaving the field clear. Dr. Kalam said of the announcement of his candidature, "I am really overwhelmed. Everywhere both in Internet and in other media, I have been asked for a message. I was thinking what message I can give to the people of the country at this juncture".

On 18 June 2002, Dr. Kalam submitted his nomination papers in the Indian Parliament, accompanied by the then Prime Minister Shri Atal Bihari Vajpayee and his senior Cabinet colleagues. The polling for the presidential election began on 15 July 2002 in Parliament and the state assemblies. The media claimed that the election was a one-sided affair and Dr. Kalam's victory was confirmed. Dr. Kalam became the 11th president of the Republic of India in an easy victory and moved into the Rashtrapati Bhavan after he was sworn in on 25 July 2002. Dr. Kalam was the third President of India to have been honoured with a Bharat Ratna, India's highest civilian honour. Earlier President Dr. Sarvepalli Radhakrishnan (1954) and Dr. Zakir Hussain (1963) who had been honoured with Bharat Ratna. He was also the first scientist and the first bachelor to occupy Rashtrapati Bhawan.

As president, Dr. Kalam was affectionately known as the **People's President,** saying that signing the Office of Profit Bill was the toughest decision he had taken during his tenure. At the same time Dr. Kalam was criticised for his inaction in deciding the fate of 20 out of the 21 mercy petitions submitted to him. In September 2003, in an interactive session in PGI Chandigarh, Dr. Kalam supported the need of Uniform Civil Code in India, keeping in view the population of the country. In 2006, on October 17, the President, Dr. A. P. J. Abdul Kalam came to Guwahati and interacted with the physically challenged children at the National Workshop-Cum-Exhibition on "Bio-Diesel in North-East".

At the end of his term as president, on 20 June 2007, though Dr. Kalam expressed his willingness to submit the nomination in the 2007 presidential election, but two days later, he decided not to contest the Presidential election again stating that he wanted to avoid involving Rashtrapati Bhavan from any political processes.

Post-presidency:

After leaving Rashtrapati Bhavan, Dr. Kalam had to serve a renowned profession, visiting professor at the Indian Institute of Management, Shillong, the Indian Institute of Management, Ahmedabad, and the Indian Institute of Management, Indore. Moreover, an honorary fellow of Indian Institute of Science, Bangalore, Chancellor of the Indian Institute of Space Science and Technology, Thiruvananthapuram; Professor of Aerospace Engineering at Anna University; and an adjunct at many other academic and research institutions across India. He taught information technology at the International Institute of Information Technology, Hyderabad, and technology at Banaras Hindu University and Anna University. In 2011, Dr. Kalam was criticised by civil groups over his stand on the "Koodankulam Nuclear Power Plant". He supported the establishment of the nuclear power plant and was accused of not speaking with the local people. In May 2012, Dr. Kalam launched a programme for the youth of India called"What Can I Give Movement", with a central theme of defeating corruption. In 2012 Dr. Kalam came Guwahati where he attended the 14th convocation function of IIT-Guwahati. In his lecture, Dr. Kalam told students that wanted to see a "silent" Brahmaputra emerging into a "smart" waterway in the country. Dr. Kalam told the students that it was his dream to make Brahmaputra the most vibrant waterway in the country. Dr. Kalam had said, "Brahmaputra is very close to me. Yesterday and even today I visited the river. It is a silent river with limited activities now. My dream is to see Brahmaputra become a smart waterway in the country,"

Death:

On 27 July 2015, Dr. Kalam travelled to Shillong to deliver a lecture on "Creating a Livable Planet Earth" at the Indian Institute of Management Shillong. While climbing a flight of stairs, he experienced some discomfort, but was able to enter the auditorium after taking a brief rest. At around 6:35 p.m. IST, only five minutes into his lecture, he collapsed. He was rushed to the nearby Bethany Hospital in a critical condition; upon arrival, he lacked a pulse or any other signs of life. Despite being placed in the intensive care unit, Dr. Kalam was confirmed dead of a sudden cardiac arrest at 7:45 p.m IST. Assam and Nagaland governor, P. B. Acharya said that the nation has suffered a great loss in the demise of Dr. Kalam. P. B. Acharya also said that Dr. Kalam was not only a former president but also a highly respected scientist internationally. The government of India declared a 7-days national mourning as a mark of respect for the departed former President, Dr. A. P. J. Abdul Kalam.

Awards and Honours:

2014: Doctor of science, Edinburgh University, UK.

2013: Von Braun Award, National Space Society

2012: Doctor of Laws (Honoris Causa), Simon

Fraser University
2011: IEEE Honorary Membership, IEEE
2010: Doctor of Engineering, University of Waterloo
2009: Honorary Doctorate, Oakland University
2009: Hoover Medal, ASME Foundation, USA
2009: International von Karman Wings Award, California Institute of Technology, USA
2008: Doctor of Engineering (Honoris Causa), Nanyang Technological University, Singapore
2008: Doctor of Science (Honoris Causa), Aligarh Muslim University, Aligarh
2007: Honorary Doctorate of Science and Technology, Carnegie Mellon University
2007: King Charles II Medal, Royal Society, UK
2007: Honorary Doctorate of Science, University of Wolverhampton, UK
2000: Ramanujan Award, Alwars Research Centre, Chennai
1998: Veer Savarkar Award, Government of India
1997: Indira Gandhi Award for National Integration, Indian National Congress
1997: Bharat Ratna, Government of India
1995: Honorary Fellow, National Academy of Medical Sciences
1994: Distinguished Fellow, Institute of Directors (India)
1990: Padma Vibhushan, Government of India
1981: Padma Bhushan, Government of India

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