



Mahatma Gandhi University

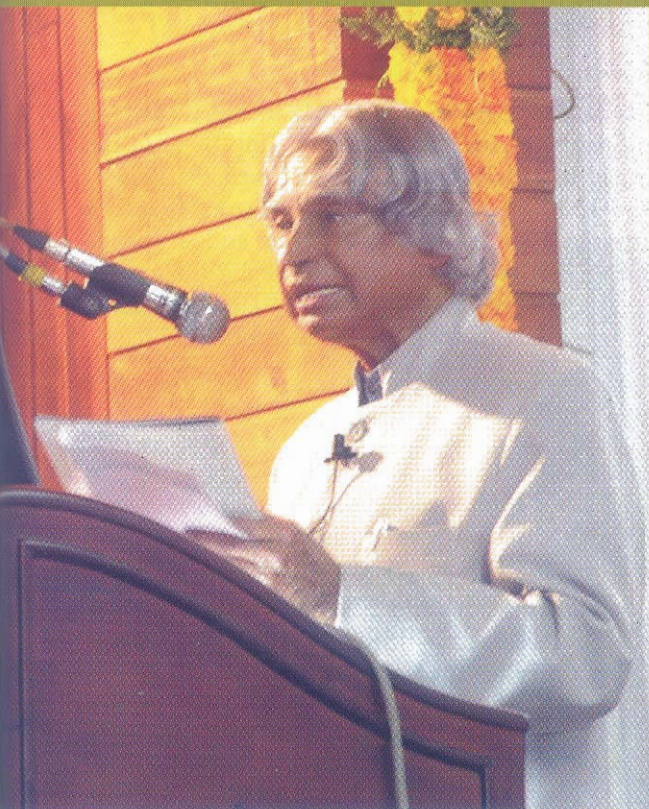
SILVER JUBILEE

SOUVENIR

“ Nation, Challenges and Leadership ”

Dr. A.P.J. Abdul Kalam

The Silver Jubilee Lecture on November 9, 2008



I am delighted to participate in the Silver Jubilee celebrations of Mahatma Gandhi University. I am happy that as a part of the celebration the University has created an Open Access Digital Archives where over 1000 dissertations of Ph.D programme undertaken in University during the last 25 years has been stored. The availability of this dissertations is an important step towards democratization of knowledge. I am sure the model of digital archives followed by Mahatma Gandhi University will be emulated by many Indian Universities, which will go a long way in democratization of knowledge, prevention of duplication leading to transparency in the education system.

Digital Library of India

India has digitized around 1,50,000 books and are available in www.dli.ernet.in website which contains more than 25 % of regional languages. Digital Library of India portal foster creativity and free access to all human knowledge through unified access. Digital Library provides a free-to-read, searchable collection of 1 million books, predominantly in Indian languages, available to every



Ceremonial lighting of the lamp

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one over the Internet. This portal will also become an aggregator of all the knowledge and digital contents created by other digital library initiatives in India. Very soon we expect that this portal would provide a gateway to Indian Digital Libraries in science, arts, culture, music, movies, traditional medicine, palm leaves and many more. The result will be a unique resource accessible to anyone in the world 24 x 7, without regard to socio economic background or nationality. I suggest Mahatma Gandhi University, Kottayam should avail the digital library facility and initiate the process of digitizing the traditional knowledge resources of this region.

My greetings to the Vice-Chancellor, faculty members, staff and students of Mahatma Gandhi University during the Silver Jubilee Celebrations. When I am with you I would like to talk on the topic “Nation, Challenges and Leadership”.

Chandrayaan-1 Mission

On 22nd October 2008 around 7 a.m a jubilant Madhavan Nair, my friend and Chairman, Indian Space Research Organization (ISRO) called me from Sreeharikoota and informed that Polar Satellite Launch Vehicle, PSLV - C II successfully launched the 1380 kg. Chandrayaan-1 Space craft into a transfer orbit with a perigee (nearest point to earth) of 255 km. and an apogee (farthest point to earth) of 22860 km, inclined at an angle of 17.9 degree to the equator. He described the precise performance of PSLV I congratulated him and his team on the successful start of India to Moon orbit.

The Chandrayaan Mission is not just to study the features of Moon but there is a much greater purpose. The Moon is going to be a source of special matters, minerals and also could be intermediate base for Mars Mission.

Messages from 50 years of ISRO

As Chandrayaan is on its journey of several lakhs of kilometers, I recall the messages conveyed by 51 Satellite missions and 27 launch vehicle missiles and various technological strength developed by ISRO in the last 5 decades. ISRO is the sole agency in the Country for space efforts. It is a government agency with no competitor. What inspires ISRO to excel? Its programmes are self-driven. Its schedules are self-drawn. Invariably they are optimistic and success oriented. The ISRO team members consisting of engineers, scientists, technical staff and administrative staff are extremely committed

and focused on the goals. Occasional failures don't deter them; they burn mid-night candles and arrive at solutions and demonstrate the strength.

The vision and missions for space came out of quest for national development by its founder Dr. Vikram Sarabhai, who was also your founder. What messages do the ISRO experiences convey? I feel they convey the following messages, which are not only applicable to the future ISRO programmes but also for various national Missions for development.

- The programmes have been driven by the vision of the founder Dr. Vikram Sarabhai that we must be second to none in bringing the benefits of space technology to the common man.
- Space vision is supreme for the ISRO teams. Whenever the vision is supreme for the Organization, the Organization succeeds.
- The programmes have been given national support cutting across political lines.
- ISRO has been continuously setting high performance standards on its own and taking responsibility to meet them and exceed them. Transparent review culture is inherent to this.
- ISRO has realized that partnership with industries and academic institutions is the only way complex programmes can be run.
- Risk taking and failures are part of innovative challenges and the Organization have to build resilient methods to prevent failures, but not dither to take up challenges.
- The missions and programmes have been enabled and have created creative leaders in number. Who is a Creative Leader?

For success in all missions, we need Creative Leaders. Creative Leadership means exercising the Vision to change the traditional role from the commander to the coach, manager to mender, from Director to delegator and from one who demands respect to one who facilitate, self respect. For a prosperous and developed India the important thrust will be on the growth in the number of creative



Creating history: Launching of the First full text online digital archives of Doctoral Theses in India



From the interaction session with APJ

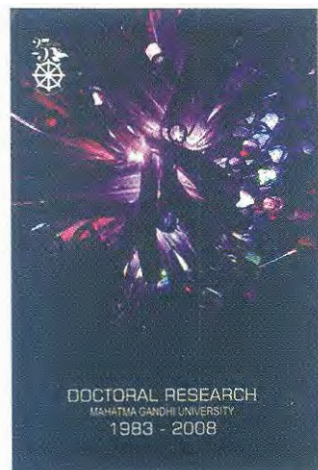


Former Indian President releasing the *Bibliometric Analysis of the Doctoral Theses approved by M.G. University for 25 years*

leaders in every laboratory institution, every industry and finally every organization. The experience of ISRO and other Mission more organizations indeed provide valuable information on generating creative leaders.

Being with the members of Mahatma Gandhi University, let me share with you some of my thoughts on evolution of Vision for the nation, setting targets for ambience of nation in 2020 and integrated actions for meeting the vision and Missions.

Let me first share with you my unique experience in mid 1990s on formulation of India Vision 2020 strategies.



Evolution of India Vision 2020

I was given the task of chairing the Technology Information, Forecasting and Assessment Council (TIFAC) . I recollect that in the first meeting of the Council itself, we took a decision that TIFAC must evolve a plan, how India can be transformed into an economically developed nation by the year 2020. When the suggestion was mooted, everybody was wondering, how we can evolve such a long-term vision under the then prevailing economic and social conditions of the country. That was the time (1991); the then Prime Minister had announced the economic liberalization and growth measures for the Indian economy and its impact had started being felt.

Inspite of this, the Council with many young members jumped into the idea and we discussed for one full day on how we can translate the thoughts into action. At a time, when the economy was growing at around 5 – 6% p.a. in GDP we had to envisage a growth rate of at least 10% p.a. consistently for 10 years for realizing the development vision of billion democratic people of multi lingual, multi religious, and multi cultural characteristics. This really ignited the minds of all of us in the Council. We debated and arrived at 17 task teams with over 500 members who had consultations with over 5000 people in various sectors of the economy and the society. Committees worked for over two years resulting in 25 reports, which we presented to the then Prime Minister of India on 2 August 1996. Transforming India into a developed nation implies that every citizen of the country lives well above the poverty line, their education and health is of a high standard, national security assured and core-competence in certain major areas enabled production of quality goods competitively including for exports, bringing all-round prosperity for the countrymen. This event led to the birth of the book “India 2020: a Vision for the New Millennium”. Based on various inputs, the government announced in Parliament the vision statement that India will become a developed nation by 2020. such a statement is very rare, since every government is elected only for a period of five years and thinking of over 20 years time frame by the Parliament and the government is a fresh breeze.

With this background, what is our ambience in 2020?

Ambience in 2020

We expect the people below poverty line to come to zero and our literacy must be nearly 100%. Human Development Index of India will be around 50. Every Indian will have either a University degree or quality training with employable vocational skill. 540 million youth will be equipped with skill and knowledge for world needs. India would get 10% of the world trade from the present 1.5%. India has already become a platform for multinational companies with Indian human resource for generating global innovation and R&D. We are transforming our R&D institutions as incubator for global innovation. We are determined to establish a world knowledge platform, which will be able to synergize the core competence of multiple nations for addressing and solving pressing societal problems. There is resurgence in our interests towards science and we are creating an environment to induce the younger generation to work on problems relevant to the sustainable prosperity of one billion people of multi-religion, multi-lingual, multi-cultural characteristics which will be a trend setter for the whole world to follow. E- governance would be in position for all G2G and G2C transactions making the governance system transparent and corruption free. Tele density will reach over 70 %. All our villages will be electrified and water shortage will be managed with proper water conservation recycling, harvesting, storage and distribution system. Sanitary facility will reach every home. We will be using more of renewable energy and adding less to the pollution. Through venture capital system and entrepreneurial training both in schools and colleges, we will have more enterprises leading to large number of employment generators rather than employment seekers. A pro-active health care system in place will provide quality healthcare to all the people of the country including those living in remote areas at an affordable cost through innovative schemes such as Yeshasvini Health Insurance scheme being practiced in the state of Karnataka. All the students will have an opportunity to take up the courses of their choice in higher education for the reasons number of advanced higher education institutions is being established and the capacities of existing institutions have been enhanced. With our experience in the Information Technology, communication systems, automobile technology, consumer durables, micro credits to self- help groups and electronic voting systems innovations which have turned out to be unique successful innovative business models , we are proceeding to enlarge the scope to reach all parts of the country through a sustainable process by delivering products and services by creating awareness among consumers, making it accessible to all, producing at a most affordable cost and ensuring just-in time availability at the right place. This will provide entrepreneurial and employment opportunity to the 540 million youth of the nation. Of course, we have to work ceaselessly using creativity and innovation for achieving the goals of these missions.





Integrated Action for Developed India

For the mission of transforming India into a developed nation, we have identified five areas where India has a core competence for integrated action: (1) Agriculture and Food processing, (2) Education & Health Care, (3) Information and communication Technology, (4) Infra Structure: Reliable and Quality Electric power, Surface transport and infra structure for all parts of the country and (5) Self-Reliance in critical technologies. These five areas are closely inter-related and if progressed in a coordinated way, will lead to food, economic and national security. During my visits to the different parts of the country and during my discussions with many citizens, the results of such integrated efforts have started becoming visible. One of the major missions is the development of infrastructure for bringing rural prosperity. This is through Provision of Urban Amenities in Rural Areas (PURA) involving creation of three connectivity namely, physical, electronic, knowledge leading to economic connectivity.

Friends, I personally feel that the connotation of sensible investment for development goes beyond the normal business perspective. Innovative processes have to be established to attain the goal of what Plato said 2400 years ago.

“Our aim in founding the State was not disproportionate happiness of any one class, but the greatest happiness of the whole.”

“The important elements that constitute a nation are: being this is free; wealthy; high productivity; harmonious living and strong defence”. We have to find how we can provide all these elements to the citizens of the nation on an equitable basis for happiness for all.

Dear friends, now I will focus on typical important mission such as PURA that is going to change the present economic condition of the nation.

PURA Mission

One major aspect of development is the mission for bringing rural prosperity. This is through Provision of Urban Amenities in Rural Areas(PURA) through creation of three connectivity namely physical,

electronic, knowledge leading to economic connectivity. The number of PURA for the whole country is estimated to be 7000 covering 600000 villages where 700 million people live. This will need an investment of around 175 billion dollars. Government is planning to implement to PURA's per district across 600 districts in the nation. There are a number of operational PURA in the country initiated by many educational, health care institutions, industry and NGOs.

This programme has social, research and technological content with substantial amount of opportunities for techno managerial experts. Enterprises and educational



Role model for the nation: Handing over of the key of the 100th house constructed by the National Service Scheme through social participation. 165 houses have been built by the NSS volunteers for the homeless costing Rs. 2.25 crores - a befitting fete in the silver jubilee year.

institutions can carve out their own niche areas and prepare themselves for providing quality techno-managerial support, which will enable execution of the economic programmes in time and at internationally competitive costs.

Conclusion

I have seen three dreams, which have taken shape as vision, mission and realization. Space programme of ISRO, AGNI programme of Defence Research and Development Organization and PURA becoming the National Mission. Of course, these three programmes succeeded in the midst of many challenges and problems,

I have worked in all these three areas. I want to convey to you what I have learnt on leadership from these three programmes.

(All the audience repeated the statements read out by Dr. APJ Abdul Kalam in tandem)

- a. Leader must have a vision.
- b. Leader must have passion to realize the vision. Leader must be able to travel into an unexplored path.
- d. Leader must know how to manage a success and failure.
- e. Leader must have courage, to take decisions.
- f. Leader should have nobility in management.
- g. Leader should be transparent in every action.
- h. Leader must work with integrity and succeed with integrity

For a sustainable growth of any organization, the important thrust will be on the generation of a number of creative leaders through nurturing the talent, and promoting innovation in every sector and R&D leading to patents. Emergence of such leaders particularly will facilitate global competitiveness and help in transforming any nation as a knowledge society. With these words, I launch the Open Access Digital Archives of Mahatma Gandhi University, release the book "Doctoral Research" and hand over the key of the 101 houses constructed by the National Service Scheme to the beneficiary.

My greetings and best wishes to all the members of the Mahatma Gandhi University for success in their mission of generating quality human resources needed for national development.

May God bless you.

