

Kalam's 10-point vision for a competitive India

Inaugurating the Confederation of Indian Industry's Partnership Summit 2006 in Kolkata on Tuesday January 17, President APJ Abdul Kalam emphasised the need for 'spiritual connectivity' in the 'dynamics of leadership.'

The President said that the country's primary challenge was to uplift the 260 million poor in India and remove poverty by 2020. He said that this could be done through a network of connectivities encompassing a knowledge grid, a healthcare grid, e-governance grid and the knowledge grid.

He said the focus should be on integrating the entire country economically as it transforms itself into a knowledge society.

We reproduce the President's speech at the CII Summit below:

"I am indeed very happy to participate in the inauguration of Partnership Summit 2006 with the theme 'Shaping the growth: Nurturing development.' My greetings to CII, who has organised this meet consecutively with different themes for the development of the nation.

I also greet the political leaders, industry captains, development planners and other distinguished guests. My special greetings to international delegates for participating and contributing in this important international meet.

I was thinking, what thoughts I can share with you on this occasion. I have selected the topic 'Dynamics of Leadership' that will present two important systems of national development and will lead to rural development through PURA (Providing Urban amenities in Rural Areas) system and national electronic grid connectivity.

Law of development

Last two years, I was studying the development patterns and the dynamics of connectivity between nations, especially in trade and business. As you all know the world has a few developed countries and many developing countries. What is the dynamics between them and what connects them?

Developed countries have to market their products in a competitive way to different countries to remain a developed country. The developing country, to transform into a developed country, has to market its products to other countries in a competitive way. Competitiveness is the common driving factors between the two types of nations.

Competitiveness has three dimensions:

Quality of the product; Cost-effectiveness; and Product is in the market

just-in-time. Indeed this dynamics of competitiveness in marketing of products by developing and developed countries is the law of development. There is a relationship between the core competence and the competitiveness of the country. Such a law applies to individual companies as well.

Ambience in the nation

In the Indian history, very rarely our nation has come across such a situation, all at a time: an ascending economic trajectory, continuously rising foreign exchange reserves, reduced rate of inflation, global recognition of the technological competence, energy of 540 million youth, umbilical connectivities of 20 million people of Indian origin in various parts of the planet, and the interest shown by many developed countries to invest in our engineers and scientists including setting up of new R&D centers.

The distinction between the public and the private sectors and the illusory primacy of one over the other is vanishing. India, as the largest democracy in the world, has a reputation for its democracy and for providing leadership for the one billion people with multi-cultural, multi-language and multi-religious backgrounds.

And our technological competence and value systems with civilisational heritage too are highly respected. Also, FIIs (foreign institutional investors) find investing in India attractive. Indians are also investing in abroad and setting up new business ventures.

As per the report titled From the Ganges to the Thames, which states that the Indian foreign direct investment in Britain is second only to that of the United States and Indian FDI project in Europe has increased from just 5 to 119 during the period 1997 to 2004.

The government is also committed to economic development by ensuring growth rate of 7% to 8% annually, enhancing the welfare of the farmers and workers and unleashing the creativity of the entrepreneurs, business persons, scientists, engineers and other productive forces of the society.

Can we expect anything better than this for increasing the momentum of our development missions and economic growth? Let us translate this great opportunity for transforming India into a developed nation before 2020.

This calls for the agriculture, manufacturing and service sectors becoming globally competitive leading to economically competitive. Then a competitive profile will emerge that will create more opportunities to the corporate sectors working in India.

Enabling environment has also been created by the government through the

sanctioning of Bharat Nirman programme -- with a commitment of Rs 1,74,000 crore (Rs 1,740 billion) allocation in 4 years, enhancement of Agriculture credit from Rs 92,000 crore (Rs 920 billion) to Rs 200,000 crore (Rs 2,000 billion), sanctioning of 100 days' guaranteed and productive employment programme in 200 backward districts and annual allocation of Rs 30,000 crore (Rs 300 billion) for rural development programme.

#### Profile of a globally competitive nation

Global competitiveness for any nation is indeed a big challenge. For achieving such a competitive edge for a nation, it is essential to have a vision. I would like to share with you my visualisation of such a nation.

- A nation where the rural and urban divide has reduced to a thin line.
- A nation where there is an equitable distribution and access to energy and quality water.
- A nation where agriculture, industry and service sector work together in symphony, absorbing technology thereby resulting in sustained wealth-generation leading to greater high value employment opportunities.
- A nation where education is not denied to any meritorious candidates because of societal or economic discrimination or because of constraints of rules.
- A nation which is the best destination for the most talented scholars, scientists, and investors from all over the world.
- A nation where the best of healthcare is available to all and the communicable diseases like AIDS/TB, water and vector borne diseases and other stress diseases, cardiac diseases, cancer and diabetes are brought down.
- A nation where the governance uses the best of the technologies to be responsive, transparent, fully connected in a high bandwidth e-governance grid, easily accessible and also simple in rules, thereby corruption free.
- A nation where poverty has been totally eradicated, illiteracy removed and crimes against women are absent and none in the society feels unalienated.
- A nation that is prosperous, healthy, secure, peaceful and happy and continues with a sustainable growth path.
- A nation that is one of the best places to live in on the earth and brings smiles on the one billion-plus faces

How the nations can realise the specified goals? I will give an example for our nation. Since India has a population of billion people, it represents 1/6th of the population of our planet. The ideas I am going to present may also be relevant and applicable to many developing countries, which are aiming to shape their growth and nurturing their development in an environment of peace and harmony with other nations.

I would like to invite all countries and investors to participate with us in the development process for mutual benefit. As far as Indian companies, they can seek partnership with civil society in India to accomplish these projects and also venture out in other countries helping them to transform themselves.

India's national missions: The challenges

India's current population is about one billion people. We are going through a major challenge of uplifting of 260 million people who are below the poverty line and also to give better life for many millions who are on the border line of poverty or just above the poverty line.

They need a decent habitat, they need work with reasonable income, they need food, they need speedy access to health care, and they need education and finally they need a good life and hope for a better future.

Our GDP is growing at more than 7% per annum on an average. Whereas, the economists suggest that to uplift the people below the poverty line, our economy has to grow at the rate of 10% per annum consistently, for over a decade.

Integrated action: To meet the need of one billion people, we have the mission of transforming India into a developed nation. We have identified five areas where India has a core competence for integrated action:

- Agriculture and food processing;
- Reliable and quality electric power, surface transport and infrastructure for all parts of the country;
- Education and healthcare;
- Information and communication technology (ICT); and
- Strategic sectors.

These five areas are closely inter-related and if properly implemented, will lead to food, economic and national security of our country. In each of these areas, there is a wealth of opportunities awaiting nations who would like to work together for mutual benefits in a win-win situation.

Each of these missions comprise many projects, investments, innovations, marketing and therefore many partnerships are possible. Those who seek out will find a new opportunity. Let us remember the adage, 'early bird catches the worm.'

Engines for growth: Emphasis would be on full utilisation of natural and human resources of the nation to meet the demands of the modern society. We should also remember that about 50% of our population is young people with aspirations for better living.

Value addition in agriculture, manufacturing and service sectors, building the national core competence and technologies will lead to additional high-income employment potential. The engines for growth will be accelerated by launching of the five national missions, which are common to all of us wherever we are on planet earth.

The totality of these five missions will enable achievement of 10% GDP growth rate per annum. It is possible to do so with ecological and economic sustainability. It is not the mission of governments. It is a collective efforts of big and small businesses, science and technology and academic institutions, foreign investors, and many others who have confidence about India.

With these aspects in view, we have already laid down the road map. The priority for the government is to convert the road map into various missions. It is to be done in a decentralized manner allowing a greater role for private enterprise and local initiatives. While converting the vision into different missions we seem to have many thoughts and variety of routes to reach the goal.

This is where there is a need to have coherent thinking among all the members of the society. All of us have to think that the nation is greater than an individual or an organisation.

Now I would like to discuss the economic growth and societal transformation.

#### Societal transformation

Societal transformation and economic growth are interlinked. Knowledge societies enrich information society through innovation. Information society enriches agriculture and manufacturing through value addition. The whole purpose of education in a country is to develop and enhance the potential of our human resource and progressively transform it into a knowledge society.

The knowledge society will be a society producing products and services that are rich in both explicit and tacit knowledge, thus creating value added products. The real capital of this knowledge society will be its knowledge components.

The society will be highly networked to create knowledge intensive environment along with enabling process to efficiently create, share, use and protect knowledge. Our education system should re-align itself at the earliest to meet the needs of the present day challenges and be fully geared to participate in the societal transformation through innovation, which is the key to competitiveness.

It should also develop a global outlook. India has many strengths. It has to reach out and make our individuals and institutions capable of succeeding in a competitive world.

Changing patterns of society:

When the world was moving from the industrial to information and knowledge era, we witnessed a changing pattern in the sectoral share of GDP and the number of people employed in each sector.

The sectoral share of gross domestic product percentage has undergone a considerable change. Contribution of agriculture to India's GDP has reduced from 39% to 22% during the period 1979 to 2004. During the same period contribution of manufacturing sector has moved from 24% to 27% and whereas the contribution from the services sector has increased from 37% to 51%.

There has been considerable change in the employment pattern also. The percentage of people employed in agriculture has come down from 64% to 54%.

Simultaneously, the percentage of people employed in manufacturing has gone up from 15% to 19% and in the service sector from 20% to 27%. This trend has to continue and by 2020 our employment pattern should aim at 44% in agriculture, 21% in manufacturing and 35% in service sectors.

The displacement of 10% people from agriculture sector has to be facilitated through skill enabling for undertaking value added tasks in the rural enterprises so that migration to urban area is reduced. Instead of the person from the rural areas going to urban towns in search of jobs in manufacturing and services sectors, PURA (Providing Urban Amenities in Rural Areas) facilitates creation of employment in the rural areas itself.

PURA achieves this by providing physical, electronic and knowledge connectivities to a cluster of villages thereby leading to their economic connectivity and prosperity. Knowledge creation and knowledge utilisation is the key to the success of a PURA programme. PURA programme can generate many business opportunities. This model is applicable to many countries.

Providing Urban Amenities in Rural Areas (PURA):

The number of PURA units required for the whole country is estimated to be 7,000. This envisages integrated connectivities to bring prosperity to rural India. These are: physical connectivity of the village clusters through quality roads and transport; electronic connectivity through telecommunication with high bandwidth fiber optic cables reaching the rural areas from urban cities and through Internet kiosks; and knowledge connectivity through education, vocational training for farmers, artisans and craftsmen and entrepreneurship programmes.

These three connectivities will lead to economic connectivity through starting of enterprises with the help of banks, micro credits and marketing of the products.

The PURA is required to be run by enlightened citizens and people capable of giving moral as well as business leadership. There is profit for partners but there is also a human face.

Both are built in the business plan itself. This is where the concept of spiritual connectivity is seen as the foundation, which bonds all the other four connectivities.

Each PURA cluster will connect about 20 villages depending upon the region and population and will cost about Rs 100 crore (Rs 1 billion). After initial short-term employment during construction etc., we have to plan for initiating actions for providing regular employment and self-employment opportunities in nationally competitive small enterprises in agro processing, manufacturing and services sectors for about 3,000 people.

If the industrial/business parks are marketed well, they can generate employment opportunities in support sector for about 10,000 people in that cluster. This will provide sustainable economy for the rural sector. In this national mission, bankers can promote entrepreneurship in the rural areas. This will lead to the removal of urban-rural divide. This experience can become a model for other countries to follow.

PURA as an enterprise: A large number of banks have entrepreneurial development programmes. Banks have also been funding small scale industries of different types in various regions. The small-scale industrialist is a promising candidate for becoming the chief executive for managing the PURA complexes in an integrated way.

PURA enterprises can also undertake management of schools, health care units, vocational training centres, chilling plants, silos and building a market, banking system and the regional business or industrial units. A new mission mode management style has to emerge for PURA enterprises.

It should not be looking for protective legislations to support them. Rather they should be efficient to compete with others. This new PURA enterprise needs partnership from the bank, from the government and also from the private entrepreneurs. Banks can train the entrepreneur for managing the PURA in their training centres and also provide them loans for creating and running PURAs as a business proposition.

Think of public-private-civil society partnerships in these efforts. Now I would like to describe the societal grid which will give the connectivity

for the billion people.

#### Connectivity model

The core of the connectivity model is Electronic Connectivity for prosperity of one billion people is the partnership between governmental and multiple institutions in the public and private domains. The strength of this partnership for collaborative growth and economic prosperity is facilitated by free flow of knowledge and information in a seamless manner cutting across levels and boundaries embracing all walks of life in the three sectors of the economy such as agriculture, manufacturing and services sector.

In this model, four grids bring about the inter-connectivity between these three sectors of the economy: namely knowledge grid, health grid, e-governance grid and the PURA (7,000 PURA) grid. Each grid is a system of multiple portals. The aim is to maximize gross domestic production and productivity of the land and people through maximizing the performance of each sector, synergised by the system of inter and intra-sectoral electronic connectivity to serve one billion people.

This will bring prosperity to 700 million people in the rural areas and 300 million plus people in the urban areas. In the process, it will ensure that the lives of 260 million people will be uplifted from below the poverty line.

#### Societal grid

To maximise the synergy between the various components of education, healthcare, e-governance, rural development we need to establish connectivities among them. These connectivities will certainly bring seamless access and information flow among the various domains leading to maximisation of GDP and productivity; hence, there is need for establishing the grids, namely knowledge grid, healthcare grid, e-governance grid and the PURA knowledge grid.

This interconnecting grid will be known as societal grid. Knowledge sharing, knowledge utilisation and knowledge re-use is very vital by all constituents of the society for promoting non-linear growth. The societal grid consists of:

#### Knowledge grid:

Interconnecting universities with socio-economic institutions, industries and R&D organisations.

#### Healthcare grid:

Interconnecting the healthcare institutions of the government, corporate and superspeciality hospitals. Research institutions, educational institutions



and ultimately, pharma R&D institutions.

E-governance grid:

Interconnecting the central government and state governments and district and block level offices for G2G and G2C connectivity.

PURA knowledge grid:

Connecting the PURA nodal centers with the village knowledge centres and domain service providers. Since this is the backbone for rural development, all other grids will infuse the knowledge into this grid for sustainable development, healthcare and good governance.

For example, five of the Periyar PURA villages have now connected using Wi-Max connectivity. Integrated village knowledge centers will act as an inter-connected delivery mechanism for tele-education, tele-medicine and e-governance services apart from individual access by the people, within and between the village knowledge centres through the PURA grid.

We have, so far discussed all the four connectivities required for the societal transformation. These connectivities can form the basis for providing platform for societal transformation leading to empowerment. This will blossom with the enabling environment of trust and confidence in the overall system.

Pan African e-Network

While we are discussing the topic 'Shaping the Growth: Nurturing Development,' I would like to recall my address to the Pan African Parliament on September 16, 2004, at Johannesburg, South African which was attended by heads of 53 member countries of the African unit.

There I announced the willingness of Government of India to provide seamless and integrated satellite, fiber optics and wireless network connecting 53 African countries. This will provide three connectivities:

Heads of the State Network for e-governance; Tele-education network for higher education, skill enhancement and capacity building; and Tele-medicine for providing health care and super specialty medicare. The government of India has already commenced the project in partnership with African Union and it will be completed by early 2007.

Now I would like to discuss with you another international partnership model for high-tech product development for world market.

Design and develop products for world market

In order to achieve global competitiveness, the product must be world-class with high quality, high cost-effectiveness and must be available in time

within the shelf life of the product. I would like to share a unique experience of design, development, production and marketing of a missile system -- Brahmos, an Indo-Russian joint venture.

What we have achieved through this venture is the development and realisation of a world-class product using the synergy of technological competence and consortium of industries of partner countries. In addition, the product being internationally competitive, it is able to service a large market with availability in time and state of the art performance at reduced cost per unit.

This will put India, a global defence exporter. Moreover, with minimum incremental investment the product has been developed and led to production and induction, at a relatively short time frame, well ahead of prescribed schedule. This has enabled early entry of the product into the world market well before any competitor could emerge.

I would like the civil industries to emulate this example and design and develop commercial products for international markets. This will lead to a win-win situation for the partner industries and enable availability of product at a low cost for the customer leading to nation's wealth generation.

Our experiences in mission mode programmes

I remember, during the 1960s India was in a state of ship to mouth existence in food. If the American ships did not bring wheat, there will be a famine in India. But there were two visionaries who worked together with the farming community and brought the first green revolution.

They are the political thinker C Subramaniam and the agriculture scientist Dr M S Swaminathan.

Today, we produce 200 million tonne of food grains, which is not only sufficient for us but also available for export. Around the same time, Varghese Kurien masterminded the white revolution, which resulted in placing India at the top of the world map of milk producers.

In India much innovation and creative thinking took place at various phases of our development. Dr Vikram Sarabhai in the 1960s said that India should design and develop large satellite launch vehicle and put communication satellite and remote sensing satellite in geo-synchronous orbit and polar orbit respectively.

This vision statement ignited hundred of scientists, technologists and thousands of technicians. Today India is capable of building any type of satellite launch vehicle and satellite.

Similarly, the vision of nuclear programme led to establishing series of nuclear power plants adding nearly 4,000-megawatt power to our electrical grid of 100,000 megawatt. There is a proposal to increase the nuclear power to 20,000 megawatt by 2020.

In the 80s, India had a very low base in information technology. Some young entrepreneurs with their innovative and creative thoughts and within the difficult boundary conditions of India's rules and regulations, demonstrated how IT enabled services can fetch export revenue.

Subsequently, even the government had to bring out innovative and liberalised IT policies. Now, our young IT entrepreneurs are making export revenue of \$18 billion. This is expected to grow to more than \$100 billion by the year 2020.

Similarly, the pharma industries are making a positive impact in the Indian economy. Wherever the government works in mission mode, the programme is successful.

#### Directory of Partnerships

Two decades ago, there has not been many international partnerships in India. Therefore, one could keep track of all the partnerships entered into by various business houses. In the recent past there is a trend of increased partnerships by India with many countries.

However, we do not have a database on all the partnerships which are presently operational in the country. Since CII has been conducting the Partnership Summit for the last twelve years, I would recommend creation of a directory of existing partnerships, which commenced from the year 2000 and publish this as a partnership directory giving details of the country, scope, progressive financial performance, brand image and the benefits accrued to the partner countries.

This information placed in the web portal can be updated very frequently. This will enable propagation of real meaning of globalization. In addition, this will stimulate more partnerships and draw our youth into partnership operations.

#### Conclusion

In India, we have seen whenever a vision is generated, missions are created and mission mode operations have succeeded in governmental setup like space programme, atomic energy programme, agriculture programme, milk programme and defence research programme.

Also in the private sectors, we have instances of empowered management

systems particularly in Pharma and IT Sectors. However, it can be seen that there is a large funding for rural development is emerging through Bharat Nirman Programme encompassing multi-ministries.

There is a big challenge in evolving a management structure and to enable convergence of multiple ministries in the state and central Governments. With the background of successful mission mode operations in certain government programmes and the distinction between public and private sector and the illusory primacy of one over the other is vanishing, there is a possibility of evolving a management structure.

What is needed is a creative leader. Who is the creative leader? Creative leadership means exercising the vision to change the traditional role from the commander to the coach, manager to mentor, from director to delegator and from one who demands respect to one who facilitates self-respect.

I am sure creative leadership spearheads all the institutions and the future aspiring institutions. For a prosperous and developed India or any other country, the important thrust will be on the growth in the number of creative leaders and innovative organisations that can create wealth through dedicated management system.

I inaugurate the Partnership Summit 2006 and my best wishes to all the participants for success in their mission of shaping growth and nurture development of their industries, organisations and thereby their nation.

May God bless you."