Inaugural Address at the

"DELHI SUSTAINABLE DEVELOPMENT SUMMIT 2003"

Vigyan Bhavan, New Delhi, February 6, 2002

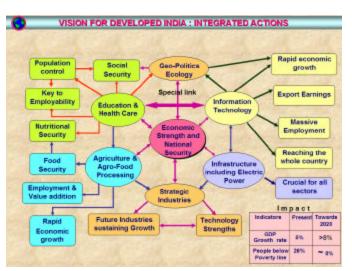
'PROSPEROUS – PEACEFUL – SAFE HUMAN HABITAT'

I am indeed delighted to inaugurate the 'Delhi Sustainable Development Summit-2003' organized by TERI, the energy and resources institute. I congratulate the organizers of this conference and also the participants and speakers from various parts of India and abroad. The topics that are covered in this "Delhi Sustainable Development Summit" are very important and progressive as they include, the societal development with environmental needs as partners, in an integrated way. I was asking myself, what will be the components of such a mission? I have selected the topic for today's discussion as "PROSPEROUS – PEACEFUL – SAFE HUMAN HABITAT"

When the nation is in development mode, the most important need of the country is an integrated developmental plan and empowered management structures in the areas of Education and Healthcare, Agriculture and Food Processing, Information and

Dr. APJ Abdul Kalam www.presidentofindia.nic.in

Communication Technology, Strategic Sectors, Infrastructure Industries and Geo-politics & Ecology. In fact, Geopolitics & Ecology has to be a development component in the five areas specified. Our education system should aim to generate



That enlightened citizens. means, a combination of learning and value systems. The second important component is the poverty eradication by attaining economic prosperity resulting in high employment potential.

these elements are addressed in the developmental plan, peace of the individual, thereby peace in the family, peace of the nation and thereby peace of our planet earth will emerge. This can be achieved by aligning the human thinking in harmony with the dynamics of the universe.

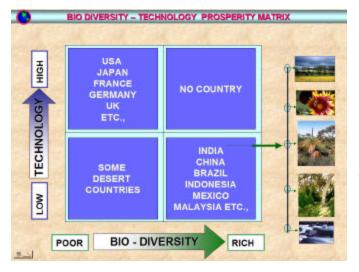
National Development

Our Prime Minister, in his Independence Day address, has emphasized the national vision of achieving the status of a 'Developed India'. Our nation has entered into 10th Five Year Plan with a focus of all round development and to achieve a goal of increasing 8% GDP growth rate. The 10th Plan period is a very vital period as it has to lay foundation for this journey of transformation by initiating mission projects that will bring economic strength to the nation.

Bio-technology for wealth generation

I would like to share one of my experiences while I was in Anna University, Chennai that resulted in getting a patent for a new molecule discovered from a herb as an anti cancer drug. This came out of the fusion of two great minds, one was a bio- technologist and the other was a traditional siddha medical practitioner. The traditional system of medicine like Ayurveda, Sidda etc have advocated and practiced preventive and curative medicinal recipes specific to individuals. The body, mind, food and environment were looked at holistically to suggest a preventive or curative approach to health. New technologies as evidenced by human genome sequencing, proteomics, ultra high throughput chemogenomics, screening is revolutionizing drug discovery. Medicinal plants offer enormous scope for development of drugs. We need to create database of traditional medicinal plants for specific bioactivity and lead for development of new drugs. North Eastern States of India have got tremendous opportunities for herbal farming and research.

Bio Diversity - Technology Prosperity Matrix



One of the core competences of India is Bio Diversity. Bio Diversity and technology combined will yield value added products. What is needed is, high productivity in agriculture, biodiversity material and

technology integrated. There are some regions in desert nations where biodiversity and tech are poor. Today no country is having rich bio-diversity and high technology together. Therefore, the challenge is in Integration of technological best and the abundant biodiversity available with us.

Technology is the most nonlinear tool that can effect the fundamental changes in the ground rules of economic competitiveness. Science is linked to technology through applications. Technology is linked to economy and environment through manufacturing. Economy and environment links technology to the society. So, there is an integrated relationship between science, technology, environment, manufacturing and the society.

High Productivity in Agriculture in the enhanced environment

Technology Research Institutions have to play a very important role by contributing to the second green revolution which will enable India to become a developed nation in the agricultural sector. The production of cereals needs to increase from the present 200 million tonnes to 300 million tonnes. Similarly, in the case of fruits and vegetables the production needs to increase. But the requirement of land for the increasing population as well as for much greater forestation and environmental preservation activities would demand that the present 170 million hectares of arable land will have to be brought down to 100 million hectares by 2020. All our agricultural scientists and technologists have to work in this direction of doubling the productivity of the available land with lesser area available for cultivation. The type of technologies needed would be in biotechnology, proper training to the farmers, additional modern equipments for preservation and storage etc.

I wanted to share with you another concern. Wherever there are people below poverty line there is also problem for the availability of water. It costs energy and money to bring water for specialised agriculture to such dry areas. What are the

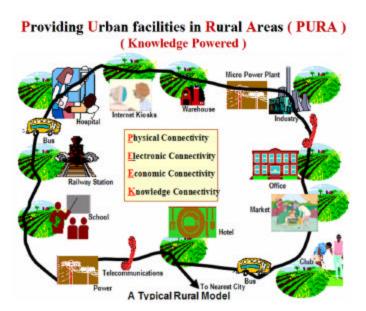
agricultural technologies, water conservation methodologies that can help lift the people who are below the poverty line. I feel, these are the aspects that agricultural scientists should address. Solutions may be just beyond agriculture alone spanning to animal husbandry, poultry, agro processing and other related activities like medicinal plants – "kathalai".

Networking of Rivers

Networking of Rivers is a vital project to manage the flood drought conditions that repeat in some part of our country. To offset this regional hydro-imbalance, the need of the hour is to have a water mission which will enable widespread availability of water without compromising environmental safety or unleashing mindless appropriation of earth's bounty. A prime ingredient of this task would be imparting the requisite thrust to the networking of our river systems to transfer water from our surplus basins to pockets of deficit. This project is in the active consideration and a task team has been formed by the Government. During the study of such mega projects, it is quite natural that there will be tremendous extreme and different views It is our responsibility to ensure that on various issues. environmental conservation activities become economically profitable. The river networking project should have it in its agenda the action plan for increasing the forestation by certain

percentage in the regions of the proposed new canals and storage basins.

Knowledge Powered PURA(Providing Urban amenities in Rural Areas)



More than two third of our billion population live in the rural parts of India. The vision of transformation to a 'developed' India can only be realized if we launch a mega mission

for empowering the rural people. Rural development has to be made as a well balanced model both economically and environmentally. My visits to the rural parts of India have confirmed that the problem of rural India depends on the connectivity. The connectivity that I refer to would include four components. Physical connectivity by providing roads in rural connectivity by electronic areas. providing reliable network and knowledge connectivity by communication establishing more professional institutions and vocational training centers. Schools with best infrastructure and teachers who love teaching, primary health centres, silos for storage of products and

markets for promoting products, cottage industries could be made economically viable if they have to be established for such a cluster of village complexes. All this connectivity need to be done in an integrated way so that **economic connectivity** will emerge leading to self sufficiency. Such Model of establishing a circular connectivity among the rural village complexes will accelerate rural development process by empowerment. I am sure that removal of poverty will call for Providing Urban amenities in Rural Areas (PURA). The model envisaged is a habitat design that would improve the quality of life in rural places and make special suggestions to remove urban congestion also. Instead of village population coming to urban area, the reverse phenomenon has to How is it possible? Knowledge powered village take place. complexes have to be generated in good numbers in every State. That means, 20-30 villages linked through a circular road (10x6 kms) with highways bringing physical connectivity. knowledge powered village complex will also have markets attracting urban business. IT enabled service industries can flourish in rural complexes as we can get land and building at very lower rates. The best technology and processes in the world with right skilled and motivated people will have to be deployed to realize such mega projects.

Conclusion

Environmental needs and concerns have to get integrated in the national development areas such as bio-diversity & drug development, agriculture food production, integrated knowledge powered rural development, networking of rivers. Any nation that has a vision to give to its people prosperous peaceful and safe society have to empower the people. When the child is empowered by the parents, at various phases of growth, the child gets transformed into a responsible citizen. When the teacher is empowered with knowledge and experience, good young human beings with value systems take shape. When individual or a team is empowered with technology, transformation to higher potential for achievement is assured. When the leader of any institution empowers his or her people, leaders are born who can change the nation in multiple areas. When women are empowered, society with stability gets assured. When the political leaders of the nation empower the people through visionary policies, the prosperity of the nation is certain. When religion transforms into a spiritual force the people become enlightened citizens with value system.

I have great pleasure in declaring the Delhi Sustainable Development Summit open. My greetings to you.