



Sustainable Development at Sustainable Cost Dhiru Shah's Talk

Namaste

On behalf of Global Indian Business Council (GIBC), USA, I would like to express our thanks and gratitude to all the organizers, especially IIT Madras for organizing the 1st Abdul Kalam Conference on 'Sustainable development at Sustainable Cost'. It is the right time to have such a conference when India is marching rapidly towards achieving the status of the 5th largest GDP in the world by 2024 and then aim to become the 3rd largest economy by 2030.

While the government will remain the major player in development of India, we, individuals, entrepreneurs, scientists, and NGOs, also have a big supporting role to play. Hopefully, this conference will lay down a roadmap with workable short term and long-term solutions and action plans for sustainable development using modern technology and scientific knowledge without sacrificing our ancient traditions, culture and ecological values.

With its religious, regional and linguistic diversity and large population combined with poverty and the current political system, India's problems are more complex and mind boggling than those of other countries and therefore it requires a multi-pronged approach to mitigate them.

We all know that even today 67% of people in India live in villages and most of them rely for employment and living on agriculture. The available cultivable land just cannot sustain such large population. As a result, there has been a steady migration of village folks to nearby towns and cities resulting in overcrowding, slums, congestion, crime and various social and ecological problems. Can we reduce, if not completely stop, this migration process? I believe that there is no other alternative but to turn Indian villages into socially, economically and spiritually livable places which will provide basic amenities and comforts of the modern day and at the same time keep them connected with the outside world by using our ancient holistic platform.

Providing clean energy to all villagers for their day-today needs, running schools and small industrial enterprises is the first step in making villages self-sufficient. Use of solar, wind, and hydrogen-based technologies will be ideal for providing energy. Also, the tools of the evolving technologies of Internet of Things and Artificial intelligence will be needed to keep the villages connected with the outside world as well as developing e-commerce, and medical diagnosis. However, we need be aware that AI and robotic advancement may result in massive unemployment as never seen before not only in India but in almost

all countries of the world. The planners will have to prepare counter measures now to minimize this future problem.

It may be appropriate to mention here briefly our ancient India's ecological traditions. Rig Veda clearly mentions: *"Heaven is my father; my mother is this vast earth, my close kin."* It rejects any difference between the creator and the created. Our ancient seers compared the universe to 'thousand-branched tree'. Mahabharat compares the whole earth to a cow. The Harappan civilization provides the practical example of this belief reflected in their water management through extensive network of water harvesting, sacred groves, medical treatment for plants and animals. It preached respect for all living creatures instead of conquest of nature as the modern science is trying to do. Besides, the Harappan society believed in simplicity of living, being happy with little.

In my opinion, the current economic model of rapid capital-intensive industrialization and the concept of smart cities may help in the short run to achieve economic growth. But in the long run, it may lead to western type consumerism, breakdown of peaceful village life and serious social, psychological, ecological and environmental problems. No doubt that people in the West have high standard of living in their day-to-day life. But it has also resulted in breakdown of family life with more divorces, self-centered individualism, more violent crimes, neglect of elderly people, and the consequent fragmentation of the society.

Considering the current Indian scenario, I think that Agriculture will remain the backbone of the village economy for a long time to come. In the pre-British colonial period (around 1700 AD), the husbandry of India was much ahead of the rest of the world in contrast to the present day text book accounts. Besides widespread artificial irrigation, the practices of (i) crop rotation, (ii) manuring, (iii) sowing by means of the drill plough, and (iv) use of a variety of other implements were fairly widespread. The nature and quality of soils seemed to be well understood. Water harvesting was common throughout India. The decline in efficiency and productivity of agriculture, and the subsequent general economic impoverishment were the results of the British government's policy of very high land and agriculture revenue taxes and appropriating all it possibly could in the late 18th and 19th centuries. No doubt, modernization of agriculture will have to take the first priority which will include scientific water management like what Israel has done for its farming, use of organic fertilizers, selective mechanization of some farming operations which will increase the farm output not only for domestic consumption but for export to other countries. As more and more people in the world are opting for Organically grown grains as against GMO products, Organic farming should be encouraged. This will fetch higher prices as compared to grains produced with chemical fertilizers. India has the potential to become one of the largest grain exporting countries in the world if the current farming is modernized and made more productive.

Generating employment for surplus farm labor within the village community also requires research and serious thinking.

In order to make the surplus agriculture villagers not only self-sufficient in their daily needs but also become powerful engines of the nation's economic growth, I think that Micro

small and medium enterprises will have to play an important role in generating rural employment on a large scale. There are many small labor-intensive industries which can thrive in this competitive world market. There is a big export market for products manufactured in this sector. It contributes 45% of export and 25% of GDP Of India.

Instead of trying to set up highly automated manufacturing enterprises in villages which don't generate much employment, I believe that we should modernize and strengthen our existing products manufacturing which will support the surplus labor and at the same time increase India's exports. Let us look at a few employment generating products.

Khadi: One of the most labor-intensive industries is hand spun Khadi cloth and hand-woven fabric and garments. In the modern fashion world, Khadi products are not only sought after but also highly priced with high margins. The Indian government will have to move fast to make sure the 'Khadi' is not patented and trade marked by foreign entities. GOI has established India Brand Equity Foundation with promotes the 'Made in India label' in the foreign markets. A public-private initiative to promote production in villages on a larger scale is required in order to bring in more small entrepreneurs in this field. The Indian domestic market for Khadi is also growing rapidly. This will be one of the biggest village level employment generating products which is also environment friendly and less capital intensive.

Farm products—Vegetables and fruits: Today, a sizable portion of farm products in India get spoiled because of lack of refrigerated storage facilities as well as timely transportation. As more and more people in the world are turning towards eating nutritional fruits and vegetables for health reasons, the Indian domestic and international markets for the packaged food are growing at a rapid rate. Smart packaging technologies and solar powered refrigerated storage will get rid of spoilage of these products. Packing products like self-venting microwave packs and respiring trays can be used in the global fruit and vegetable marketing. Usage of small drones in delivering farms products in nearby villages and towns will also generate more employment and create a new category of small entrepreneurs at the village level.

Coir: The Indian coir industry contributes significantly to the economies of Kerala, Tamil Nadu, Andhra, Karnataka, Maharashtra, Orissa, Goa, the Andamans and Lakshadweep. It gives part time employment to about half a million people - many of them women. Besides domestic demand, there is a large export market for Coir fiber, value added products like mats, rugs etc. Currently, coir export is around Rs. 70 crores per year, which is insignificant compared to the total world demand. The challenge is to innovate production, improve product consistency and develop novel applications. Emphasis should be on developing devices/equipment/machinery through R&D to reduce drudgery and to improve productivity of coir workers. Development of improved variety of looms would help in improve the production of coir yarn spinning, coir mats, etc. In order to boost exports, the scheme of cooperative publicity in the export markets is needed. Indian coir products could be made more competitive in the world market and has a tremendous growth potential which could generate more rural employment. There are many other rural based small-scale businesses and industries including Handicrafts, carpentry and woodwork, orchards, Broadband internet provider, Jewelry etc.

Why small-scale industries and business in villages?

Starting a small industry and business in a village has its upsides. Firstly, smaller capital and lower overhead are required to start business. And secondly, it is easier to organize a business in a small place where people know each other.

How do we move forward in creating such small enterprises in rural India?

Since the economic/ social development varies from states/regions to regions, we'll need several differently business modes. However, the basic requirements will remain the same:

1. Seed capital to start a business/industry: Micro Financing by GOI has already made good progress. Public/private financing should be encouraged. Since land is easily available in rural areas, large and medium size Indian companies can be attracted to set up small manufacturing units linked to their main plants for producing tools and spare parts etc.
2. Land acquisition for starting such small industries should be made easier by the state governments and the local bureaucratic machinery.
3. The laws should be amended to make it easier to get licenses to start business. Like Gujarat's government, all states should have a One Window Licensing scheme whereby a small entrepreneur should be able to get industry/business license easily.
4. Skill development including computer/IT schools financed by government/ private sectors should be set up in all rural areas which can train rural youths in various skills including training in running a small business.
5. Although GOI has done remarkable work in country wide road building in the last few years, many villages are still not connected to the main roads which hampers movement of people and goods from villages to towns and cities. Therefore village level road development should be given a top priority by the govt.

Finally, on a philosophical note, as mentioned earlier, please understand that the West has led in material and intellectual growth but declined rapidly in emotional and spiritual well-being. Can we achieve high economic growth as well as high Happiness Index? I still remember the speech of the PM of Bhutan delivered in 2014 at Vibrant Gujarat. He said that while Bhutan welcomes foreign industries and businesses, but they have to meet our strict ecological and happiness model in order to get into the country. Today, Bhutan has the highest Happiness index in the world. Of course, we cannot compare Bhutan with India but at least an attempt must be made to strike a balanced approach.

Concept of time and space are two powerful outcomes of human consciousness and imagination.

All successful people have understood usually subconsciously, these two elements of time and space and leverage them to help achieve whatever they want.

It has however become very difficult for humans to cope with modernity where space has shrunk and where time has been compressed dramatically.

Now distances are no more a constraint with people being able to routinely circle the world in 40 hours. People and situations that never invaded our space now routinely beam vast amounts of information, much of it garbage right into our hands and in our homes and workplaces. Distance as a constraint, seems to have simply disappeared from our lives.

Time, too has become compressed, everything is moving faster and faster, events and situations impact us first and we realise only later what has happened. Everything is urgent and important. Everyone demands immediate service, response, and products. Even love and attention are expected to be provided on demand.

A humanity now changing so rapidly is experiencing great stress which is constantly increasing and most people do not know what to do. The greater the GDP (Gross Domestic Product) per capita for any economy, greater is the stress. Where people work for a living they are experiencing 'Burn-Out' and those that are living off the state such as resource rich economies possessing oil and gas, the population are experiencing 'Rust-Out'.

Wealth has come, but not well being. Associates have come but not friends, illness care has come but not health, sex has come in abundance but love seems scarce. Religions boom but spirituality seems to have withered.

Now the fastest group growing in most societies are 'Helping agencies'. Many are NGOs (Non governmental agencies) many of them functioning for profit. More and more people jumping in to take advantage of human misery. Misery caused not by material want but by material excess.

The West has led in material and intellectual growth but declined rapidly in emotional and spiritual well being. While the East possesses great spiritual well being it hungers for material prosperity. Surprisingly if one were to ask people 'How they felt?', usually the person from a less affluent or even