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"DECISION MAKING IN THE 21st CENTURY: IMPERATIVES OF AN ANALYTICAL APPROACH"

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Speaking on Environment is similar to the story of the blind men who were asked to describe an elephant. Anything they said about the elephant was true. If they said that its legs were like pillars or tree stumps it was not wrong. One can pick up any aspect of the environment, speak on it, and still be relevant, which is why the area of environment is so challenging and complex.

It is challenging because one does not see the nexus straightaway between cause and effect. The person who throws away a plastic bag does not realize that he is one among a million who is doing the same thing, and a million plastic bags on the street is a problem. (Incidentally, I amagainst banning the production of plastics !!)

It is complex, because no aspect of the environment is unimportant. Is "water pollution" more important than "air pollution"? Or does "hazardous waste management" demand greater attention than others? What about pollution of coastal waters, or disappearance of bio-diversity and green cover? Where does one start with environmental management?

This is important since no one has oodles of money to throw away, and every investment should give maximum returns. While today there is enough technical and analytical capability, the critical question is how these scientific inputs can be integrated into sound decision making that will deliver a product which will be sustainable and confer benefits on vulnerable sections of society who always seem to bear the brunt.

There is need therefore to take a holistic view of Environment and prioritize one's actions. The topic "Environment and Health" which all of you are going to discuss for the next three days has various components. There are issues concerning land use, transportation, siting of mega projects and the like. At the end of the day a clear

perception should emerge on priorities, particularly when the context is "Urban Planning and Environment Management for Human Health"

The fastest growing population is urban population in the poorest countries. While global population over the next 30 years is expected to increase at an annual rate of less than 1% (around 0.97%), urbanized population of the less developed regions will increase by 3% per annum (around 2.67%). There are almost 2 billion people living in urbanized regions of the developing world, three quarters of whom face acute poverty, inadequate, or no, housing and sanitation facilities, severe lack of drinking water, infant mortality, poor maternal and child health, and suffer the crowning misery of high rates of HIV/AIDS infection.

By 2030 the 2 billion, is expected to grow to 4 billion, in a global population close to 8 billion. The number of cities with more than 5 million inhabitants (megacities) will increase from 41, at present, to 59 by 2015. Only 1 of the expected new megacities will be located in a developed country. By 2020 India will have the largest urban population in the world.

The enormity of the problem demands focussed attention on connections between the built environment and people who live there. The built environment is that part of the physical environment made by people for people. According to Health Canada's report on Health and Environment it comprises of "buildings, spaces, and products created or at least significantly modified by people" The remainder is the natural environment. Sadly, even this has been interfered with by humans resulting in global warming!!

The joint urban planning and health perspective is essentially a health impact assessment, underpinned with environmental management to mitigate negatives of unbridled urbanization. A number of questions can be asked. For example, what would be the consequences of inadequate housing? On grounds of equity one would like to know the pattern of distribution of housing stock between sub groups of population. Among a range of possible decisions which of them would confer an enhanced quality of life to the largest number? Can this joint exercise help in evolving useful indicators to monitor progress and effectiveness of programmes and policies?

So, how can urban planners serve the needs of public health? Urban planners who are public authorities should be buttressed by strong political will that should exercise necessary restraint on the private market and thus protect the public from the worst excesses of the private sector. What this means is that there should be only that much of building stock consistent with an infrastructure that can support the development. The urban complexes should be sustainable and yield an enhanced quality of life.

Permit me to draw on the work of two individuals involved in creating urban complexes. The first is a Scotsman, named Patrick Geddes. He was recognized in his country as a pioneer of ecological town planning. The circumstances of his contact with India are not relevant for us here, but he arrived in Chennai or Madras as it was

known then, in 1914. While in India, he wrote nearly fifty town plans covering Dhaka in the east to Ahmedabad in the west and from Lahore in the north to Thanjavur in the south. In these plans his 'practical – ecological' approach can be seen through recommendations for setting aside open spaces for recreation, tree planting, protection and provision of sustainable and safe water supply. He strongly recommended preservation and maintenance of tanks and reservoirs, both as a protection against flooding and as a measure of recharging the aquifer. Acutely aware of the resource-extractive characteristics of modern cities, Geddes sought to harmonize urban living with the countryside.

The other person belonged to a much earlier period and his name is quite familiar to students of Indian history. He is none other than Mohammed-bin-Tuglak, who in his zeal to immortalize himself shifted his capital from Delhi to a place, as it transpired, had no water and the project turned out to be a fiasco. The waste of resources was of course incidental and the minor loss written off!! There was no skin off the ruler's back and as usual the poor had to pay for his folly.

These are studies in contrast but there are lessons to be learnt. While Geddes was intuitively perceptive, cautious, and made development plans that sought to integrate nature, Mohammed-bin-Tuglak, however well intentioned, was over ambitious, reckless and committed himself without proper application of mind. Neither had the benefit and assistance of modern scientific technologies, knowledge, and approaches available today for decision makers.

If proliferation of megacities is to take place in the developing world, an onerous responsibility rests on urban planners and their bosses to ensure that the lives of people who inhabit these cities, particularly those living on the margins, are not worse off as a result of the development.

The overarching goal of this joint exercise of urban planning and public health assessment is actually based on two fundamental, though understated concepts of 'equality' and 'democracy'. Equality in the sense, that all those living within the built environment irrespective of their economic condition have human rights and justifiable expectations that they will receive equal benefits from the State's policies and programmes that are designed to protect health, and conversely protection from vulnerability to ill health.

By democracy is meant more participation of the governed in the designing and implementation of schemes executed for their benefit. It is not an empty ritual of participation or mere 'tokenism'. The process should reflect a genuine attempt to involve citizens through partnership and delegated power, more so since most of these projects are implemented through public funds which ultimately are raised or paid for by the community. Honest involvement of the community can light up the dark corners of fear and misinformation that usually are the bane of sound projects, and make for easier implementation.

Such huge developments require massive funds which are usually accessed and controlled by governments. It is required and expected of decision makers in the higher echelons of power that these funds are deployed after due consideration of all consequences and implications in the long term, of their decisions; after comprehensive consultation with major stake holders and not on the basis of a whim. It should not become a case of acting in haste and repenting at leisure.

There can be no excuse for today's leaders to take hasty or ill considered decisions as they have the advantage of sophisticated analytical techniques, and an accurate knowledge base which can be accessed without difficulty to help them in arriving at the best possible decision. Decision makers should not become prisoners of ego or trapped in illusions of their own infallibility. As Nehru once said, nation building is a life time's business. It is a race where one team hands over the baton to another to reach the distant goal; in this case a never ending goal.

A poor developing country, with societies at low levels of literacy and awareness, led by strong and ambitious decision makers having access to resources, is a heady cocktail. Only their decisions will tell whether they have inherited the genes of a Geddes or Mohammed - bin -Tuglak.

I am confident the insightful discussions that will take place, under the auspices of this Conference will show the way for enlightened decision making , which alone can put the jigsaw of sophisticated technical analytical tools into a composite whole that can yield beneficial results.

I would be remiss if I did not conclude by saying it was an honour for me to have been given the opportunity to deliver the Keynote address before such an enlightened audience and distinguished Vice-Chancellor, of an even more distinguished university. Thank you.