

**PL 303 Professor Monkombu Swaminathan**

**Chairman of the Board of Trustees, M. S. Swaminathan Research Foundation**

Your Imperial Highness, Chairman, the visionary founder of this whole forum, Mr. Omi, ladies and gentlemen: I want to stick to the question what we can do, my colleagues have talked about what global action is needed, what kind of local action can be stimulated so that living in harmony with nature becomes a non-negotiable human ethic.

One principle suggested by Einstein and Bertrand Russell, the founders of Pugwash, of which I had the privilege of being chairperson for some years, was “remember your humanity and forget everything else”.

The Brundtland Commission over 25 years ago had suggested that sustainable development should become the new human ethic. The title of their report was our common future in order to emphasize that whatever may be the political frontiers, ecologically our fates are intertwined and therefore we must in the interest of our common future should look at the planet itself together. For a better common future, my feeling is that we need a better common present. If the present is not good, the future will not be bright. I want to give you 3 examples how to create a better common present for humankind.

The first is about education, because ultimately on everything we do education has the greatest impact, on our mind, our personality and so on. Richard Low coined the term **Nature Deficit Disorder** to indicate our alienation from nature; a love of nature, the beauty of nature is not there in our children and society. What are we doing to see that this Nature Deficit Disorder doesn't spread?

I had prepared for this purpose a School Exercise titled “Charter for Nature” for my village/ city. It means what is current status of the life support systems in the village or in the town. Secondly what does the population carrying capacity of the ecosystem, has it already been exceeded? In other words, from school onwards, you create an awareness of the need for living in harmony with nature and understand what is the land, water, soil, flora, forest, fauna, the biodiversity and at the same time, what kind of population can this resource sustain?

Today the uncommon opportunity for spreading this kind of information, is provided by information, communication technology, ICT has given new meaning and content to the concept of the global village. For the first time anything which happens anywhere, everyone knows about it. We are developing a methodology by which digital technology based on the principle of social inclusion, starting with the satellite technology, at a block level, a group of villages, a village knowledge center and finally the last person connectivity is through the synergy between the

internet and mobile phone. For example small artisanal fishermen going out after the tsunami of 2004, they got very afraid, today they carry a mobile phone which has GPS data on wave heights at different distances and where the fish shoals are thereby opening completely new opportunities for an artisanal for successful and sustainable fish based livelihood fishermen. Ladies and gentlemen, there are new opportunities which we should take advantage of in the case of information, communication technology.

My second example, relates to food, because as pointed out by the Roman philosopher Seneca long ago, the hungry person listens neither to religion nor to reason nor is bent by any prayer. On September 25 there was a big meeting in N. Y., convened by Secretary-General Ban Ki-moon, to review the progress in achieving the first among the UN millennium development goals, namely reduction in hunger and poverty. Reduction of poverty and hunger by half by 2015, which is a great shame on humankind that far from reducing hunger, the Director General of FAO said 75 million more women, children and men have been added to the those caught in the hunger trap during 2007 alone. As the result of price increase of food. 75 million have been added rather than reduction. What do we do then? We have to help small farmers, to produce more. We have developed Bio-villages which represent human centered development, whose major aim is to promote bio-happiness. Bio-happiness comes from the sustainable use of natural resources. There are two path ways one is an evergreen revolution which I have defined as increasing productivity in perpetuity without ecological harm, in other words, mainstream ecology in technology development and dissemination. The other is organic farming and green agriculture which is based upon the use of integrated management where we can use the minimum essential chemical pesticide or mineral fertilizers.

Now ladies and gentlemen this hunger problem is a very serious problem and I want you to take notice of the fact that the modest goal of reducing number of people hungry and poverty by 2015 is not being realized although the resources needed are small and affordable.

My last point is about facing the challenge of climate change which affects all nations. In all calamities, the poor nations and poor in all nations are the worst sufferers. They are the worst sufferers whether it is hunger or whether it is drought or whether it is flood or whether it is sea-level rise. There is need for a greater consciousness of the importance of not only reducing anthropogenic emissions but also managing what is happening today. For this we should train local level climate risk managers. What we have done is to develop a drought, flood, and sea level rise codes. To mitigate the impact of sea level rise, we can raise mangrove bioshields. There are many things we can do. It is very important to train a cadre of the local level of climate risk managers.

May I, your Imperial Highness, conclude by again coming back to the fact without that living in

harmony and returning to harmony with nature life would not be worth living. Modern science is adding years to life. People are on the one hand living very long today, number of people over 100 has increased at the global level. But how do you add life to years? That can come only by overcoming the nature deficit disorder and by living in harmony not only with nature but with each other.

I close by quoting what Gandhi said, "how can we be non violent to nature if we are going to be violent to each other?" It is a very important question, in other words, harmony with nature starts with harmony with each other. Let the STS Forum become the flagship of the global "Harmony with nature and with each other movement".