



Key Note Address at the Inaugural Ceremony

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Participants to this workshop

It is gratifying that such a Workshop is being organized in Kerala and I must congratulate the Department of Forests, both for taking the initiative for organizing this Workshop and also for launching the extremely innovative “Haritha Keralam” project. It is a matter of privilege for me that I have been asked to deliver a keynote address in this Workshop. Unfortunately my knowledge in matters of Global Warming is no better than that of any lay person. I cannot pretend to hold forthwith any informed opinion on a subject, which is exercising scientists at this moment. But certain conclusions to my mind are inescapable for any lay man. There would of course be a tendency not to take Global Warming seriously, which is natural because after all, threats of eminent ecological disasters have been with us for decades and centuries. In 1850, the economist David Ricardo thought that as accumulation proceeded, you would not be able to raise food grain out put sufficiently, because of which the world would settle down to a stationary state. The growth becomes impossible because food grain out put cannot be increased because of the limited quantity of land and the fact that there are diminishing returns when they go on investing more and more in land, you don’t get correspondingly higher and higher returns. Much later, some decades ago there was a club of Rome, which has also warned us of dire consequences. To a certain extent, they are for the people who would quite naturally believe that warning of Global Warming fall into a similar category. But I think, even from a fairly straightforward commonsense practical point of view, there are certain inescapable conclusions. Let me list out some propositions.

First proposition is that no matter what you think of the models of Global Warming, the fact that Global Warming is taking place is something, which is indubitable. The fact remains that we have now much higher level of carbondioxide, compared to the pre-industrial period. The fact remains that ever



since satellite data have become available, we can actually see that the rate of Global Warming is fairly considerable. I am told that it is $0.15^{\circ}\text{C} \pm 0.05$ per decade, which is actually quite considerable, and that is something, which is indubitable. So whether it is a circular trend, whether it is part of a fairly long cycle or whether it is a part of a short cycle, this kind of a phenomenon is certainly likely to make a substantial difference to our lives and therefore we have to take it seriously.

The second proposition which I feel also is indubitable is that anthropogenic contribution to Global Warming - contributions because of activities of human kind, is again something which is a subject of debate. But the fact is that no matter how important anthropogenic contributions are to this process, the fact is that they are an important means of intervention. Even if, we believe that human beings have not really contributed to this acceleration of Global Warming to any significant extent, nonetheless human beings actions certainly reduce the pace of Global Warming to levels which are more livable. So the interventions in terms of our life style, our behavior and so on, is of course extremely important.

The third proposition, which I think is again quite indubitable, is that it is said that if you freeze anthropogenic contributions around the levels of 2000, even so the pace of Global Warming would be quite considerable. It is important therefore, that we not only freeze the anthropogenic contributions, but we have to lower it. As a means of intervention we have to make sure that there must be a lowering of the anthropogenic contributions to Global Warming. How do we have this lowering?

The proposition four that I want to advance is almost everybody particularly scientists would argue in terms of a technological solution to it, that we can actually have newer kinds of technology that would get rid of this problem. Technological solutions would of course be very favored because they do not impinge on life style. We can continue driving our cars, we can continue having our air conditioners but of course we can now change the technology of cars and air conditioners such that even though with the same life style, we can contribute less to Global Warming. While I think that for that many reason fairly popular way of intervening in Global warming, it seems to me that it is not sufficient. Fundamentally technology, while it intervenes at one level, has got all kinds of unpredicted or even unknown consequences at another level. Some degree of life style change has also to be associated as a part of any solution to Global Warming. Shri. Mohanty in the beginning talked about energy conservation, which I think, is very important. But at the same time I believe all these measures would be insufficient. We would have to have some degree of a change in our life style in order to be able to maintain a kind of equilibrium so that mankind does not face the kinds of threats that Honorable Minister Shri. Binoy Viswam so eloquently elaborated.

The last proposition, which I want to make is, in all this, while many people would argue and agree with the proposition that life style changes are important, they would like this life style change, be tried out in the third world countries. I believe no solution to Global Warming should be attempted, that preserves the existing global inequalities. I think it is very tempting to say, as the Honorable Minister referred to it, that of course China and India are developing rapidly, they are going to contribute so much to Global Warming, so let us ensure that we freeze our contributions at the current level or we have let us say *pari-passu*



reduction in contribution across all countries. But in a situation, in which some countries contribute a lot more than other countries, a *pari-passu* proposition at reduction in contribution still leaves the levels of global inequalities unchanged. Now I believe that any solution for the problem of Global Warming, that leaves untouched the problem of global inequalities, is no solution at all and certainly should not be acceptable to large parts of humanity.

It is essential therefore that the issue of Global Warming is one which is actually solved through certain common global understanding which is of course associated with capitalism and provides the ideological foundation of the capitalism, the kind of dominant thinking which has existed with us for more than 300 years - almost 400 years. Therefore it is an extremely complex issue, how exactly we come to cope with these problems. But while these complex issues cannot of course be addressed by Kerala, we at the same time are likely to witness the implications of Global Warming and it is very important for us to take some steps in this regard. Now one of the things about Global Warming again which warns me greatly particularly in the context of Kerala is the proposition which is advanced by most scientists that in low latitude countries Global Warming is likely to result in reduction in yields per acre i.e.; agriculture yields per acre. Now that basically means in states like Kerala indeed much of South India you would have a situation where there is going to be a substantial strain as far as food grain out put is concerned. Kerala already has a substantial strain on its food grain out put. As a matter of fact I personally believe that for nearly three decades this state has been pursuing a development strategy which is in essence fundamentally flawed. That development strategy consists in the fact that we increasingly shift out of the production of food grains into the production of all kinds of cash crops which appear at the moment to be profitable or at the time of shifting, profitable. It is fundamentally flawed because it is based on two assumptions; neither of which was likely always to persist and both of which have become unstuck at this moment.

The first assumption is that the prices of these cash crops we get in the international market would always remain fairly remunerative. The second assumption was that while, given those prices we deposit foreign exchange in the coffers of our Nation, at the same time the National Government will always make available to us enough food grains so that we can feed our population. In Kerala, we have one of the finest public distribution systems in food grains anywhere in the world. So both these assumptions on the basis of which the shift was made and has been going on & on & on for decades from food grain production to cash crop production is a shift which is now beginning to, its adverse implications are beginning to become clear - both assumptions have actually collapsed. At this moment we find prices in the world market for a whole range of crops grown by Kerala, crashing. They had crashed some time ago because of which you had suicides in this state as well. The suicides were arrested partially because the problem of debt was to some extent partly addressed and partly because price itself was moving up. Again in the last few months, a whole range of cash crop prices are beginning to crash. This is something which augers ill as far as the future of the states is concerned. And at the same time when it comes to getting food grains from the National Government, Kerala deposits so much money in the National exchequer in terms of foreign exchange reserves. It has the right to assume that its food grain supply would be met or requirements would be met by the Central Government. But when it comes to that again, as we know in the course of



last several months increasingly, with neo liberal policies that are winding up, whirl winding up, whole procurement and distribution system and Kerala was getting a raw deal as well. It is essential and this is something which in essence we have been thinking about and trying to implement for some time for Kerala to move back into food grain production to improve its food security. I believe that the arguments about Global Warming in essence reaffirm and strengthen this course correction for the state. Now this is something, which I believe is not just relevant in Kerala's context but what is happening here is actually part also of a more general phenomenon. If you look at the world as a whole – take the entire world between 1985 & 2005, just take last two decades – there is a significant reduction in the per capita cereal output for the world as a whole. Obviously during this period the per capita income of the world has gone up and nobody has ever argued that when income goes up, people actually reduce cereal consumption. If anything, if you take direct and indirect cereal intake as income goes up then people consume more in the form of processed food from animal foods and so on. So you find that at a time when there is an increase in the world's per capita income per capita cereal production has gone down and naturally so is cereal consumption. After all we can't import it from moon. So it follows that some thing has been happening - and at the same time during this period there are no pressures in cereal prices except last year only. No pressures because you find that actually the terms of trade between cereals on the one hand and manufactured goods on the other hand during the last twenty years have fallen against cereals by 42%. How do you explain the fact that output is falling even as income is rising and therefore at base prices the demand should be rising and yet the prices of cereals in related terms declining?

It is essentially because of a very short curtailment of purchasing power in the hands of a very substantial part of the world's population. I personally believe that globalization has resulted in this phenomenon of very sharp curtailment of purchasing power in the hands of a very significant part of the world's population, something which, I call the process of income deflation. So you find substantial segments undergoing income deflation and therefore their food security is jeopardized. I believe that, if we ensure food security to everybody both by ensuring adequate purchasing power in their hands and by ensuring enough supplies of food grains, it would be important for us for both these purposes to ensure that there is a significant increase in food grain output, through shift of acreage towards food grains apart from yield raising technological progress. The same is true of Kerala. We have to think in terms of the development trajectory and it is essential not only to cope with the inherited problems but specifically with inherited problems that are likely to become grossly aggravated because of the phenomenon of Global Warming.

Thank You

