

# LECTURE SERIES

## *Policy and Planning for Ecological Security*

*Transcript of a talk  
by  
Shekhar Singh*

Lect/E@F-Policy/2002



RaAG

Research, Assessment and Analysis Group

Transcript of a talk given at the India International Centre, New Delhi, on 5<sup>th</sup> February, 2002, at the invitation of the Foundation for Ecological Security. An edited version of this transcript was subsequently published as a chapter in ***Ecological Security: The Foundation of Sustainable Development***, edited by Samar Singh. Shipra Publications and India International Centre, New Delhi, 2007.

Sketch on the cover is by Pratibha Pande.



GREAT HORNED OWL *Bubo bubo*

## Introduction

Thank you very much Mr. Chairman, Mr. Samar Singh and other friends. It is a privilege to come here and to speak on this very interesting topic. I am not totally sure whether I am qualified to talk about it, though I did have something to do with planning over a decade ago, when I was in the Planning Commission. Though I am sure many things have changed since then, let me nevertheless share some of my experiences and I am sure Mr. Jayakrishnan, Mr. Pandey and others who are very much a part of the planning process now, could make whatever I say more contemporary.

### **Ecological Security**

When we talk about policy and planning for ecological security, the first question we need to ask is: what is meant by ecological security? When I looked up the term “security” in a dictionary, it had a very interesting meaning. Security was defined as “meeting obligations and fulfilling pledges”, and I thought this very appropriate for today’s topic, because one way of understanding whether our policy and planning is adequate to meet the imperatives of ecological security is to ask: do our policies and plans allow us to meet our obligations and fulfill our pledge, to the people of India and to the people of the World, to conserve nature. This is the sense in which I want to look at this broad topic.

### **Inter-generational Security**

Towards whom do we have such an obligation and to whom have we made such a pledge? I have tried to highlight the three groups that need our most focussed attention. The first is, of course, the future generations, to whom we have to provide what we could call inter-generational security. This, I think, is well understood. When we talk about sustainable development we talk about how the consumption patterns of the present generation must not be allowed to compromise the options and opportunities of future generations

The only trouble is that though it is much talked about, sustainable development being perhaps the most uttered phrase across the world in conferences and workshops, it means different things to different people. In many of the countries of the 'West' it is not so much development or nature that they want to sustain, what they want to sustain are their exorbitant lifestyles. But, of course, it is very difficult for them to admit that, very difficult for them to tell us to curb our consumption because they want to sustain their lifestyles. Therefore, the whole thing gets covered under the amorphous term 'sustainable development'. Therefore, the first thing we have to be sure of is that when we talk about sustainable development, we are talking about it in the context of India and of countries like India, rather than in a global context, where it means something very different.

### **Intra-generational Security**

Secondly, we talk about ecological security for the disempowered and the oppressed, within our country and within the world, and how to ensure that our obligations towards them are met. This is intra-generational ecological security for people in our own generation who are disempowered, who are oppressed: the tribals, women, the rural poor, urban poor and many others. And here, I think, we have relatively weak policies and plans. We have, for example, no rehabilitation policy in this country, yet we continue to displace people for development projects. And this is despite the fact that, barring China, there is no other country in the world that has displaced as many people as India has for development projects. We do an environmental impact assessment of our projects, we do a cost benefit analysis of our projects, but we do not do a 'class benefit' analysis. We do not ask the question: who benefits and who pays?

As many of you would know, there is a requirement that a project, in order to be approved, must have a 1:1.5 cost benefit ratio. So, if the cost is Rs.1.00, the profits or benefits must be at least Rs.1.50, for the project to qualify. But I would like to think that if you brought in a class-benefit analysis then this would become rubbish. For example, you might want to support a project that costs Rs.2.00 and the benefit is only Rs.1.00, if the cost is being paid by the rich and the benefits are going to the poor. Similarly, you might not want to support a project that costs Rs.1.00 and the benefit is Rs.4.00, if it is the other way round. But we do not have a system by which we do a distribution analysis or class-benefit analysis of our projects.

Interestingly, India is considered globally to be one of those countries that is fighting very hard for equity, especially when it comes to climate change and ozone depletion, and we are a leading voice among the global community, demanding that we the poorer countries, we the underdeveloped, we the developing, we the countries of the south, must get a fair deal. But that same principle of justice is rarely applied internally to issues of national equity. So, we fight to bring about global equity, but we do not fight to bring about national equity. I think this is a very weak area of our policies and plans.

### **Inter-species Security**

The third sort of ecological security that we talk about is the ecological security for other species. I know this is not a very popular point of view and very often I have been told that this is unnecessarily making the whole debate too abstract, but I still feel that the earth was not created just for human beings and we should be sensitive to our responsibility and obligations towards other species who share this world with us. In fact, people who are familiar with the legal system would know that if there is a piece of disputed property, the person who came and first occupied that property has an advantage in law. If you take that principle, most of these other creatures came to earth much before we did, and yet we have assumed that this earth belongs to us and that they have no rights except what we feel inclined to grant them.

Unfortunately, this is also a very weak aspect of our policy and though we have an Act for the Prevention of Cruelty to Animals, I have yet to see a plan for a dam that, apart from talking about human beings being submerged and therefore the need to shift them out, sheds even one tear for all the animals that are going to be drowned when the water rises. We don't have such sensibilities.

These, to my mind, are the three groups that we must keep in front of us, when we look at ecological security. Of course there are others, but these are the ones that demand and deserve most of our concern for ecological security.

### **Policies and Plans**

The plans and policies that we make, and the strategies we adopt, must be such that they are scientifically valid. A large number of environmental issues inevitably involve science, all sorts of science, not just the biological sciences or chemistry, but also social sciences. All plans, policies and strategies must be scientifically evaluated. But this is problematic.

There are three types of problems. First, in some areas, science is weak in this country. For example, we have a protected area network but we do not yet have a scientific understanding of what are the minimum viable populations of various species of animals that we need to maintain, in order to ensure their long term genetic viability. Therefore, we also do not know what is the minimum size that the protected area needs to be. The views that scientists have differ widely. In fact, one view is that whether the tiger gets poached or not, it is already doomed because there is not a single viable population of tigers remaining in this country.

Part of the reason why we do not have good answers to these questions is that this is not such a critical issue in countries of the west. Therefore, they don't research it. However, though this is a critical issue for us, we also don't think too much about it. As we have huge human population pressures, we need to justify every inch of area that we include in a protected area. I am sure the Chairman will tell you how difficult it is to protect national parks and sanctuaries, how difficult it is to justify that even a corner of these areas should not be taken away. But on what basis? Where is the science?

The second problem is the weak application of science. I think India is a country that is marked by a very deep divide between science and administration: the two rarely interact. There are problems on both sides. Administrators do not think there is much in science that could be of use to them. Scientists by and large are not geared to meet the sorts of demands, timeframes, issues and questions that administrators have to deal with. I remember when I was in the Planning Commission. I made a pledge to myself that I would not approve a single project unless I conferred with scientists to know something about it, and discussed it with them. Very often, the projects documents came with tabs of "secret and confidential", but nevertheless one would call a group of scientists for discussion. I found that it was very difficult to get scientists to give an opinion in the five days that one typically had to assess a project. The usual thing was that they needed time to study it, or turn it into a project, which would need a few years of study. But the file had to go up immediately. It had to be cleared and the bosses were not going to wait, even if I had no opinion. There is a problem on both sides, but I would suggest that the main problem is a lack of interaction. Scientists are not called upon often enough to deal

with administrative decisions and administrators don't often find scientists helpful enough in what they are trying to do. This is the second problem that we have.

The third problem, to my mind, is very poor levels of applied research. It is the business of universities to do pure research and it is the business of Ministries to sponsor applied research. Ministries should have a clear idea of the problems being faced in the field and the sorts of solution they are looking for. That is the sort of research that should be encouraged. In my own experience we have not only haphazard research, but very poorly focused research. I am tempted to share an experience I had when we were reviewing the 7<sup>th</sup> Plan, in the process of formulating the 8<sup>th</sup> Plan. I am sure, it is not typical, but I remember I was looking at the research projects that had been funded by the Ministry of Environment and Forests and I found that there was one project that had been approved, with quite a large amount of money, to study the ant-eaters in a particular place. And when I saw the project report it said that when they went to that particular place to study the ant-eaters, they did not find any, so they decided to study the birds instead, and they therefore listed the birds that were found in that area! The attention and priority that research gets in India, especially applied research, leaves much to be desired.

Apart from being scientifically valid, the second point about what our plans and strategies need to be is that they need to be technologically sound. Technology is a double, edged weapon. You can use technology to protect nature, you can use technology to destroy it. The socio-economic and political environment influences the development and choice of technology . It doesn't grow in a vacuum. Unfortunately, in our world, the technology to use and exploit nature has grown much faster than the technology to conserve and re-generate it. The reasons are obvious. Initial technological development took place mainly in the West, where private profits were the main fuel for technological development. The use of technology to exploit nature led to private profits but nature was a public good and there were no profits to be made out of its conservation and regeneration. There was no internalizing of the costs of environmental degradation, and therefore you had this schism, this divide. Unfortunately that divide still continues. We still find that we are discovering newer and newer ways of using natural resources,

and of misusing them, but very, very few ways of protecting, or re-generating resources, and this has become a big problem.

We also need cost effective and innovative mechanisms to protect nature. This is a particular need in India. We are a poor country with many demands on our financial resources. We also have many constraints, some of them peculiar to our country. Therefore, what we need are little things that might work. Things that take into consideration the political and social reality and are yet able to deliver the goods that you want.

I am reminded of an article I read about Germany where they were having a lot of problems because there was a concentration of industries on a particular river and sometimes, at night, a lot of these industries would release toxic chemicals into the river. By the time the chemicals were detected downstream, it was not easy to determine which industries had released them. Then some technological genius came up with a very simple solution. By law every industry had to locate the input pipe drawing water for their factory downstream of their liquid waste outlet pipe. This meant that if you released any toxic chemicals into the river, they would go right back into your factory. A little technical innovation like that changed the whole scenario because you can't keep changing your input and output pipes everyday, as that takes a lot of investment and they found that the people were forced to clean-up their effluents other wise their own industries and machinery would get corroded. So we need technical innovation, we don't need necessarily large, expensive technology. We need little things that work which can make our lives easier.

Finally, we have to have strategies which are functionally harmonious. And I think this is, if I might say, our weakest card. An activist friend of mine once described the Government of India, as an organization, which has vertical loyalty and horizontal animosity! My own experience is that this is a pretty good description, because you have different departments of different Ministries pursuing their own agendas without any effort at trying to interface with each other. When I was thinking about what I was going to say, I thought I must try and find some imagery that would effectively illustrate this point. I could not think of no better an image than that of a symphony orchestra.

### **Governmental Harmony**

Imagine in your mind that the Government of India is an orchestra. Right in front you have the Finance Ministry, which has huge big drums, which are deafening out everybody, saying “GDP, GDP, GDP”. You also have, in prominent positions and with large trumpets and horns, the Water Resources Ministry insisting on “dams”, “dams”, “dams”, and the Power Ministry, the Ministry of Industry and the Department of Mines, all saying “produce”, “produce”, “produce”. You have the Environment Ministry and the Welfare Ministry in one corner, with a flute each, trying very hard to be heard over all this din, but of course nobody is hearing them. You have the Prime Minister, who is the conductor of this orchestra, and one would have thought he would bring in some harmony, but the poor man has in front of him not one music score, but twenty music scores. There is the Environment Ministry score, the Ministry of Water Resources score, the Power Ministry score, as there is a separate score for every other ministry and department. So the conductor does not know what to do because he does not have one consolidated score.

You have next to him the Planning Commission, who is, of course, facing the other way and conducting some other orchestra that we do not know anything about. I am reminded of when we were formulating the 8<sup>th</sup> Plan in the Planning Commission. The way the plans were formulated in those days was that the senior people, the Members, all got busy writing the approach paper and the chapters and we, the advisors, got busy working out the financial allocations. The day before the Planning Commission meeting the chapters and allocations were put together, bound in one volume and presented as a draft Plan. I remember the very idealistic approach paper, which talked about transforming society, being applauded by the Members and the Deputy Chairman of the Planning Commission. But then, the Secretary of the Planning Commission, in a very timid voice said “Sir, the approach paper does not match the allocations, because the approach paper talks about all sorts of new things but the financial allocations are for the same old things that we have been funding for the last 30 years”. The response was: “but you can’t stop projects midterm. After all, they are half completed and therefore you have to make allocations for them”. The Secretary then said, “Sir, if you don’t make the required changes in the 8<sup>th</sup> Plan, its going to be more difficult in the 9<sup>th</sup> Plan and even more difficult in the 10<sup>th</sup> Plan”. But the matter was left at that.

Of course, this symphony orchestra has other disharmonies. It is not enough that the so called “development ministries” have loud instruments, they also have megaphones, provided by the World Bank, the IMF, and by industry and contractor lobbies, which further drown out all sounds of sanity.

The Environment Ministry and the Social Welfare Ministry are not without external support and NGOs, the Press and even the courts offer them a megaphone. But there is a wall around them. A wall of secrecy, of distrust and sometimes of careerism, and this wall stops them from accepting these megaphones. Of course, the courts have a “bulldozer” call “Contempt of Court”, so they from time to time breach this wall and come across. However, such legal intervention is, I think, creating a very strange and unhappy situation, not only in the Ministry of Environment but in the Government in general.

Because of this very pro-active attitude of, for example, the Supreme Court, there appears to be a hesitation in the government to act on its own. The best way to describe this hesitation is to use the example of the three monkeys that were made popular by Gandhiji. The government seems more and more to be behaving like these monkeys. There is one monkey who sits with his hands over his eyes saying “see no violation of the Law till the Supreme Court points it out to you”, there is one sitting with his hands over his ears saying “hear no complaint till the Supreme Court tells you to”, and there is one sitting with his hands on his mouth saying “give no information till the Supreme Court asks for it. There is also a fourth monkey, who is mostly asleep but jumps up and down and pretends to be very active every time there is a Supreme Court order.

I am sometimes happy with the orders that the Supreme Court passes regarding the environment, but I do not think the courts can run a democracy. Unfortunately, this is what is increasingly happening.

### **Feasibility**

Finally, there is the question of administrative and political feasibility. Are our plans feasible? Are they the sorts of plans that we can actually implement? I am reminded, and I am sure Mr. Samar Singh will remember, that in 1985 Mr. Rajiv Gandhi, who was then the Prime Minister, announced on national television the formation of the National Wastelands Development Board and said that he wants to make forestry a people’s movement. He announced that the NWDB would plant 5 million hectares of forests each

year. That was a remarkable target, however people who know about forest plantations would know that in the thirty years before that we had planted a total of 4 million hectares. Therefore, to suddenly go from planting 4 million hectares in 30 years to 5 million hectares per year was a monumental task. We all waited with bated breaths, but that promise was never made good, for we had neither the financial nor the human and material resources to get anywhere near that target. Was this, then, a feasible plan? Would it not have been better to set realistic targets that could actually have been achieved?

The Chairman, Shri Jayakrishnan, mentioned in his opening remarks that the Planning Commission has now planned to afforest all the area requiring tree cover by 2012. Given the fact that our Forest Policy stipulates a forest cover of 33% for the country and that our current forest cover, even if we include degraded forest areas, is less than 20%, the total area to be afforested by 2012 would be in excess of 40 million hectares. I hope I am alive at that point, for I would love to see what happens to this project. However, I suspect that this would also go the way of other previous targets, because it is all very well to set a target but has anybody done the calculation of what it is going to cost, how much land it is going to take out of commercial or other uses, how this is going to be done, what human and material resources are required and where are they going to come from.

### **Strategic Impact Assessment**

There are three or four other issues that need to be considered when we assess the adequacy of our planning process. First of all, in India we have no strategic impact assessment, we assess specific projects, we assess specific programmes, but we don't assess our policies and strategies for their environmental impacts. No one, for example, says: "Okay, this is your energy policy. But before it is sent out, let us look at what sorts of environment implications it has, and whether they are acceptable". In fact, I have here with me the 1987 Water Policy of the Government of India, which is very interesting. The Policy lists all the uses that water in our rivers and lakes should be put to, in order of priority, and starts with provision of drinking water, then irrigation, and so on. But can you believe that the conservation of the ecological functions of lakes and rivers is mentioned nowhere in that list. So, according to the water policy, you can drain a river or a lake of

100% of the water and as long as you give first preference to drinking water and second to irrigation, etc., you are in conformity with the policy. What happens to the ecological functions?

### **Natural Resource Accounting and Budgeting**

Secondly, we do not have a system of natural resource accounting and budgeting. In most “developing countries”, and India is no exception, the governments are preoccupied with economic growth and development. Therefore, if the environmentalist or the Ministry of Environment & Forests wants to be heard, they have to at least partly speak the language of economists, which happens to be the predominant language. They have to be able to say: “look, environmental degradation and neglect also has significant economic costs. It is not just a matter of pretty trees and tigers. Yet we have no system by which the economic and financial costs of environmental degradation and neglect are reflected in the national planning process.

Some years back the Ministry of Environment and Forests produced a white paper on natural resource accounting. It was almost entirely based on work done by the World Bank. This paper calculated that lack of action on the environment was costing the nation between 6% and 9% of our GDP. And this was without taking into consideration many aspects like the loss of biodiversity, for which no good data were available.

This would imply that if our annual growth rate was between 5% and 6%, when one took into consideration the cost of environmental degradation, our real growth rate would be between –1% and –3%. Interestingly, in the National Conservation Strategy and Policy Statement on Environment and Development, brought out by the Ministry of Environment and Forest in June 1992, there is a very interesting clause which says that the government will prepare, each year, a natural resources budget which will reflect the state and availability of resources like land, forest, water etc., and which will rationally allocate the resources in keeping with the principles of conservation and sustainable development. This was declared in 1992, yet no such budget has ever been prepared. What we need is a system that realistically calculates the economic cost of environmental degradation and incorporates this into the planning process.

I am, however, not suggesting that all environmental resources must be allocated on the basis of their economic or financial value alone. I am reminded of the

Narmada case, and some of you might also recollect, that sometime in the 1980s Mr. Seshan, who was then the Secretary, Ministry of Environment and Forest, referred the Narmada Sagar Project to the Forest Research Institute, asking it to calculate the cost of the forests that were to be submerged. At that point the project, if I remember correctly, roughly cost Rs.2000 crores and the benefits were expected to be around Rs. 3000 crores, so you had a 1:1.5 cost benefit ratio. The Forest Research Institute came back with the estimated cost of the forests to be submerged at around Rs. 35,000 crores. I was then, as I am now, on the Environmental Sub-Group of the Narmada Control Authority and I said “this is delightful because if the cost of forests is Rs.35,000 crores and your benefits are only Rs.3000 crores, the project is not viable”. I remember the then Vice-Chairman of the NVDA, whom I shall not name, saying “Shekhar, give us one month, we also have economists”. He came back with a revised estimate where the benefits of the project had been re-calculated to Rs. 60,000 crores. You could always add on backward and forward linkages, *ad infinitum*, and show them as project benefits. It is like the old principle, that if you run over a chicken that belongs to a non-economist, then it is only a chicken and all you have to pay for is the cost of a chicken. But if it belongs to an economist, then you have had it, because the cost of the chicken would include the cost of all the eggs it would have laid in its lifetime, each one of which would have hatched into another chicken, who would then each have laid so many eggs, *ad infinitum*. Therefore I am not suggesting that all decisions about the environment must finally be taken on financial or economic considerations. However, it is important that these be an input into the decision making process.

Hopefully in the 10<sup>th</sup> Plan such a system might get activated because there was a working group set up by the Planning Commission to design an appropriate system of natural resource budgeting and accounting. This is, to my mind, a very, very important agenda, which we need to urgently focus on.

### **Environmental Impact Assessment**

The third point here is that even when we do environmental impact assessments, and I am sorry if this is a sensitive point, there is so much pressure that it is almost impossible to do a proper assessment or be able to get a fair decision. I had the privilege of serving as Chairman of the Environmental Appraisal Committee for Thermal Power and a

member of the committee for river valley projects, of the Ministry of Environment and Forests. That's when I learnt what really happens in the system. We would get a huge amount of pressure from various quarters for various projects. I can tell you any number of examples, like the two well-known projects, the Tehri Project and the Sardar Sarovar Narmada Project. If you look at them closely you will find that neither one of them was initially cleared by the Ministry of Environment & Forests. In fact, the then Secretary to the Ministry of Environment & Forests went on record, in 1997, to say that the Ministry did not clear the Tehri Project, but that it was cleared by "higher authorities", who ever that might be! Similarly, if you look at the documents on the Narmada Sagar and Sardar Sarovar projects, you will find it very clearly written that the Ministry does not think that they should be cleared.

I remember the case of the Kayamkulam super thermal power project in Kerala. When it came for environmental appraisal, I was the Chairman of the Committee. We went to have a look at the site and I then learnt the unfortunate truth that many of these large and controversial projects were located in the political constituencies of big shots. This project was in the constituency of a Union Minister, who also arrived at the site while the committee was there. He came and told me that the last man who stood for elections from there lost the elections because he could not get clearance for the project. Therefore, the Minister was going to ensure that the project was cleared this time, so that he didn't lose his elections. I laughingly told him that he had made the task of the committee more difficult, for now they had to not only assess the project, but also had to decide whether or not they wanted him to win the next elections! Though the committee finally decided not to accord clearance to the Kayamkullam project, the Environment Minister had a special meeting with the concerned Minister and the Chief minister of the State and recorded in the minutes that though the project did not merit environmental clearance, however, the project was being cleared!

There was also a lot of pressure put for the the Dholpur project, in Rajasthan, which was in the constituency of the then Chief Minister.

I must here say that my own experience has been that the Secretary, Ministry of Environment & Forests, has often put up a valiant fight for the environment. I remember that during my stint at the Planning Commission, and I am sure Mr. Samar

Singh would also recall the various occasions, I often attended the Committee of Secretaries meeting as a representative of the Planning Commission. In these meetings, usually the Environment Secretary would be isolated and all the Secretaries would say “you are anti-development, you are stopping the progress of the nation”. I was often the only other voice in support of the Environment Ministry. However, very often the pressure is unfortunately too much for the Ministry. So, it is not a system that is working well.

The Environment Ministry gives conditional clearance to many projects. As you probably know, the Tehri has conditional clearance, the Narmada Sagar has conditional clearance, Sardar Sarvor has conditional clearance. Very often the conditions stipulated include the *pari passu* implementation of the environmental safeguards. The inventor of this famous phrase “*pari passu*”, Mr. Ramaswamy Iyer, who is a former Secretary of the Ministry of Water resources, is sitting facing me across the table. Such clearance really implied that environmental and social action plans should be implemented concurrently with the engineering works. However, many project authorities treat “*pari passu*” to mean co-terminus rather than concurrent, so that only when your engineering works are about to be completed do you start worrying about the environment or about social considerations. The Environment Ministry has little ability to enforce the condition of clearance, because once you have given clearance, what can you do? Does the Environment Ministry have the political clout to be able to withdraw clearance if the conditions are not being met?

It has been suggested that the Ministry should only give clearance for two years and that the onus should be on the project authorities to come back after two years and prove to the Environment Ministry that they have fulfilled all the conditions of clearance. Only once they have proved this can their clearance be renewed. Let the onus to demonstrate compliance be on them. But I do not know if such a system is ever going to come through. Therefore, there remains a huge problem of enforcement

### **The Regulatory Approach**

There are also other sorts of issues. There is an over-dependence on what one would call a regulatory approach, and this has limited use in India. The rich get away because the courts are slow, good lawyers can be hired, and the system can be subverted.

I don't know what the situation is now, but I remember when I was on the monitoring committee of the Ganga Action Plan, hundreds of cases had been filed against industry and all of them were bogged down in courts of law. Years would pass without any enforcement and industries would happily carry on because of the stay orders that they had obtained or because of the delays in dealing with the cases. In fact, I remember that every time they had a monitoring committee meeting they would produce statistics that would suggest that despite the hundreds of crores that were being spent, the Ganga water was getting dirtier. So one year I asked the person incharge of the plan "on what basis can we keep giving you money, because the river is getting dirtier and dirtier". "Well" he said "if we did not have the Ganga Action Plan, the river would get dirtier at a faster rate".

I was recently in the Steering Committee Meeting of the 10<sup>th</sup> Plan, in the Planning Commission, and I enquired about the current status of the river waters and the latest monitoring reports. To my amazement, I was told that in 1997 they had given up monitoring the water quality! This revelation provoked one of the Members of the Planning Commission to recount a true story about 18<sup>th</sup> Century London. Apparently pick-pocketing had become a serious problem and the police were not being able to effectively control it. When this was brought to the notice of the Lord Mayor, the Lord Mayor reportedly said "If that's the problem, lets by law abolish pockets". In the same way, if you have a problem about controlling pollution, lets just abolish monitoring!

We also have problems of enforcement among the poor, because they have few real options. They need resources from the forest for their survival. They do not have the real option to sit back and watch wild animals ruin their crops or kill their livestock. If they have to survive they have to have access to natural resources. They also have a very tough life and it is difficult to deter them through the threat of punishment.

I remember one of the NGOs working with street children telling me that one day some of these children decided to go for a holiday to Shimla. When asked how they were going to find the money to get to Shimla and back, they were frank enough to admit that they were going to travel, ticket-less, by train. They had even made a little song that explained their logic: "*Jana free, aana free, pakre gaye to khana free*" (Going was free and return was free, and if they got caught, even their food would be free!).

We have a system where a lot of people are already so desperately poor that you can't scare them by the threat of the jail. Many of them would be better off in jail, where they would at least have a bed to sleep on, a roof over their head, three meals a day and basic medical care.

Therefore, just the threat of prosecution does not work. It does not work for the rich because they have ways of getting around the law. It does not work for the poor because they don't have any real options.

There is also the over-arching problem of corruption, though this is not peculiar to the Ministry of Environment and Forests, but a general malaise in the government and the society. This, however, makes regulation all the more difficult, because the system depends on individuals functioning as regulators. However, where the regulators themselves are corrupt, every new law just opens up new avenues for corruption. I was told a very interesting story in a meeting that was organized by the Forest Department and the World Bank a couple of months back. It was, I think, about Maharashtra where forest encroachers used to bribe the forest guards so that they were not recorded as encroachers. Then the Government changed its policy and the holdings of all those who had encroached before a certain date were to be regularized. Then the same forest guards started getting bribes to record these people as encroachers, so that they could also get the benefit of the new policy. Therefore, you can keep changing the system, the rent-seeking behavior does not seem to change.

So the regulatory approach has many drawbacks and we need to think of other ways of getting around the problem. What are these other ways? Let me end up by listing out a few of them.

### **Ecodevelopment**

One of the approaches that the Environment Ministry has been pushing and seem to want to push even harder during the 10<sup>th</sup> plan, is what is called eco-development. Such an approach requires the development of alternate sources of livelihood for those communities living in and around forests, national parks and sanctuaries and dependent on their resources to an extent, or in a manner, that is unsustainable. .

### **Fiscal Measures**

I certainly think that we have to focus far more on fiscal measures for conservation. I think the Finance Minister, before he finalizes his budget, must consult the Environment Minister and see what sorts of fiscal measures can be put into position which help us to conserve natural resources, whether it is electricity, water, forests, soils, etc.

### **Integration of Environmental Concerns**

We must integrate environmental concerns into the policy and plans of all sectors, departments and ministries. Today the relationship of many of these ministries and departments is mutually antagonistic: the Ministry of Water Resources versus the Ministry of Environment, The Ministry of Power versus the Ministry of Environment.

The Tewari Committee Report in 1980, on the basis of which the Department of Environment was set up, had recommended that in each Ministry, like there is an internal financial advisor, there should also be an internal environmental advisor and, further, that this internal environmental advisor should be in some senses under the control of the Ministry of Environment & Forests, so that their loyalties are not totally with their host Ministry. The idea seemed to have been that even at the early stages of a project, or plan, or policy, even at the stage of formulation, some of the environmental concerns can be incorporated. This was especially important for projects because, very often, by the time the project came to the Ministry of Environment & Forests for appraisal, a large amount of money had been spent and project construction had already started. There was, then, pressure to give a post-facto clearance as, otherwise, there would be a “national loss”. There are numerous cases where this has happened and there are many dams, including the infamous Tehri Dam, where construction was started many years before environmental clearance was accorded.

There needs, therefore, to be a system where there is both an internal and a subsequent external review of the environmental impacts of proposed projects. The Ministry of Environment & Forests also needs to be a little more pro-active. They need to go out and tell ministries how better to design their projects, so that their objectives are also met and the environment is not destroyed, rather than to just sit back and say “Sorry, this is not accepted”. The Environment Ministry needs to enable other ministries to meet their own obligations while meeting the environmental ones. They need to be helped to

design better and safer projects, for you can't ask the Power Ministry not to produce power, or the Water Resources Ministry not to build dams.

### **Independent Environmental Assessments**

We need to immunize our system of environmental clearances from political interference and though in a country like India you cannot do this totally, at least it can be done partly by setting up some sorts of statutory structures, which are not subject to day-to-day pressures.

At present this appraisal is done by committees of the Environment Ministry which, in any case, are advisory committees and the final decision is taken by the Ministry itself. Initially, when this mechanism was set up, the appraisal committees of the Environment Ministry were all headed or mostly headed by people from outside the government. I had the privilege of chairing one of them. But over the years, perhaps because these committees were too independent, there was a change in the trend. I know that retired government servants, usually retired secretaries to the Government of India, subsequently chaired the committee I used to chair, and I think this is the trend in the other committees also. I am, of course, not at all disputing their credentials, but the point is that in terms of public credibility you need to make sure that you have some people who are independent of the government and who can be above suspicion when they say 'Yes, we looked at this project and we think its alright'. Unfortunately, that is not happening today.

### **Land Use Planning**

We need to develop a land use plan for the country. As many of you might know, a land-use planning board was set up, if I am not mistaken, sometime in the 1980s. It was chaired by the Prime Minister and had, as members, all the Chief Ministers and various Central Ministers. But what I was able to find out was that they only met twice, in the last 20-25 years, and we are certainly no closer to having a land use plan today than we were in the 1980s.

But we need such a plan. We need to be able to take decisions dispassionately and in advance of project formulation and not start taking decisions only when the Reliance Industry, for example, wants to build a refinery in a national park or some cement industry wants to set up in a sanctuary in the Himalayas. We need rational land

use guidelines and we need to make all decisions regarding land use transparent to the public.

One advantage of a land use plan is that you can then apply the “Judo principle”. Given the fact that our government is sometime slow, sometimes corrupt, let us offer industrialists a chance to set up in “compliance zones”, which are already identified. They can be told that if they opt for a compliance zone, then they do not have to go through the elaborate process of environmental clearances. They might save 3 or 4 years and, for an industrialists, for the serious industrialists, the saving of 3 or 4 years is an important matter. If they want to go to a non-compliance area then they have to go through all the elaborate assessment processes. We, therefore, use the slowness and tediousness of our government procedures as an advantage by enticing people to set up in pre-assessed areas and thereby save themselves the time and bother of procuring a special environmental clearance.

### **Transparency**

Another critical need of the hour is for governments to be more transparent in their functioning. There is now pending, in Parliament, a Freedom of Information Bill. When it is finally passed, hopefully many of these things will become easier. Unless we can be open, unless we can share information, unless we can tell people “Look, this is the basis on which clearances have been given”, it is not going to work.

Recently I was in a meeting organized by The Delhi Administration on the right to information. The Delhi Government has now got a Right to Information Act and they have set up a Delhi State Committee, of which I am a member. This was a meeting to orient all the Secretaries and Senior Officers of Delhi Administration on this Right to Information Act. However, one of the objections that kept coming up was, “How can we give out this information? They will use it to criticize us”. My response was: why should the citizens of India not have the right to criticize their government? And if no wrong is being done, how can there be criticism? In fact, transparency would help in minimising the suspicion and distrust that arises when citizens are kept in the dark.

But the objections did not stop there. One officer got up and said: “Everybody knows that half of the things that are done are done at the behest of the Minister. How are we going to be able to justify those?” However, the point is that that is precisely why

you need transparency. When you have a law that everything has to be made public, you have a defence against even your own Minister. If the minister is tempted to “bend the rules” you can always remind him or her that there is now a freedom of information law and anybody can get access to the decision and then challenge or criticize it. That should be an effective deterrent nine times out of ten. Therefore, we desperately need more transparency.

## **Conclusions**

Finally, and I think I would like to end on this note, we must read the writing on the wall. I always believe that ultimately human society will survive and progress. However, wise people can ensure that progress is achieved without heavy costs being paid, especially by the weak, the oppressed and the marginalized. To put it in another way, society evolves, and if you try and stop evolution or come in the way of the process of evolution, then pressure builds up and there is a revolution. And revolutions are messy things. They are costly, they are uncertain, and nobody finally wins.

For the process of evolution to succeed, there is a need to forge new partnerships, especially between governments and community institutions. This is the clear writing on the wall.

Admittedly, there are people outside the government, as there are within it, who have their own vested interests. There are unreliable NGOs, there are people who want publicity, people whose sole purpose is to run down the Ministry and the government. There are a whole host of them. But there are others who have a genuine concern for the environment, an appreciation of the constraints that government systems impose, and a will to be constructive. It is only through constant interaction with such people that a real partnership can be built up.

I think if we can look at some of these agendas, and it’s a good time as the 10<sup>th</sup> Plan is in the process of finalisation, perhaps we might be able to feel a little more secure about our environment and the future of our life support systems. Thank you.

