

# WORKING PAPER

## Future Directions in Biodiversity Conservation

Shekhar Singh



RaAG

Research, Assessment and Analysis Group

Authored in 1994, as an input to the discussions held in the various training programmes, mainly for senior civil servants.

The painting of a white rose, on the cover, is by Uma Bordoloi.

## **THE ISSUES**

The task of determining how best to conserve biodiversity involves resolving three distinct but interrelated types of issues. First, there are ethical issues that need to be resolved. Then, there are ecological issues and, finally, there are issues of practicability.

### **Ethical Issues**

The health and well being of humanity is a fundamental ethical value that underlies most, perhaps all, social philosophies. Social contracts also recognise that to ensure such wellbeing, often certain sacrifices to be made and costs paid. One ethical dilemma is : who should pay these costs and who should consequently benefit.

In the context of conservation, this translates into determining whether it is justified to expect the poor, mainly rural, communities to face the brunt of the deprivations that conservation might imply. It also involves deciding whether future generations, which have no voice today, should have to pay the costs of the insensitivity and indolence of their ancestors. Do people own natural resources? Do people get special rights because of geographical proximity? It also means determining whether animals have any rights or are they only to live and be free as long as it is convenient to human beings.

There are also issues of social morality. Whether nations and national governments have global obligations regarding the common planet they share with others? How participatory must decisions about conservation be? Can a group of people, even if they unanimously decide to do so, have the right to destroy nature? Is the conservation of nature a fundamental principle which no social institution, however democratic or decentralised, has the right to disregard?

### **Ecological Issues**

There are critical ecological issues that need to be dealt with once the moral issues are resolved. What does conservation involve? What are the basic requirements? How much of what needs to be conserved, and where? What are the minimum

viable populations for different species? What should be the minimum size of a conservation unit? How much human use or interference can be tolerated? What are the indicators of degradation or regeneration?

Clearly, the answers to these questions need to follow from the answers given to the earlier ethical questions. How much needs to be conserved, where and how, cannot be determined without first knowing why conservation is being attempted. For example, if animal rights are acknowledged, then what must be left for the animals would be different to if they were not. Similarly, if obligations are seen as primarily global, rather than local or national, then the scientific requirements to fulfill such obligations might be different to if conservation was only a local issue.

#### Issues of Practicability

Conservation is not practiced in isolation but as a part of a social, cultural, political, economic and administrative ethos. Therefore, conservation strategies, while being faithful to the ethical values prescribed and the ecological requirements determined, need to find the best way forward in a world full of constraints and limitations. Some or many people might not be willing to acknowledge the ethical and scientific imperatives for conservation. There might be a lack of capabilities, of integrity, of resources and political will. There might be immediate crisis which make long term values seem abstract and theoretical. Or, most people might be too busy fighting for their immediate survival to care about what happens even in the very near future. Credibilities might have been comprehensively lost, or history might have taught the people bitter lessons, which militate against conservation.

### **SOME CURRENT DEBATES**

#### Participation, Decentralisation and Ownership

Understandably, perhaps the most vigorously debated issue relates to the ownership of biodiversity. Who owns these resources and, consequently, who has the right to decide how they are to be used or conserved? Do those living, historically, in close geographical proximity to them own them primarily or solely? Should not those who have historically protected these resources, or most immediately desisted from destroying them, have the first or sole right over them?

These are essentially questions of social ethics. But, often, mixed up with these and other such questions are questions of practicability: can biodiversity be

conserved without the co-operation and support of the "local people" or the people located geographically proximate to such biodiversity? Would such support be forthcoming if these "local people" were not given some rights or say over such resources?

There are also other issues, related both to science and practicability. Do not people who are closely living with nature know more about it than distant scientists and experts? Should not, then, their decisions on how to manage these resources be scientifically more credible than those of "external experts"?

#### Alternative Resources and Replaced Incomes

Another raging debate is on whether it is correct and practical to divert human pressures from conservation areas by identifying or developing alternative sources of biomass and incomes for those depending on such areas. In this debate, the ethicality of such a strategy is questioned as it is argued that these people were the owners of these resources and therefore they should be handed back these resources rather than be excluded, with sops in the form of alternatives. The science is questioned when it is argued that there is no need to curtail or prohibit the use that people make of this area, as such use is not incompatible with conservation.

The practicability is questioned when it is argued that such a strategy will not work, as the people will either continue to degrade the conservation areas even while they receive alternatives, or that these alternatives will make them rich and therefore even a greater threat to the surrounding biodiversity.

#### Pristine Areas and their Size

Another raging debate, basically centred around national parks and sanctuaries, is about the extent of such areas and the restrictions they imply. Many feel that there is no justification in carving out huge chunks of land (or the ocean) as protected areas, where little or no human use is allowed. The objections to these are, again, on all three counts.

It is seen as unethical to deprive human beings, especially the rural poor, of access from such abundant resources. It is also seen as oppressive and against human dignity, as the restrictions are often enforced insensitively. The preference seemingly given to animals over human beings, and even to the elite tourist and wildlifer, over the poor villager, are also seen as unethical.

It is seen as unscientific as it is argued that there is no need to demand pristineness and that, in any case, nothing on earth is really pristine. It is also argued

that, after all, human beings are also a part of nature and therefore, even from the ecological point of view, there can be little justification in excluding them from the rest of nature. It is also argued that biodiversity can be adequately protected in much smaller areas which can also support human use. Finally, it is argued that studies have shown that fringe areas or multiple use areas have much greater "biodiversity" than so called pristine areas.

The carving out and maintaining of large areas as protected areas, excluding all or most human uses, is also seen by some as impractical. This is especially so, people argue, in a densely populated and poor country like India and would only result in alienating a majority of people from biodiversity conservation itself.

#### Development, Poverty Alleviation and the Environment

This is a more traditional but, nevertheless, still popular debate. Biodiversity conservation is posited as being anti development and anti the poor. In this form it is sought to be raised as an ethical issue, for development and poverty alleviation are both seen as desirable ends. Besides, it is argued, the people want "development" and therefore, in a democracy, it is unethical to overrule what the people want.

It is also offered as a scientific argument when it is argued that conservation of biodiversity has little or no impact on making the lot of human beings better. The thesis that dams and industry will contribute more to humanity than the continuation of species and ecosystems, questions the interlinkages that ecologists have tried hard to establish.

It raises questions about practicability, especially about the political compulsions which, in a democracy, make the decision makers favour popular opinion. It argues that as the common person, the voter, by and large, prefers industrial and infrastructural development to the conservation of biodiversity, wherever there is a potential conflict it is impractical to expect conservation to win.

#### Economic Costs

There is a growing debate on the economics of biodiversity conservation. There are demands that all environmental "costs" and benefits should be reduced to economic costs and benefits, so that "rational" decisions can be made. Environmental economics and natural resource accounting are two increasingly influential disciplines.

Here, again, all of the three types of issues are involved. There is the ethical assumption that all human values can be reduced to economic values. And, considering that economics is exclusively a human pre-occupation, there is the additional assumption all natural values are only human values.

Ecological issues are raised when a demand is made to demonstrate the tangible use, to human beings, of ecological processes and of the continued survival and well being of ecosystems and species.

It is impractical, it is argued, to expect a society to sacrifice economic opportunities for intangible, futuristic, contentious and vague ecological gains. Therefore, it is further argued, unless the people and the politicians can be shown that there is money to be made, or saved, through conservation, it is not practical to expect support for conservation.

### Incentives

At another level, it is being increasingly argued that individuals and communities cannot be expected to conserve biodiversity unless there are some incentives, primarily economic ones, linked to such conservation. "People need to be paid to conserve". And, perhaps, one way of paying them is to "bio-prospect" and "market" the commercially viable components of biodiversity.

Such debates raise ethical questions regarding the value ascribed to nature and the proper motivations for human action. Should all of nature be looked at only as a commodity? Should human beings be expected to act only out of economic self-interest?

Questions of science are also raised. Can species be harvested without damaging the ecosystem? Can commercially important species be cultivated viably? Can the potential commercial value of species be determined quickly?

Many practical issues emerge. Would bio prospecting and commercialisation lead to degradation rather than conservation? Can the linking of economic incentives to conservation be sustained? If one commodotises the environment, would it not be sold to the highest bidder? Can one realistically expect the poor and very poor to work for nothing when everybody else is being paid for their involvement in conservation?

## THE WAY FORWARD

These issues and other such need to be debated. Discussion and dissension are healthy. However, these must be carried out in a constructive spirit, to enhance and guide action rather than to paralyse it.

Clearly the existing system of protected areas can not be wished away. Besides, they perform the important functions of providing protection to large mammals and to ecosystems, a function that might not be easily replicated by smaller conservation units. However, their locations and methods of functioning need to be reviewed.

When the British started creating protected areas in India, at the turn of the century, there existed by all accounts a large network of sacred sites across the country. Rather than respect and strengthen these sites, new areas were closed up. Most of the protected areas so set up did not have social sanction and acceptability.

At the time of the Indian independence, there was still existing a network of socially protected sacred sites. These, again, were ignored and a very significant opportunity lost. Though many of these sites have now been lost, even today it is not too late to identify them and to put in an effort at strengthening the institutions that traditionally conserved these areas. These would be a very valuable addition to the existing network of protected areas.

But more than the locations, the spirit of conservation which appeared to be a part of the Indian society, must not be allowed to disappear. Each community, rural or urban, must be guaranteed the opportunity of having its own patch of wilderness that it can conserve.

Protected areas must be seen as havens for non-human creatures and not just "nature banks" for human use. They must fully guarantee the continuation of all species and ecosystems and of all the related ecological processes and functions. Management strategies must be justified by good science, especially where they imply possible deprivations for the local communities. And, where such deprivations are inevitable, they must be minimised by providing best possible alternatives to the biomass and income requirements of the local communities.

All biodiversity belongs to all of humanity. However, those living in close proximity to it have a special responsibility to protect it for all of humankind, just as humankind has the obligation to ensure that they do not sacrifice alone or in vain. Therefore, the opportunity to conserve must always be available to the local communities and they must never be excluded from this by any centralised or bureaucratic institution. But no one has the right to degrade or destroy.

Local communities who have historically protected nature must deserve some special rights. They must have the first or even the sole right over the finite and indivisible benefits of their patch of nature. Their basic needs must first be fulfilled, whether they be for water, or wood, or grass, before surpluses can be distributed to others. But the infinite and divisible benefits, like knowledge, or aesthetic, cultural and medicinal values, must be accessible to all. And where, even of the finite benefits which are theirs, humankind desires to reserve some for the greater good of all people, then they must be adequately and appropriately compensated for this additional sacrifice.

Nature must not be allowed to be subsumed by economics. There is no reason to measure nature and natural resources in terms of rupees and paise. Nature has its own measures, which are far more fundamental and legitimate than the artificial measure of money. Science must show us what is required to maintain all life with dignity and compassion, for now and for future generations. Poverty must be tackled by redistributing the existing material wealth rather than by destroying nature. Till surpluses have been equitably redistributed, wastes brought down to the minimum and productivity optimised, there clearly exist better ways of tackling poverty.

In the ultimate analysis, this must all seem too idealistic and impractical. Where is the political will? Where is the social commitment? But, then, we are dealing with a system that has convinced the people that there are no options. That anything which deviates even slightly from the imperatives of this system is impractical and unrealistic. By implication, we are being told that we are doomed, and we meekly accept that.

The time has come for the people to refuse to accept what our planners and experts are telling us. The time has come for us to put the objectives of all planning and governance up front and then to work together to develop alternative, workable, systems. These do not have to come from our imagination and ingenuity alone, but

from real life experiences of remarkable and innovative individuals and communities across the world. We must develop an alternate ethics. We must develop an appropriate science. And we must rewrite the manuals of practicability. Living life healthily, with compassion and dignity, without compromising the options of our children and their children after them, must be shown and made to be practical.

