Theme 3 – Valuing the Environment

Presentation: Which Value for Nature?

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The ocean has been used as a metaphor in diverse cultures for awakening human society to the causes and consequences of disaster brought about by a collapse in the ethical values that sustain life. The Apocalypse in St John's Revelation has served as such a source of awakening. In India, the metaphor of destruction is the *Pralaya*, or dissolution. As described in the *Vishnu Purana*, the world is destroyed and recreated by the cosmic being when human values fail to maintain nature and society. Then Vishnu the Creator assumes the character of Rudra or Shiva the Destroyer and descends to reunite all his creatures with himself. He enters into the seven rays of the sun, drinks up all the waters of the earth, leaving the seas and the springs dry.

Among the degradation of values that brings forth this dissolution is the reduction of all value to wealth and the exclusion of compassion from human relationships. As the *Vishnu Purana* states, 'The minds of men will be wholly occupied in acquiring wealth, and wealth will be spent solely on selfish gratification ... The people will almost always be in dread of dearth and apprehensive of scarcity'.¹

These links between greed, scarcity and total destruction are at the heart of the ecological crisis which engulfs us. The reduction of all value to monetary value is identified as an important aspect of the crisis of scarcity generated by the very process of increasing affluence.

It is often stated that the roots of environmental destruction lie in our treating natural resources as 'free' and in giving them 'value'. In the dominant paradigm, value is reduced to market price, forgetting that value is derived also from non-tangible sources such as the sacred and from resources held as commons; and such value is too high to be placed at the mercy of the market-place.

For most ancient cultures, the highest form of value in nature has been embodied in the idea of the sacred - sacred forests, sacred rivers, sacred seas have been the cultural and spiritual strategies of assigning a high value to nature and its protection. For the traditional fishermen in Kerala in India, for example, the sea is *Kodalamma* - mother and goddess who offers limitless wealth, if she is revered.

Traditional fishing communities have well worked codes of conduct to ensure justice and sustainability in harvesting the bounties of the ocean. These unwritten rules protect the oceans as a regulated commons. Even today, half the fish consumed comes from communities using the seas as commons, using technologies that protect species diversity and livelihoods, whilst providing fish for local communities rather than global markets. Spiritual value, ecological common sense and social justice come together in a value system that limits exploitation. It is this very value system that has been identified as 'backwardness and primitiveness' in the 'Mare Liberium' or 'freedom of the seas' paradigm propounded by Hugo Grotius in 1608, according to which the fishery resources are so abundant, they can be exploited freely without fear of depletion.

For traditional fishing communities the seas are 'free' in both a spiritual sense and in the social sense that they belong to none, and ought to be denied to none. The clash in values brought forth by the crises in fisheries is also a clash over which freedom humanity will promote - the freedom of capital to exploit nature or the freedom of nature and people to sustain themselves.

The recognition of nature's 'value' can therefore take place at many levels leading to diverse paradigms and actions: the cosmological, spiritual valuation leads to a rejuvenation of spiritual traditions; the social valuation leads to a recovery of the commons; while the commercial valuation leads to the programme of privatisation, marketisation and commodification of all resources.

This conversion of the sacred and the commons into a commodity has been at the root of the fisheries crisis that we observe in every ocean. Nine of the world's major fishing grounds are threatened. Four have been 'fished out' commercially. The FAO now acknowledges that an estimated 70 per cent of global fish stocks

are 'depleted' or 'almost depleted' and that 'the oceans most valuable commercial species are fished to capacity'. This over exploitation of fish in a price-based paradigm destroys both the marine diversity that is necessary to renew the life of the oceans, and the livelihoods of traditional fishing communities whose resources are either usurped or destroyed.

The destruction of marine biodiversity

Technologies such as purse seining and trawling are powerful but destructive. Highly capitalised trawler fleets and purse seiners use nets which scoop up whole shoals of fish among which are 'by-catch' and 'discards': commercially useless because they are the wrong species or the wrong size. As the recent issue of the *Ecologist* reports, annual global discards in commercial fisheries have been conservatively estimated at 27 million tonnes - equivalent to more than one third the weight of all reported marine landings in commercial fisheries world-wide.

The diverse species treated as waste by global commercial fishing fleets is the economic base for the traditional fisherman, and the ecological base for the sustainability of the marine environment.

It is estimated that 100 million of the world's poorest people depend on fishing for all or part of their livelihoods. According to an FAO estimate, there are two million small scale boats and one million large scale boats: it is the latter that cause the problem of over-fishing. Most of the large fishing vessels are controlled by trans-national corporations and possess technology for fish detection, catching and processing, allowing them to become more efficient hunting machines: huge catches are made, but at the high price of destroying the livelihoods of traditional fishing communities through the ecological impact of undermining their very basis.

Catches of fish world-wide plummeted for traditional fishing communities; taking India as an example, sardines and mackerel, once the mainstay of the fisheries, fell from 250,000 tonnes in 1968 to 87,000 tonnes in 1990. This situation is replicated globally, resulting in small fishermen throughout the world organising themselves to protect their right to fish.

On 23-24 November 1994, one million fish workers from nine maritime Indian states covering a coastline of over 7,500 km went on strike. They were protesting against Indian government policies giving international joint ventures free access to fish in the country's Exclusive Economic Zone (EEZ).

Based on a narrow definition of 'productivity', fishing technologies are relentlessly destroying the livelihood of millions; taking into account the criteria of the sustainability and diversity of fish yields, these commercial technologies are in reality very unproductive and wasteful.

The Vice President for Sustainability at the World Bank, Ismail Serageldin has been stating recently that the depletion of marine fisheries will allow us to move from 'primitive' hunting technologies to farming of fish. However, given the recent experience with intensive aquaculture, there is little indication that cultivation of fish guided only by maximising of global commercial value of selected species will be sustainable. Sustainability needs to take diversity of occupations and species into account. It also needs to see production in a longer time frame that is usually considered by commercial interests or economic experts at the World Bank.

The shrimp and fish culture project of the World Bank (1991) is an example of the financing of ecological disaster by only recognising the international market value of shrimp.

The project's aim was to deliberately destroy the ecological models of shrimp farming and replace them with ecologically destructive practices. The staff appraisal report states, 'To date, almost all shrimp culture is based on a traditional, extensive shrimp culture system, with ponds frequently used for paddy cultivation in the rainy season and converted to shrimp and fish culture in the remaining period. As a result, shrimp yields are low, reflecting poor infrastructure, low density of stocking, inadequate or no water exchange, lack of feed and low level of technology.'²

The yield of shrimp quite clearly is not the only yield in traditional shrimp culture, which considers the yields of paddy and fresh water simultaneously with that of shrimp, thus conserving ecosystems while producing enough for human needs. In the state of Kerala such rotational cultivation of shrimp and paddy is

called *Chemmeen Kutti* and *Pokkali*. The World Bank's philosophy, however, does not allow such conservation and need-based production to be considered 'productive': only that which increases exports and profits is 'productive', in this view.

The proposal to give market values to all resources as a solution to the ecological crisis is like offering the disease as the cure. This disease is reflected in the change in the meaning of the term 'resource' itself, which originally implied life. Its root is the Latin verb *surgere* which evoked the image of a spring that continually surges up from the ground. Natural regeneration, along with human reciprocation, were inherent in the traditional notion of 'resource'.

With the advent of industrialism and colonialism, however, a conceptual break occurred. 'Natural resources' became those raw materials of nature which were exploited for industrial production and colonial trade. With the capacity of regeneration gone, the attitude of reciprocity has also lost its ground: it is now simply human industry which 'impart value' to nature. For natural resources required to be 'developed'. Nature's capacity to renew itself had been denied. The economy of nature had been undermined by the economy of the market.

In a stable constellation of economic organisation, nature's economy is recognised as the most basic, in the sense that it is the base of the people's and market economies; however, development and economic growth treat the market economy as primary, neglecting nature's economy and the people's economy. Commodification of resources needs to be replaced by the recovery of commons which involves the reaffirmation of nature's economy; and this in turn calls for the restoration of the spiritual, ecological and social dimensions of nature.

Marketisation is based not only on the fallacy that 'value' equals 'price', but also on the myth that privatisation can help to preserve resources by preventing the over-exploitation that results from commonly held property resources. While commons are based on inalienability of shared rights derived from use, privatisation is based on tradeability of private property. The assumption that alienability is more conducive to conservation is derived from the false association of price with value.

Thus as Pearce and Warford argue, 'in the absence of rights to sell or transfer land, the land 'owner' may be unable to realise the value of any improvements and thus has little incentive to invest in long term measures such as soil conservation.' This assumption is patently false, since the best examples of soil conservation (for example, the hill terraces of the Himalaya) are realised precisely for the opposite reasons. Communities not threatened by alienation of resources and their benefits have a long term interest not only in conserving resources, but also in maximising benefit from them without compromising the viability of these resources.

Economic growth takes place through the over-exploitation of natural resources which creates a scarcity of natural resources in nature's economy and the survival economy. Further economic growth cannot help in the regeneration of the very spheres which must be destroyed if economic growth has to take place. Nature shrinks as capital. The growth of the market cannot solve the very crisis it creates. Further, while natural resources can be converted into cash, cash cannot be converted into nature's ecological processes. Those who offer market solutions to the ecological crisis limit themselves to the market, and look for substitutes to the commercial function of natural resources as commodities and raw material. However, in nature's economy, the currency is not money, it is life.

The neglect of the role of natural resources in ecological processes and in people's sustenance economy, and the diversion and destruction of these resources for commodity production and capital accumulation, are the main reasons for the ecological crisis and the crisis of survival in the Third World. The solution seems to lie in giving local communities control over local resources so that they have the rights and responsibility to rebuild nature's economy, and through it their sustenance.

We have called this recovery of the commons 'Aquarian Reform' in the context of the crisis of fisheries. As we stated in *Ecology and the Politics of Survival* ³ Aquarian Reforms have two facts:

1. Reserving the right to own fishing assets exclusively to those who are willing to fish themselves, no absentee 'sealords'.

2. Placing the primary right and responsibility for management of the marine resources at the micro and mezzo levels to such a working fishing community.

These reforms are mutually reinforcing and will restrict the tendency to enjoy short-term gains at the expense of a long-term crisis. They will ensure greater distributive justice, participation and sustainability.

- ¹ Ved Vyas, Sri Vishnu Purana, Geetha Press, Gorakhpur, January 1982
- ² 'The Aquaculture Disaster: Prawn Profits Pauperise Coastal India' in *The Ecologist Asia*, Vol. 3 no.5 September/October 1995
- ³ Vandana Shiva, 'Ecology and the Politics of Survival: Conflicts over Natural Resources in India', Sage Publications, 1991, p.325