

Environment and New Economic Policies

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Reprinted from **Economic and Political Weekly**, Vol XXX, No 17, April 29, 1995
Pagination as in original

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The current overarching objective of the government to integrate India into the global market has meant that Indian natural resources are being made available to outside markets, the vast Indian middle class as a market is being opened up to foreign corporate sectors and natural resources, painstakingly conserved and sustainably utilised by Indian communities, are now up for grabs.

TWO years back we started a review of the impact of the New Economic Policies (NEP) on India's environment and on those communities which depend directly for their subsistence and livelihood on the natural environment [Kothari and Kothari 1993; Kothari 1994]. It was shown that each of the major components of these policies were having a severe environmental (and consequently social) impact:

(i) The drive towards an export-led model of growth was rapidly sacrificing natural resources to earn foreign exchange, as was especially seen in the fisheries and mining sectors;

(ii) The move towards liberalisation had resulted in an atmosphere of a free-for-all, with industries increasingly ignoring environmental standards, and state governments sacrificing natural habitats, including their own wildlife protected areas, to make way for commercial enterprises;

(iii) The directive to reduce government expenditure was resulting in cuts in social and environmental sectors. This was leading to a reduction in programmes for the conservation and regeneration of natural resources;

(iv) Opening up of the economy was bringing in companies with a notorious track record on environment (including pesticide manufacturers who had almost wound up in their parent countries), and wasteful consumer goods and toxics which were adding to the country's garbage and health problems.

A brief review of the events during 1994-95 shows that though there has been an increase in the allotments to social sectors in response to the widespread outcry against the earlier cuts, the trend of sacrificing natural habitats and resources for short-term gains, and of ignoring the daily survival needs of local rural communities, has continued unabated. There is in the new policies an over-arching objective: to integrate India into the global market. This means making available Indian natural resources to outside markets, and making available the vast Indian middle class, as a market, to outside companies. Natural resources, painstakingly conserved and

sustainably utilised by Indian communities, are now up for grabs.

EXPORTS: SELLING OUR FUTURE

Heavy reliance is being placed on exports as a means to drive the economy forward. Not for one moment am I against a judicious policy of exporting what India has an abundance of. But a rational export policy would ensure that domestic supplies of the same products are not hijacked, that the exports do not cause domestic prices to skyrocket, that the resultant exploitation is ecologically sustainable, that the rights of local communities from whom resources are being extracted are respected, and that they control and benefit from the exports as far as possible. Unfortunately, the current thrust violates each of these principles.

The clearest examples of this destructive thrust are in the case of fisheries and aquaculture, floriculture, cash cropping, and mining. 1994 was marked by a series of massive protests by fisherfolk living along India's coasts. On February 4 and again on November 23, millions of fisherfolk struck work, refusing to engage in any fishing, fish landing, or fish selling. Their target of ire was the Indian government's current thrust towards opening out the country's fisheries to export-oriented, mechanised harvesting. They claimed that this thrust would devastate both the marine environment and small-scale fisherfolk's livelihoods.

Marine product exports rose by well over 30 per cent from 1992-93 to 1993-94, increasing their share in the overall exports from 3.2 to 3.6 per cent. Exports of fish and fish products as a whole have risen from 1,59,000 tonnes, valued at Rs 960 crore in 1990-91, to 2,58,000 tonnes, valued at Rs 2,552 crore in 1993-94. In the same period (1991-94), 82 companies were given clearance for joint (foreign and Indian) venture marine fisheries, using 255 deep sea fishing trawlers.

Not surprisingly, joint ventures being allowed into India are all export-oriented. According to FAO and other data, fish catch in virtually the entire world is declining, with the exception of the Indian ocean. It is obvious that the major fishing companies,

and the rich fish-eating nations, are eyeing our waters to satiate their large appetites. Unfortunately, lured by the foreign exchange prospects, our government has given in to this unjustified and unsustainable demand. Proponents of trawling claim that these ventures will be allowed to fish only in deep waters, where traditional fisherfolk do not go. But past experience has shown that trawler owners find it convenient and cheaper to fish closer to shore. Also, trawlers are often used in the fish-breeding season, during which time traditional fisherfolk usually give the seas a rest. The results, for India's marine ecosystems and traditional fisherfolk, are already proving to be disastrous. Physical clashes between trawler owners and local fisherfolk are a common occurrence. It is not at all surprising that millions of fisherfolk are so stridently asking for a change in policy.

Fisherfolk and farmers along the coasts will also be seriously hit by the spate of new prawn and shrimp farming ventures which are being cleared. There has been a rapid expansion of such aquaculture, largely oriented to foreign demand for sea-food. Such farming involves intensive management of coastal ecosystems, oriented to a single species; this invariably disrupts the delicate salinity balance of coastal areas, and reduces their biodiversity. In many areas of the world (Thailand, Philippines, Taiwan, Ecuador), such farming has left marine deserts in its wake. Since large-scale operations standardised to meet stringent export requirements are affordable mainly by big companies, benefits hardly go to small fisherfolk.

The government of India has big plans for aquaculture in the country. The head of the Aqua Foundation of India, M Sakthivel, was recently quoted as projecting a jump of shrimp exports from 70,000 tonnes at present to 2,00,000 tonnes by 2000 AD, and stating that "the world is looking to India to meet its shrimp requirements". A World Bank funded project alone expects to convert vast stretches of brackish water area along the coast into aquaculture farms; a recent estimate suggests that about one million ha are suitable for such conversion. The promise is that this will provide employment to several million people, cause minimal environmental damage and no displacement, and of course earn the country immense foreign exchange. However, studies of farms which have been set up in the last few years, for instance in the Nagai Quaid-e-Milleth district of Tamil Nadu, and the Nellore district of Andhra Pradesh, have shown that serious pollution problems have been caused by prawn farming, and that per unit of area, aquaculture has provided less than half the employment that farming previously did. In addition, considerable

depletion of groundwater has taken place, and salinity of the water and of the soils on land surrounding the aqua-farms, has increased significantly. Threats have been reported to the biodiversity and livelihood resources of ecologically sensitive areas like the Pulicat Lake (straddling AP and Tamil Nadu), by indiscriminate expansion of aquaculture. Similar experiences are being reported from other parts of India's coastline [see K G Kumar and S Joglekar 'Plunder of the Depths', *Business India*, August 15-28, 1994; Jacob D Raj and Daisy Dharmaraj 'Aquaculture, A Boon or a Bane: Andhra Pradesh Experience', *Prepare*, Madras]. Other sectors slated for major export-oriented production are floriculture and agro-products, including processed foods. Between 1992-93 and 1993-94, India's agro-exports jumped from Rs 7,430 crore to Rs 10,062 crore. Agriculture production oriented towards the export market can be extremely damaging to the environment and to the livelihood security of small farmers. Since 1991, 41 joint ventures for export-oriented flower production have been approved; from a figure of 0.6 million US dollars in 1987-88, export had already leaped to 4.8 million US dollars in 1992-93. Intensive floriculture can be ecologically destructive, given that production is highly dependent on the use of fertilisers, pesticides and other artificial inputs. It is also likely to push out the small farmer, who will not have the necessary resources to invest, in favour of the large farmer and the private corporation.

Minning is another major thrust area for investments, especially related to exports. 1994 saw major changes in the National Mining Policy and amendments in the Mines and Minerals Development Act, primarily towards easing investments by the private sector, including foreign concerns. Immediately several companies have evinced interest. A subsidiary of an Australian consortium of mining firms, the Australia Indian Resources, has applied for prospecting licences over a staggering 50,000 sq km in Andhra Pradesh, Karnataka, and Maharashtra. One of the world's largest mining companies, the British RTZ Corporation Plc, has set up a subsidiary in India named Kembla Coal and Coke, and is scouting for joint ventures for iron ore mining in Orissa. These are just tips of the coming iceberg.

The concern is that in the desire to cash in on the country's vast mineral resources, neither state governments nor private companies are likely to bother about such niceties as natural resource conservation and local community rights. Mining, especially surface mining, is extremely devastating, as witnessed in the vast desertscapes created in the iron ore belts of Goa, the limestone belts of Rajasthan and Uttar Pradesh hills, the coal belts of east India, and other areas. As an example of what is to come, Orissa's

export earnings have risen by 36 per cent per annum over the decade, with minerals topping the list of items exported; what is ignored is that this has been at the cost of large-scale deforestation and dispossession of lands from tribal communities. Even rich wildlife habitats are being sacrificed by the same state government which once declared them protected; recently the Kudremukh Iron Ore company was given a new lease to prospect for iron-ore in the middle of the Kudremukh National Park, one of the few remaining evergreen forest patches in Karnataka.

Nor does the argument, that multinational companies are able to do mining in a safer and less environmentally destructive way, hold much water. For instance, RTZ Corporation, has a global record of destruction and displacement which few others can equal: violation of indigenous people's territorial rights in South America and South-East Asia, encouraging a bitterly fought civil war in Papua New Guinea, furthering white rule in South Africa. A company like this should not be touched with a barge pole by the Indian government; but then, forex speaks much more powerfully in its current mindset than does environmental sustainability and human rights.

With the acceptance of GATT by the Indian government, the above trends can only intensify. The GATT secretariat projects that the major boost in international trade by this treaty will be in the sectors of textiles, agriculture/forestry/fisheries, and processed foods/beverages. In its official *Economic Survey* for 1994-95, the government has gleefully reported that these are the precise sectors in which "India's existing and potential export competitiveness lies", and that they could earn the country an extra 2.7 to 7 billion US dollars per annum. The commercial stakes are very high, and competitiveness can be greatly increased by ignoring the costs of environmental conservation and social security measures needed to achieve sustainability in production in these sectors.

Also pushing the unsustainable thrust towards export-oriented exploitation will be India's continuing debt-repayment burden. The burden is expected to be about 13 billion US dollars in 1995-96, and the government has clearly stated that a healthy balance of payments situation can only be achieved with greatly increased exports. The finer print reads: "no matter at what cost".

A FREE-FOR-ALL

The thrust towards exports has been accompanied by a corresponding relaxation of various controls which were earlier exercised over the industrial and commercial sector. Once again, no-one is arguing that bureaucratic controls should not be relaxed. However, all industrial countries of the world have gone through a process of tightening

environmental standards and controls over industrial and development projects, for the simple reason that project authorities and corporate houses on their own have not shown environmental and social responsibility. In India, there is a reverse process going on, that of loosening, in policy or in practice, the environmental safeguards so painstakingly built up over the 1980s. Bureaucratic red-tapism was an inappropriate bathwater for the environmental safeguard baby; what the new economic policies are doing is to throw out the baby with the bathwater.

There are several examples of this, apart from the changes in the mining policy and law, mentioned above. In the 1993-94 Budget, the government announced a five-year tax holiday for new industries being set up in industrially backward areas; this has now been extended to all backward areas by the department of revenue. Since such areas are defined primarily from the narrow economic point of view, almost invariably they are areas where the last vestiges of natural habitats and traditional cultures remain. The government is still viewing relatively non-monetised, non-commercialised livelihoods (such as traditional organic farming, small-scale fishing, pastoralism, and village industries), as 'backward', not realising (or not wanting to accept the fact) that these are in fact the most sustainable ways of living on earth, and not thinking of ways to encourage and enhance these livelihoods to meet the challenges of modernity. And so in large parts of the country which have so far been free from the suicidal path of industrial development (Kutch, Ladakh, Andaman and Lakshadweep Islands, Bastar...), industries are being given a red-carpet welcome by the new policies. With virtually no monitoring by official environmental agencies in these 'remote' areas and with weak local NGO presence, this process is inevitably going to lead to ecological devastation and social disruption on a massive scale.

A sample of the industrial policy reforms which some states have announced, as listed in the *Economic Survey* 1994-95, gives a taste of things to come:

- Haryana has set up high powered committee to take spot decisions on foreign investments, NRI projects, and 100 per cent export-oriented projects; it has also announced that all projects will be cleared through the State Pollution Control Board within 15 days.
- Kerala has introduced a green channel scheme to expedite clearances.
- Punjab has constituted a committee to provide land 'off the shelf' and is formulating a policy to ensure clearances within 24 hours of the submission of a proposal.
- Rajasthan has exempted 155 SSI industries from obtaining a No Objection Certificate

from the State Control Board, and reduced the number of industries to be inspected under the Factories Act from 15 to 3.

In each of these cases, it is clear that the state governments attach no importance to the critical environmental appraisal process which industries must go through: it is impossible for such an appraisal to be done within 15 days (Haryana), much less within 24 hours (Punjab), not to mention 'on the spot' (Haryana)! The whittling down of the list of industries requiring pollution clearances and Factories Act inspection (which includes the plant's working environment and state of maintenance), by Rajasthan, is even more chilling.

A specific alarming example of industrial deregulation is the automobile industry. The *Economic Survey* 1994-95 boasts that "delicensing of the automobile industry has led to a boom in investment in automobile components and plans for producing new cars"; it notes that many of the biggest international names in the field are entering into joint ventures, including General Motors, Peugeot, Mercedes, Daewoo, and Rovers; it also records the following jumps in vehicular sales over the period 1993-94: 20 per cent for cars, 30 per cent for jeeps, 25 per cent for commercial vehicles, 18 per cent for two-wheelers, and 41 per cent for three-wheelers. Already Indian cities are amongst the most polluted in the world, with severe health impacts on their residents. While undoubtedly many of the new vehicles will be less polluting than the existing Indian models, the sheer jump in numbers will lead to an increase in aggregate pollution levels. This is very evident in Delhi, for instance, where the last few years have seen a quantum jump in pollution levels, caused primarily by the 90,000 new vehicles which get added to its streets every year.

Apart from the threat posed by liberalisation to our air and water there is a direct attack on land resources also. As noted above, Punjab is ready to sell land 'off the shelf'. There is increasingly talk of relaxing the Land Ceiling Acts for rural and urban areas, to make way for the massive landholdings which industry and commercial farming or floriculture will require. Not only prime agricultural land, but also pastures and wetlands, which are critical for biodiversity conservation and for poor local communities, are likely to fall victim to this trend. The process also flies in the face of the government's oft-repeated and obviously hollow claim of being concerned with increasing social and economic equity.

One rather alarming example of this is the proposal to lease forest lands to industries, for growing raw materials. Ostensibly to reduce the pressure of industries on natural forests, this move is being severely criticised on a number of counts: in places, good forest areas may be leased out in the guise of degraded forest lands, and the dependence

of local poor people (especially pastoralists) on degraded lands and grasslands will be denied if these lands are leased to industry. Astonishingly, environment minister Kamal Nath defended the move by saying that state governments were not fully able to protect forest lands, and that private companies may be able to do this better! Alternative suggestions regarding farm forestry to meet industrial demands have so far been ignored by the ministry. It is indeed sad that the very ministry which should be resisting and moderating the new economic forces is capitulating to unjustified industrial demands.

Liberalisation of imports has also led to dangerous trends. Last year we reported the enormous influx of consumer goods and the consequent rise in waste materials going into our water and soils. Plastics are just one example of this. Now, evidence has surfaced that the situation is far worse: India is becoming the dumping ground for a whole range of toxic wastes from the industrial countries, much as has happened to many other tropical countries in the past. Pepsi Cola Company, welcomed with folded hands by the government, is reported to be exporting some 45,000 tonnes of plastic waste into India. Greenpeace International reports that an Indian company, Futura Industries of Tamil Nadu, has imported 10,000 metric tonnes of plastic waste since 1992. This is for recycling, but Futura has admitted that 30-40 per cent of this cannot be re-used. In the first half of 1994, 5 million kg of metal wastes were imported from Australia; between 1992 and 1993, imports of lead acid battery wastes from the same country

increased nearly three-fold from 1,26,000 kg to 3,46,000 kg. In October 1994, a delegation of Australian officials was to come to India to negotiate more such trade arrangements; fortunately, due to widespread public protest, the tour was cancelled. The ministry of environment has now reportedly taken a strong view against such imports, but it has been sidelined by other government departments, including the department of chemicals and petrochemicals, and by sections in industry, including the ship-breaking and small-scale plastics industry. All that has happened is that a committee has been appointed to suggest conditions under which the import can be allowed.

Another indication of the eagerness of the Indian government to please foreign investors and major Indian industries is the alacrity with which it has proposed an intellectual property rights (IPR) system for new plant varieties. Under GATT, India is obliged to introduce a *sui generis* IPR system for plants; however, it has a five-year grace period in which to do so, and there is no written obligation to follow any existing model of IPR legislation. However, under pressure from seed companies who want monopolistic rights to the varieties they produce, the agriculture ministry has not only already drafted a Plant Varieties Act, but more or less modelled it after the International Convention for the Protection of New Varieties of Plants (UPOV). The UPOV Convention has recently been amended to almost eliminate sections guaranteeing farmers' and researchers' exemptions from being subject to IPR

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monopolies. Though the Indian draft has "included strong sections on farmers' and researchers' rights, it is feared that these will not stay for long: it is probably a matter of time before the Indian government succumbs to the intense pressure from the international seed industry, which caused the dilution of these aspects in the UPOV Convention.

Once we are on the road to accepting private IPRs on life forms, there is no way we will be able to resist the global trend to make such IPRs more and more monopolistic, affecting both farmers and the crop genetic diversity which they have developed and continue to depend on. India could well have adapted a system of protection which gave common/public rights to plants, which obliged breeders to publicly share their inventions while assuring them financially adequate and socially acceptable returns, which emphasised diversity rather than uniformity in the use of crops, and which used public good rather than private profit as the major incentive for creativity (as has so far been done in the public sector seed development programme). But Cargill and Imperial Chemicals Industries (ICI) and W R Grace would not have liked that, so it was not to be.

ECONOMIC SURVEY AND ENVIRONMENT

For the second year now, the official *Economic Survey* of the government of India has included a section on environment. As was the case last year, this time too it is an insignificant component, totalling a mere three out of 167 pages. Again like last time, it is tucked away in the chapter on 'Infrastructure', treated like an irritating aside.

There is obviously no understanding amongst the country's economic planners, of the cross-cutting significance of the environment. The fact that *all* human (including economic) activity is ultimately based on four elements – land, water, air and biological resources – and that therefore economic activity must be mindful of the sustainability of these elements, seems to continue to elude Manmohan Singh and co. If the government was serious about sustainable development (as grandly proclaimed by Narasimha Rao at the Earth Summit in Rio in 1992), it would at the very least analyse the two-way relationship between environment and development as it unfolds every year, and then take corrective measures.

There is no evidence of this in the *Economic Survey*. The section on environment gives a general picture of the dismal situation regarding forests, land and water and pollution, and then lists a few steps that the government is taking to tackle these. It does not link the year's major economic developments with this situation; it does not, for instance, analyse whether the impact of these developments was detrimental or

corrective. Nor does it do the reverse: analyse the implications of the environmental situation for future economic development in India.

This failure is all the more glaring because the facts presented in this brief section all point to the need to drastically review the economic policies of the country. Perhaps this is why no analysis is presented, for if done honestly, the government would have to admit that the environmental crisis is an outcome of these very policies. The *Survey* admits, for instance, that:

- industrialisation has put severe pressure on natural resources;
- 90 per cent of water in 241 Class II cities is polluted;
- 54 per cent of the urban and 97 per cent of the rural population do not have sanitation facilities;
- mangrove forests on our coasts are under great threat due to oil spillages from ships and coastal refineries, discharge of industrial effluents, etc.

Yet, it fails to state that the economic activities of the past year (or for that matter of the 1990s as a whole) have only served to put further pressure, cause more pollution, destroy more mangroves; and on the other hand, the drastically increased budgets that would be required to tackle the pollution and sanitation and other problems have not been forthcoming. It does not draw the logical conclusion from the data presented: that mechanised trawling, large-scale aquaculture, intensive cash cropping, mining, indiscriminate industrial growth in ecologically sensitive ('backward') zones, and other activities which are now being promoted, must be halted and alternative forms of economic activity sought which do not cause irreversible ecological damage. It blithely talks of the government's strategy of conserving natural resources, preventing and controlling pollution, conducting prior environmental impact assessments, and involving people in afforestation, but does not show how the past year's policies and programmes have actually managed to achieve these steps, or indeed how the next year's policies and programmes will do so.

To give a specific example of the failure to logically diagnose its own data, the *Survey* mentions that stress needs to be given to integrated pest management (IPM), which emphasises a mix of pest control methods, minimising the use of hazardous pesticides; yet in the same breath, estimates that pesticide use has increased from 68,000 tonnes in 1992-93 to 83,000 tonnes in 1993-94. Though it claims that 5,000 extension workers have been trained in IPM techniques for cotton and rice, no policy statement is made that there will be an attempt to gradually replace pesticide use by IPM or other safer methods. More generally on agriculture, the *Survey* states that there is a "large unfinished agenda of agrarian reform, special support

programmes for small farmers...", but fails to analyse how the thrust towards agro-product exports, floriculture, and aquaculture is likely to affect this agenda. Nor does it anywhere mention the need to take the path towards sustainable agriculture, which would involve getting away from the green revolution model towards farming which uses minimal chemicals, indigenously produced seeds, locally harvestable water, and soil/moisture conservation measures. Integrated watershed development and conservation schemes are mentioned in passing, but the *Survey* does not show how, if at all, the policies and programmes being pursued actually encourage these schemes.

The government has grandly declared, in its *Economic Survey* 1994-95, that the country's basic goals are "growth, equity, self-reliance, and modernisation..." and "sustained improvement in the living standard of people of India, especially the poor". While there is plenty of evidence that the goals of growth and modernisation are being vigorously followed, those of equity and self-reliance are quite obviously being sacrificed at the altar of short-term and narrow-visioned material growth. NSS household consumption data suggest that in the first two years of reforms, the 'upper' 30 per cent of population increased their share of the nation's economic pie at the cost of the remaining 70 per cent; this increase in inequality is perhaps even more pronounced if one takes into account the fact that many non-marketed goods and services (e.g. fresh water, free fodder, medicinal plants, etc) are increasingly being snatched from the poor to commercialise for the benefit of the rich. To talk of 'sustained improvement' in the lot of the country's poor is a mockery, when the policies are only serving to exploit the natural resources on which these poor are dependent, in order to enrich the trawler owner, the large farmer, the big Indian industrialist and the multinational company, the contractor, the mine-owner, and of course the politicians and bureaucrats who get their share of the economic pie. The poor will undoubtedly get some crumbs falling their way, but that would be a pathetic form of equity, sustainability, and self-reliance indeed.

PEOPLE'S RESISTANCE INCREASES

It is not my case that all investments being made as a result of the new economic policies, by foreign or Indian companies, are environmentally destructive. Several investments in pollution control technologies, non-conventional and renewable energy sources, recycling, and so on, are likely to be made. For instance, proposals for the generation of 450 MW by wind farms and solar plants are presently under consideration. But even a cursory glance at industrial trends clearly shows that investments on sustainable and conservation-

oriented projects are insignificant compared to what is going into resource-exploitative, polluting, land-grabbing, inequitous projects. This is not surprising, given that quick money is easier to make from the latter than from the former and that those who stand to gain from short-term exploitation of natural resources are the ones who are dictating the decisions on economic policies and programmes. If forest-dwellers, village women, marginal farmers, tribals and nomads, small-scale fisherfolk, and other such ecosystem-dependent people were taking the decisions, we would have a very different structural adjustment process taking place.

There are, indeed, signs that this may not be a dream. People's mass resistance to the new policies and programmes has significantly increased, and is having some effect not only on individual projects but on the policies themselves. Most widespread was the agitation of traditional fisherfolk, with two nationwide strikes against the deep-sea fishing policy. Apart from gaining an impressive following amongst fishing communities, the agitation, and some hard questioning from members of parliament during a heated debate on the subject, led the government of India announcing a review of this policy.

Sporadic successes elsewhere also signalled hope. Sustained opposition by villagers and activists continued to stall work on the Du Pont-Thapar Nylon plant in Goa; the agitation reached a head in early 1995 when a young boy was killed in police firing during a demonstration against the plant, and villagers in retaliation burnt structures on the plant premises. Du Pont announced that it may consider an alternative site in India. In Gujarat, the high court ordered a stay on the denotification of the Narayan Sarovar Sanctuary, which had been illegally done by the state government in 1993 to make a way for a cement factory. It is not clear how long this order will remain in place given the intense pressure of the industrial lobby to clear the project, but at least environmentalists have won some time to gather force. In Orissa, a mix of environmental and political opposition has continued to stall the denotification of Balukhand Sanctuary (proposed by the Biju Patnaik government to make way for a hotel complex), as also of the Bhattarkanika Sanctuary (home to the world's largest congregation of the endangered Olive ridley sea turtle, and threatened by trawling, fishing jetties, and roads). International groups like the Mangrove Action Project joined in the protest and announced that they would press for a boycott of shrimp and prawns produced in such destructive manner. Greenpeace International has joined Indian groups in demanding a halt to toxic waste exports from industrial countries to India. Innovative protests against the ridiculous proposal to import 7-10 million tonnes of cattle dung

from Holland (impregnated with chemical feedstock), including the dumping of 50 tonnes of 'swadeshi' dung by farmers outside the Lok Sabha, led to the proposal being rejected. And though the widespread opposition to GATT did not stop the Indian government from entering into the treaty, considerable groundwork to subvert its implementation appears to have been done [Toxic Waste Trade: A Primer, Public Interest Research Group, 1994].

These successes are at best temporary, helping to buy time. The most pressing need is for environmentalists, social activists, and sensitive academics to work out an alternative strategy for the economic renewal of the country, a strategy which is socially and environmentally sensitive and sustainable. Elements of such a strategy are present in the widespread mass movements built around natural resource conflicts, and in the various alternative energy, agricultural and industrial projects which are success-

fully being run by citizens groups and a handful of government officials across the country. But unless these elements can be bound together into a comprehensive conceptual and practical alternative, the powerful forces unleashed by Manmohan Singh and the IMF will continue to lead the country over the brink of survival.

[This article is dedicated to Nilesh Naik, age 25, killed in police firing in January 1995, during an agitation against the Thapar-Du Pont Nylon factory proposed to be set up in Goa. The factory remains stalled due to popular local resistance.]

References

- Kothari, A (1994): 'Environment', *Alternative Economic Survey*, Public Interest Research Group, New Delhi.
- Kothari, M and A. Kothari (1993): 'Structural Adjustment vs Environment', *Economic and Political Weekly*, Vol XXVIII, No 11, March 13. Reprinted in *Alternative Economic Survey*, Public Interest Research Group, New Delhi, 1993.

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