Globalisation and Sustainable Development: Economic and Environmental Conflicts

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The achievement of sustainable development is a global endeavour that requires a massive reorganisation of world's economic policies, institutions and technology, and can be achieved only if there is coordination and cooperation of all sectors and all countries. It requires a universal effort, and cannot be achieved if just *one* country follows a sustainable path; for the gains to the world environment due to one country's sustainable development, will be cancelled out by the environmentally destructive practices of the others. On Spaceship Earth all have to sink or swim together.

The move towards sustainable development should involve a gradual change to ecofriendly techniques and commodities, and the phasing out of environmentally destructive ones. In this regard, globalisation policies should put pressure on all countries to slowly abandon their unsustainable economic development, and encourage the growth of sustainable practices. Until sustainable practices are an integral part of the developmental plans of world economies, mere environmental tinkering at the edges of economic policy cannot lead to sustainable development.

Nor can sustainable development be achieved merely by a single ministry within a country, trying to clean up the environmental mess created by other sectors. Development will continue to be unsustainable, unless the policies of all sectors such as planning, trade, industry, agriculture, etc. integrate sustainable practices with their objectives. As a starting point, environmental conservation, pollution control, etc. could be taken up. But the long-term move towards sustainable development can be realised only when there is a concentrated effort to change the mode of production and consumption, to ecofriendly development.

But the globalisation policies are seriously deficient in this outlook. On the other hand, both at the national and international levels, environmental policies are subservient to economic policy, and environmental regulations are often bent or ignored to accommodate economic development. This dichotomy between economic and environmental policies is all the more apparent in the case of globalisation policies. Industrial development and the lifestyle of the "advanced" countries have become universal, with the advent of *economic globalisation* policies. But the present form of development of the "advanced" countries is unsustainable, and is the chief reason for the environmental degradation of the Earth [Meadows 1972]. By universalising this form of production and consumption, environmental degradation is also being globalised, with almost all countries of the world following a common pattern of economic development that is uniformly unsustainable and environmentally destructive.

To counter global environmental destruction, international agencies such as the UNEP, are struggling to introduce measures to ensure that all countries of the world follow some general environmental norms and policies to achieve sustainable development. Environmental laws being universal, this can be called as *environmental globalisation*.

Thus economies of the world are subject to two forms of globalisation -

- 1. Economic globalisation, and
- 2. Environmental globalisation.

While *economic globalisation* proposed by the WTO is patently unsustainable *environmental globalisation* attempts to direct nations towards sustainable development. But these two forms of globalisation conflict with each other – for many WTO policies affect the environment adversely, while a number of UNEP directives infringe on

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WTO regulations¹. So, following the directives of one leads to violating those of the other.

This is the dilemma faced by the developing countries – should they follow the dictates of environmental globalisation or those of economic globalisation? And how should they modify their own national laws to satisfy these contradictory prescriptions? Since they are dependent on aid, technology and other forms of economic help from the international agencies and industrial countries, this variance in the two global polices makes it difficult for them to chose one form of globalisation without breaking the rules of the other. In both cases they face the threats of sanctions. Further, developed countries use both types globalisation to exploit them, so that the less developed countries are getting the worst of both bargains.

In India also this conflict between economic and environmental policies has become sharper since the advent of the globalisation and liberalisation era, and is mirrored in the conflicts between her economic and environmental regimes.

This paper examines the different types of inconsistencies between *environmental* globalisation policy and *economic* globalisation policy in the context of sustainable development, with particular reference to developing countries and India. It points out how economic and environmental globalisation are at odds with one another, and suggests that unless the two policies work in tandem, both at the national and international levels, it will be impossible to achieve sustainable development globally.

Conflicts between economic and environmental globalisation:

The need for sustainable development in the world² was recognised around the 1980's, at about the same time as the advent of economic globalisation. Various international environmental conferences stressed the need for environmental protection, and the need to move towards an alternative form of development, based on ecofriendly methods of production and consumption. However, economic globalisation policies are not geared to sustainable development; instead they advocate the universal spread of the same form of unsustainable development, with a few environmental caveats³.

Surprisingly, although the UN is the fountainhead for both types of globalisation, it is unable to coordinate and unify its global economic and environmental policies towards the ultimate goal of sustainable development. This is fundamentally due to the fact that the objectives and policies of WTO are in opposition to those of UNEP – for, while the former wants the present mode of industrial development to be spread worldwide, the latter is calling for sustainable development. But more often than not, economic globalisation is usually given greater priority, while environmental rules are put on the back burner, so as not to discourage industrial development. The result – unsustainable development worldwide.

This opposing nature of economic and environmental globalisation policies can be traced to differences in their theoretical base, their priorities, and their method of implementation. Since the ideologies of economic and environmental globalisation differ, it is not surprising that their policies and impacts also clash with one another. The various reasons for the conflicts between the two forms of globalisation will now be discussed.

Theoretical Conflicts between Economic and Environmental Globalisation:

1. Free markets vs. Government controls: Theoretically, economic globalisation is based on "free markets". Founded

¹ For example, while 27.4% of total FDI approved in India between 1991-2002, was in the energy sector, including power and oil refineries, the negotiations on climate change call for the phasing out of fossil fuels to reduce GHGs.

² Sustainable development was first mentioned in the WCS of 1983, and later popularised at the WCED by Brundtland in his book *Our Common Future* 1987.

³ Although the WTO has a section on trade and environment, and holds many meetings, such as the Symposium on Trade and Environment, to discuss the sustainable nature of trade policies, it is not able to achieve any accord with environmental regulations, nor is it able to construct a trade and liberalisation policy that can lead to sustainable development. [Voon 2000, Simpson Gary 2000].

on Neo-classical economic theory, it assumes that economic efficiency can be achieved through free markets at the national level, and free trade at the international level. Therefore it calls for the reduction of all types of governmental controls, both internal and international, to allow the working of a free market.

But environmental degradation is caused by "market failure". Environmental economists point out that the free market does not include "environmental externalities". Firms and other economic agents do not include environmental and pollution impact costs in their economic decisions, so that environmental degradation continues unheeded and uncorrected [Hanley, et al. 2000]. Hence, environmental economists argue that it is necessary to introduce severe governmental regulations, to ensure that the ambient environment is not affected negatively by the working of free markets. This applies both to local and international markets. Therefore, freeing the market through economic globalisation will only increase the cases of market failure, and free trade will freely permit worldwide environmental degradation.

Herein lies the conflict – while economic globalisation wants free markets, environmental globalisation pleads for stricter government intervention and control over the market. So the very theoretical base of economic and environmental globalisation is conflicting– the former wanting more liberalisation of the economy, and the latter wanting more government controls. An economy subject to both forms of globalisation will be puzzled about which one of these it has to follow – free markets or government regulation.

2. *Kuznet's Curve:* It has been pointed out that some types of pollutants follow a Kuznet's inverse U-shaped relationship with income [Hettige, et.al.1997]. As the GNP of a country increases, its pollution also rises and reaches a maximum. But after a certain level of income, environmental rules become more stringent, environmental regulation increases and pollution emissions fall. Thus according to this theory, pollution in less developed countries is of a transient and self-correcting nature, and as the critical level of income is crossed, pollution (and other environmental damages) will automatically decrease. We can interpret this as follows: since economic globalisation, will increase the income of less developed countries, once this crucial income level is crossed, it will automatically cause their levels of pollution to fall. Hence the theory implies that environmental controls are not needed in less developed countries, as economic development will itself take care of the environmental problems.

The Kuznet's curve theory assumes that there is no harm if developing countries continue to pollute up to the critical income level, after which the pollution levels will automatically start falling. But there are reasons why this may not hold true:

- a) Since the present form of development is unsustainable, it is doubtful if most of the third world countries can even reach this level of income, before the Earth runs out of environmental resources.
- b) It ignores the fact that environmental damages are cumulative and irreversible. So by the time (if at all), the less developed countries reach this 'critical' income level, the world environment might be damaged irreparably.
- c) Whatever the level of income, governments will not voluntarily impose environmental norms, nor will the industrial sector permit them to do so. Therefore there is nothing automatic about either the imposition of government regulation or of pollution decreasing after a certain level of income.
- d) The less developed countries are now forced into an unsustainable development path, which they may not be able to correct even if they cross the "critical" income level.
- e) Finally, there is no universal proof of the Kuznet's curve. The theory is based on only a few pollutants such as sulphur dioxide and urban SPM. But municipal wastes or carbon dioxide emissions, are found to be rising monotonically with PCY. [World Development Report, 1992].

Therefore it is necessary to have global environmental laws, which stipulate that all countries - whether with

high or low incomes, should take protective measures from the *present* itself⁴. If they do, then a lot of environmental damage can be avoided. The pressure to introduce sustainable development practices necessarily comes from outside – for, although governments can ignore or suppress local people, it will be more difficult to withstand international pressures. We can conclude that the move towards *environmental globalisation* is due to the fact that countries cannot afford to wait to cross the critical income limit of income (if any) before undertaking environmental protection, for by then it may be too late, for them as well as for the global environment. They have to take action now, to avoid the environmental pitfalls of industrial development, and to initiate sustainable development as early as possible.

3. Pollution Havens vs. Haloes: The environmental impact of foreign direct investment (FDI) in less developed countries, is yet another theoretical area of controversy. According to the supporters of economic globalisation, FDI introduces the latest environmental friendly technology and commodities, and trade regimes impose stricter environmental regulations on less developed countries. These measures will improve environmental conditions in developing countries. Thus supporters declare that FDI wears a "Pollution halo", and economic globalisation leads to more ecofriendly industrial development. [Wheeler 2000].

Opponents to economic globalisation on the other hand, point out that FDI from developed countries tend to be in "dirty" industries. Since pollution regulation is stricter in industrialised countries, and pollution abatement costs are higher, polluting industries in developed countries tend to relocate in the more environmentally lenient III World. So it is argued that economic globalisation, has converted less developed countries into "pollution havens" for the dirty industries of the West, leading to increase in their environmental deterioration⁵. Since the rules of WTO are very stringent, less developed countries cannot use environmental norms to prevent the dirty industries from being set up. Therefore they argue that economic globalisation has led to the worsening of the environment in less developed countries, while improving the environment of the developed countries⁶. [Low and Yeats 1992, Mani and Wheeler 1997].

The pollution haven vs. haloes debate has been raging for some time now, but the bottom line is this: the present form of industrial globalisation is *itself* not directed towards sustainable development. Environmental impacts being global, the world's population suffers regardless of who pollutes, or where the dirty industries are located. If pollution havens are being established, then the world suffers, through the destruction of the environment of less developed countries. Similarly, if pollution haloes exist, then the developed countries retain the polluting industries, which again destroy the global environment. At the global level, it does not matter where the polluting industry (such as a nuclear reactor) is set up – ultimately if one part of the world suffers, then the entire world suffers – and global development will be unsustainable.

Policy Conflicts between Economic and Environmental Globalisation:

The policies flowing out of the divergent theories of economic and environmental globalisation, are naturally conflicting. It is well recognised that the policies of WTO frequently violate the UNEP and Multilateral Environmental Agreements (MEAs). Not only are the two forms of globalisation working against each other, but they are also biased favourably towards the advanced countries, and work against the interests of the developing countries. The industrial countries are quick to use the environmental and the economic globalisation regulations against the developing countries, to gain economic advantages from them. A few such cases are discussed below:

⁴ For example, USA and other developed countries in Kyoto objected to GHG emission reductions on the grounds that any efforts by the industrial countries to reduce CO2 would be cancelled out by the pollution from the developing countries. They asked for GHG cuts by countries like India and China also, which are nowhere near the "critical income level."

⁵ Larry Summers, US Treasury Secretary, is quoted to have suggested that more high-polluting industries should move to developing countries, as people there do not live so long anyway, so multinationals would have to pay out less in compensation for any deaths caused by their pollution. http://www.greenparty.org.uk

⁶ Actually there have been a number of instances where polluting industries and goods have been shifted to developing countries including India, are quoted in this paper.

1. *Discrimination:* Although WTO does not prevent national governments from taxing environmentally harmful goods, these are restricted only to domestic products and processes, and "characteristics" of imported products. WTO does not permit the application of national environmental standards to production processes of the exporting countries.

However, environmental regulation *does require* discrimination between ecofriendly and unfriendly methods of products and production [Sampson 2000]. Only if the importing country can use environmentally safe goods and techniques, can it hope to introduce sustainable development. But this violates the WTO rationale of avoiding all types of "discrimination", so as to prevent countries from giving any type of special trading advantages to others, or discriminate against a particular product, because of the manner in which it was produced. Less developed countries are now caught in a cleft stick: if they ignore international environmental regulations, then environmental sanctions will fall on their exports, affecting their foreign exchange earnings. If however they want to comply with international environmental standards, it will increase their costs of production, and make their products uncompetitive in the world market.

Meanwhile, industrial countries are quietly sending their own environmentally hazardous products and industries to developing countries, which are too weak to prevent this form of exploitation.

2. *Trade Sanctions:* Industrial countries have played the environmental card to ban many products of developing countries. For example – garments from India that used azo-dyes were banned in Europe, as also prawns and fish imports in USA, on the grounds that 'turtle excluding' devices were not used. Less developed countries are badly affected by such bans, as for example the ban of ivory trade that has affected many African nations. Here environmental globalisation works against economic globalisation.

But advanced countries are getting the benefits of both economic and environmental globalisation. They are powerful enough to continue selling environmentally unsafe and banned products to developing countries, as well as establishing banned industries therein. For instance, many banned pesticides are being exported to less developed countries, and most of the chemical industries have also been shifted from developed countries. The difference in the trade related environmental controls by developed as against developing countries is most glaring in the case of GMOs. Powerful MNCs like Monsanto not only resist all efforts by the importing countries against GMOs, but also threaten them with trade sanctions if they refuse to import and use them8.

3. *MEAs and WTO:* The WTO rules on Trade, run counter to the UNEP Multilateral Environmental Agreements. For e.g. although USA was still not a Party to the Cartagena Biosafety Protocol, (not having ratified the UN Convention on Biological Diversity), it still threatened to ban the imports from Thailand in 2001, if Thailand introduced laws requiring labelling of GE food products. It also forced the Thai government to raise the contamination threshold of GMOs from 3% to 5%, leaving serious loopholes in the labelling law. The following year South Korea came under similar pressure. The US government tried to force the South Korean government to raise the threshold from 3% to 5% in its labelling laws. Sri Lanka and Bolivia are other less developed countries that have faced the wrath of USA for banning imports of GE foods. [Greenpeace, 2003]. There are many other examples of such coercion by advanced countries against less developed countries [Jha, Veena 1999, Perez, Oren 2002]

4. *Trade Related Intellectual Property Rights (TRIPS):* Another feature of the WTO that is environmentally unsustainable is the Trade Related Intellectual Property Rights agreement that defines how products can be protected from piracy. TRIPS aims to prevent imitation of products and protects those who have invented, discovered or introduced them. This discrimination is obvious when it is noticed that action is taken against less developed

⁷ For instance the growth of chemical industrial units in Jeedimetla, Patencheru and Bolarum in Hyderabad followed the ban of production of process chemicals in USA.

⁸ USA the largest producer of GMOs, dominated by the giant TNC – Monsanto (responsible for 91% of the GE crops grown in the world), is forcing many countries to accept them under the shield of WTO. Although the European Union and many developing countries refused to import GMOs, in 2003 the US government filed a formal complaint in the WTO against EU, for its *de facto moratorium* on GMO imports. [Greenpeace publication, 2003]

countries that break the TRIPs laws, especially of the powerful TNCs, while the same rule is not applied when firms from developed countries plunder the products of less developed countries. Many less developed countries object to this bias in TRIPs and its partian spirit towards the rich nations. [Oxfam: *Policy Paper 2001*]

TRIPs laws were broken by firms from developed countries, who tried to patent products and processes known for generations to indigenous peoples of some developing countries. TNCs of the western countries particularly USA, applied for patents for Neem, Turmeric and Basmati from India and Pakistan, and Jasmine Rice from Thailand. Only after expensive litigation against the powerful US firms, could they be freed of the patents. Although the Cartegena Protocol on Biodiversity involves protection of the species and processes of indigenous communities, and their takeover by foreign firms, the developed countries state this to be against the WTO's policy of free and unrestricted trade. This illustrates a case where an environmental law - the conservation of bio-diversity is opposed by the Free trade laws of WTO⁹.

There are many such cases, where the WTO policies work contrary to the global environmental policies. The result is that neither the economic nor the environmental globalisation policies have been able to ensure environmental protection in the short run, or direct the world economies towards sustainable development, in the long run.

Conflict between World Financial Bodies and Environmental Globalisation:

World bodies like the World Bank, the IMF etc. are the key lenders to less developed countries, and responsible for ushering economic globalisation. But their economic policies violate environmental globalisation, and they have been criticised for sponsoring environmentally damaging projects, at the behest of powerful transnational companies and countries, that force them to perpetuate their own environmentally damaging type of development. At the same time, increasing pressures from world communities and affected countries to conserve the environment, is forcing them to temper their loans with environmental norms. In the conflict, these financial bodies are still leaning towards unsustainable development, while paying lip service to environmental protection. Therefore the lending policies of the global financial institutions, often contravene UNEP's environmental norms.

The World Bank: A report by World Bank's Inspection Panel concluded that World Bank staff violated many of its own policies, including those on resettlement of indigenous peoples, environmental assessment and project supervision. The environmental consequences of its programmes have been severe. Much of the Bank's \$22 billion annual lending to projects and programmes are in environmentally sensitive areas, such as energy, agriculture and transport. The Bank also failed to achieve its stated goals of poverty reduction and "sustainable development." Furthermore, the World Bank's "environmental" lending often serves as little more than camouflage for other environmentally destructive projects. The Bank's support to the highly environmentally destructive Narmada Sagar Sarovar Project in India is well known. It withdrew only after worldwide protests were made against its environmental and social impacts.

According to the Bank's official report in 2003, villagers in Jharkhand state, Eastern India suffered harm to their livelihoods as a result of a World Bank-backed coal-mining project. The Environmental Management Plan for the Parej East mine suggested that only about half of the 253-hectare mine area could be reclaimed for agricultural land after mining, while the rest would be filled up with water. But the villagers were not warned that the water would be poisoned by contact with coal and other sediments. [Down to Earth, June 15, 2004].

After facing immense flak for its neglect of environmental matters when granting loans, especially in less developed countries, the World Bank has since the past decade, implemented a few environmental regulations in its agenda. For instance, an Environmental Assessment Report is now to be submitted for projects financed by it. However, the Bank managed to get out of environmental embarrassments, by stating that since its loans are given

⁹ But the WTO feels that environmental implications affecting free trade and its own rules, is negligible, since there only about 20 out of 500 environmental rules restrict trade on environmental grounds - such as trade in ODS, hazardous wastes, endangered species. The larger implications of trade on the environment are ignored. [WTO website].

to financial intermediaries, it is up to them to ensure environmental compliance in the projects they undertake. The Bank is also offering a few environmental training programmes etc. But the WB's projects themselves being unsustainable, its environmental regulations are way too little, to negate the larger environmental destruction of its projects.

• *The IMF*: The IMF's policy aims to correct short-term balance-of payment problems, without regard to the long-term impacts of such measures. The IMF, it has been found, lacks the expertise to deal with social and environmental issues of the widely differing economic situations in each country. The IMF's continual disregard for people and the environment, in borrowing countries has undermined the foundations of sustainable development in many countries.

^a *The Global Environment Facility (GEF):* an international financial mechanism to fund projects intended to benefit the global environment, is largely managed by the World Bank. As such, GEF projects suffer from the same problems as the Bank's regular lending operations. The GEF follows a top-down, ineffective approach of dealing with problems related to climate change, biodiversity, international waters and ozone depletion. The World Bank requires that many GEF projects be attached to large regular World Bank loans, which often are at odds with protecting the global environment. Also, the USA being the chief donor, dictates policies with strings attached that will help its own economy and trade. [Greenpeace website]. The contributions from developed countries to the GEF have been falling over the years – USA's contribution fell from \$7.23 million in 1999 to \$6.5 million in 2001. UK, Germany, Finland, Sweden, Norway and Denmark, have also reduced their contributions. The fund is used to finance environmental projects in less developed countries. This decrease in contributions shows that the top industrial nations are losing interest in promoting sustainable development in developing countries. [UNEP *Annual Report* 2001].

The few cases cited above show that the move towards sustainable development is dogged by inconsistencies in the economic and environmental globalisation policies. While economic globalisation is being implemented with gusto, environmental globalisation is still unable to control environmental degradation on a large scale, nor it is able to direct global development towards a sustainable path. Further, the advanced countries use both economic and environmental globalisation rules as it suits them to exploit the developing countries.

Globalisation and Sustainable development in India:

In the case of India also, the same conflicts dog the economic and environmental globalisation of the country. Economic globalisation policies are oriented towards unsustainable development, and dominate and even violate environmental globalisation policies. The economic policy of India, after economic globalisation, has not been remodelled towards sustainable development, but only includes some environmental mopping up of the damages created by industrial development. Environmental policy in India is too weak to counter the unsustainable development introduced by the WTO regime.

Some of the areas of conflict are now discussed.

History of Globalisation in India:

Although environmental globalisation was initiated much before economic globalisation in India (1972 and 1990 respectively), her economic policies do not reflect a move towards sustainable development. There is very little co-ordination between her economic and environmental regulations, and economic policies are still being given greater priority than environmental ones.

History of Economic Globalisation:

India initiated economic globalisation in the 1990s, due to her massive international debt, foreign exchange crises, and a stagnant economy. The usual regulations of free trade, liberalisation and privatisation of the economy were imposed on India as well. The outcome was that economic globalisation recommendations were included in the

national economic policies. As such the strict control over the economy that was a feature of the planning era in India, was replaced by a more liberal economy.

History of Environmental Globalisation:

Environmental protection was enshrined in the Indian Constitution¹⁰, much before the advent of economic globalisation. Also India participated in the first UN Conference on the Human Environment, Stockholm 1972, and so environmental globalisation in India preceded economic globalisation by almost two decades. Following the UNEP's environmental governance, and its recommendations, the Government of India set up a Department of Environment, and initiated legislation to control environmental pollution. Various Environmental Acts were put into force in the 1970s-80s, much before the economic globalisation and liberalisation policy was started.

Since environmental globalisation came first, we would expect that environmental protection and sustainable development would be strong ingredients of India's economic globalisation policies as well. But that is not so; for here again environmental controls are often flouted, since priority is given to economic globalisation encouraging an unsustainable type of economic development.

Conflicts in Economic and Environmental Organisation and Laws:

Just as the UN is unable to coordinate the working of its economic and environmental branches, the Government of India is also unable to coordinate the economic and environmental globalisation of the country, and there is conflict between the two. While the departments of Trade, Industry, Agriculture, Planning, and Finance have jumped headlong into industrial development, with just a few environmental rules, the Environmental Ministry, under the duress of the UNEP, the International Environmental Agreements as well as local pressures, is vainly trying to implement stricter environmental controls, through government regulation. But the economic sectors being more powerful have succeeded in adopting economic globalisation, with its environmentally harmful pattern of development, disregarding environmental norms. [Panth, P.1997]

Environmental Laws in India:

Although environmental protection directives were enshrined in the Constitution, environmental regulation in India was taken up seriously only after the Stockholm Conference, with the passing of many Environmental Acts, and the creation of the Ministry of Environment and Forest (MoEF) and the Pollution Control Boards (PCBs).

Unfortunately, environmental laws are "soft laws," mere guidelines, so that taking punitive action against defaulters is difficult. For example, though industrial pollution is continuing unabatedly, the onus is on the victims to sue the polluters. Since the victims are usually the poor and helpless, with little knowledge of the law, and the polluters are powerful industrialists, not all the culprits are caught, or punished for their environmental misbehaviour. Although recently the PCBs have been given the authority to close down polluting units, lack of staff, inefficiency, corruption and threats, makes it difficult for them to cope with the powerful forces behind the polluting firms.

The same lack of authority makes other environmental laws such as the Forest Act, the Wildlife Act, etc, ineffective. Economic incentives override environmental laws, with government, foreign and private sector's industrial and development activities, given more priority than environmental protection. But deregulation of commercial activity under economic globalisation, should not mean dilution of environmental standards. The enforcement of environmental standards must be regarded as a fundamental part of the agenda of economic reforms. Unfortunately, this has not been the case. [R. Sudarshan, 1996]

State governments especially, are flouting environmental norms, in a bid to attract foreign investment under economic globalisation. For example: in 1995, the Rajastan Govt. issued a directive to denotify forest lands, to

¹⁰ The Indian Constitution enjoins the "States to take measures to protect and improve the environment and to safeguard the forests and wildlife of the country." It also states that "it is the fundamental duty of every citizen to protect and improve the natural environment, including forests, lakes and rivers, and wildlife, and to have ecological compassion for the living creatures."

allow mining by local and foreign mining companies, thus defying the Forest Conservation Act. The famous Narayana Sarovar Sanctuary of Gujarat was forcibly denotified at the instance of a Japanese investor who wanted to set up a highly polluting cement factory there. [Kothari 1998].

A World Bank study [1993] put the value of environmental damage in India at about US \$9.7 billion per year, or 4.5% of GDP of 1992. However, VII Plan's allocation to Science, Technology and Environment, was a low 1.4% of total plan outlay, which increased to 2.1% in the VIII Plan, and 3% in the IX Plan. Since three sectors share this amount, the percentage share to the Environment is even lower. The low budgetary allocation to the Environmental sector, compared to the higher environmental damage cost, shows the low priority given by the Central Government to environmental conservation. This is in spite of the fact that data analysis shows that environmental degradation is increasing faster than GDP. According to the estimates made by CSE, while GDP increased 2.5 times between 1975 and 1995, industrial pollution quadrupled, and vehicular pollution increased 8 times [*Down To Earth*, Jan. 31, 1999].

Conflicts in Policy in India:

Economic vs. Environmental Globalisation Policy:

The New Economic Policy (NEP) introduced in India at the WB's directive, does not give much prominence to environmental protection, except for a few guidelines. These are not substantial enough to ensure environmental protection. Nor is the NEP directed towards sustainable development; on the contrary it has opened the doors to the influx of unsustainable, and environmentally dangerous techniques and goods from the industrial countries. A few of the environmental stipulations in the NEP are given below:

• Environmental Impact Assessment: though compulsory for both Indian and foreign firms with investment up to \$12.5 million, is often disregarded. Though 29 industries of Schedule I require environmental clearance from the Central Government, there is pressure on the MoEF to reduce the number of industries, and to raise the limit to \$37.5 million in power and other infrastructure industries. These are some of the most environmentally destructive activities. For other projects, there is pressure to raise the limit to \$25 million, and clearance is being asked for from State PCBs, rather than the central PCB. But, State governments, anxious to develop and to attract investment, try to dilute the EIA still further [MoEF Annual Report 2002]. Therefore, environmental clearance of projects has now become easier. While this facilitates economic globalisation, it creates greater environmental damages, and encourages an unsustainable form of development by watering down environmental clearance rules.

Industrial Location: The NEP permits the setting up of polluting industries without environmental clearance (except for those subject to compulsory licensing) within 25 Kms of the periphery of cities with population less than 1 million, and in other prior designated industrial areas. This regulation has extended the areas of pollution near small cities like Ratlam in M.P. Small-scale industries are exempted from locational restrictions, except those subject to local land use and zoning laws. The result: these areas have developed into pollution hotspots – such as Patencheru near Hyderabad, the Ankaleshwar belt or the so-called "Golden Corridor" in Gujarat, which are highly polluted, with excessive concentrations of toxic chemicals, in air and water.

• Fiscal Incentives: Five-year tax holiday and other incentives are offered to industrial units set up in backward regions of India, especially the Northeast regions. But now the levels of pollution and natural resources degradation in the backward regions of Mizoram and Assam have increased tremendously.

Patents: The Patent rules under TRIPS also discriminate against less developed countries. India's native plant resources such as neem, basmati, wheat and turmeric, were on the verge of being patented by US firms. But at the same time, as said earlier, India cannot prevent GMOs and GM technology, which are known to be environmentally dangerous, from being imported.

Conflicts in Practice:

If sustainable development has to be achieved, then the New Economic Policy should have encouraged

environmentally friendly products and processes through trade, privatisation, etc. Instead, it is permitting trade and production of more polluting and damaging products, many of which have been banned in the developed countries. We shall now look at some examples of how economic practices are working in contravention to both national and global environmental protection and safety regulations.

Free Trade: Free trade is now going on in many banned products - with many threatened plant and animal species, such as wild orchids removed from the list of banned exports. A general category of plants, plant portions and derivatives obtained from the wild, were also removed from the negative lists of exports [Kothari, 1998]. This is a breach of the Plant Protection Varieties rules of the MoEF, and encourages foreign control over our indigenous species.

Toxic wastes imports are allowed under the Free Trade Regime, which violates the Basel Protocol on Trade in Hazardous Wastes. According to Greenpeace, hundreds of tons of plastics and metals such as lead, copper and other wastes are coming into India from countries like Australia, Canada, UK and USA, apparently for recycling. An Indian company, Futura Industries of Tamil Nadu, has imported 10,000 metric tonnes of plastic waste since 1992, out of which only 30-40% could be recycled. Between 1992-93, imports of lead acid battery wastes from Australia increased nearly three folds from 126,000 Kg to 346,000 Kg. [Kothari 1998].

 \neg *FDI:* Out of the 35 high priority areas in which Foreign Direct Investment is allowed, at least ten are in environmentally harmful industries such as chemicals, fertilisers, pesticides, pharmaceuticals, cement and paper and pulp industries. Only two are in environmentally friendly areas – alternate energy systems, and bioinsecticides. Bulk drug units were relocated into India, after USA banned their local production in 1985. Now bulk drug factories are the main cause of pollution in the hotspots of Patencheru and Jeedimetla in Hyderabad, due to their uncontrolled and untreated effluents.

The share of dirty industries in total FDI was 51%, between 1991-2000. Of these 27.4% was in Energy, 4.5% Chemicals, 7.5% Transport, 5.5% Metallurgical, 3.5% Food Processing - all classified as Red or most polluting industries, while Hotels and Tourism 1.7% and Textiles 1.2%, came under Orange industries [*Annual Report* CPCB 2003]. Also the largest inflow to approvals of foreign investment, was in the dirty industries, chiefly chemicals 37.7%. [SIA (FDI Data Cell), 2003].

The above data suggests that India may be turning into a "pollution haven" for dirty industries. Other writers have also found empirical evidence that does point to a pollution haven effect in India. [Bhattacharya, Mani and Wheeler]. Bhattacharya [2003] has shown that there has been a rise of dirty products in exports compared to imports, since the start of the globalisation process in India, implying a "havens" effect.

Delicensing: Many goods produced by the public sector were delicensed, to allow private and foreign firms to produce them. These include polluting industries such as mining, power production, chemicals, etc. Though the law suggests that foreign firms should obtain licences, the NEP does not prevent them from establishing hazardous industries in India. For example, Hindustan Lever Limited, a branch of Unilever a US-Dutch company, started a mercury thermometer factory in the pure environs of Kodaikanal after its main factory was closed down in USA. The thermometers were made for export. The resulting level of mercury poisoning was almost 250 times the permitted limits in this region, and adversely affected the environment. [Green peace website]

• *Choice of Goods:* The NEP does not prevent the production of commodities banned by International Organisations such as the WHO and UN. For example, foreign companies like Bayer of Germany, and DOW of USA are producing pesticides banned by the POPs UNEP 1995 treaty¹¹ [*India Environment Issues*, 2001]. But POPs and trade in hazardous substances are banned under India's environmental policy.

¹¹ These include Monocrotophos, methyl parathion, and 5 other highly toxic and banned pesticides, even though they have to be phased out under the POPs UNEP treaty of 1995.

While the SPCBs are struggling to find ways to control vehicular pollution in metro regions, Euro II vehicles that are now passé in the West due to the introduction of Euro IV norms, are being imported and produced here. Nor does the NEP insist that only green vehicles be produced and imported, but is permitting diesel and petrol vehicles, thus missing a chance to shift to a more sustainable development path. This has resulted in the same type of urban pollution that characterises Western development.

Although foreign firms should obtain environmental clearance, by showing their Environmental Impact Statements, these are usually scuttled through, and they are allowed to start production. A case in point is that of Coca Cola, which gave a wrong EIA about its water requirements, in Kasargod, Kerala. But its total water usage has depleted the ground water, resulting in water scarcity and drought conditions in the district. [*Down to Earth.* June 15, 2004]

^a Energy Projects and GHG emissions: At a time when there is increasing pressure from countries like USA on India and China to control their CO_2 emissions¹², thermal power production by foreign firms, through captive coalmines has been given priority in India. Out of the total FDI approved between 1991-2000, 27.4% were in commercial energy, of which 15.4% were in power, and 12% in oil refineries. [SIA (FDI Data Cell), DIP&P.] Power production through fossil fuels, contravenes the Kyoto Protocol on GHG, that calls for the phasing out of fossil fuels, and shift to renewables. Renewable energy is still extremely expensive, and if the same amounts of subsidies that are given to fossil fuels are given to it, then there is a chance to shift to a more sustainable type of development. But the economic globalisation policy does not encourage green products such as – renewable over non-renewable energy, or organic over chemicals, or biodegradable over non-biodegradable plastics.

□ *Agriculture:* Economic globalisation is converting agricultural lands for export-oriented crops, which are again meant for urban and foreign markets. The food security of the country is threatened with the patent regime, which tends to usurp the common knowledge base of the people, with the appropriation of the seeds, patents on bio-diversity, people's knowledge and the monopolisation of the agribusiness in the hands of a few conglomerates from the developed nations.

Agricultural production for export has led to monoculture, for example in Punjab, basmati for exports has replaced hundreds of other rice varieties. Pepsicola's tomato sauce requires only a particular variety of tomato, which has replaced all other local varieties. Such conditions lead to loss of biodiversity, and loss of generic species, in the name of economic globalisation.

• Land and Coastal Regulations: There is a move to change the land acquisition act with corresponding changes in the laws regarding displacement and rehabilitation. The purpose is to make the lands available more easily for industrial companies under globalisation. A bill has been passed by both the houses of Parliament to change the coastal regulation zone to facilitate environmentally hazardous aquaculture farming. Aquaculture, while earning foreign exchange, affects the coastal ecosystems, due to monoculture and use of pesticides. A NEERI study showed that aquaculture led to a loss of Rs.142 crores due to fall in rice production, and pollution of salt pans, wage losses to farmers, and of local fisheries in Tamil Nadu in 1996 [Kothari, 1998]. It has also resulted in heavy pollution and degradation of pristine shorelines and lakes such as Pulicat and Chilkur Lakes on the East Coast.

Foreign Industries Environmental Records:

According to the "pollution haloes" thesis, foreign firms bring with them stricter environmental regulations, and follow the strict environmental rules of their home countries. But the record of foreign firms belies this theory.

a) The classic case is that of the Union Carbide factory in Bhopal, which not only did not adhere to the

¹² India and China rank 5th and 2nd in world's emissions of carbon dioxide. *World Resources, 1997-98.*

environmental norms of India, but also grossly violated international safety measures for hazardous substances. Coupled with that, the compensation paid to the victims of MIT gas was meagre – only \$470 million compared to the \$3.5 billion that was asked by the Indian government. Recently the Dow Company purchased Union Carbide, but refused to shoulder its liabilities. On the contrary the company was ready to sue the victims for staging a peaceful protest in Mumbai. [Greenpeace website]

In the factory premises in Bhopal, 21 dangerous chemical wastes continue to seep into the ground water. The chemical stockpile of 2000 mt remains in the compound, affecting the lives of about 5 residential areas surrounding the factory. [Greenpeace 1999]. DOW Chemicals that has bought out Union Carbide, refused to either pay compensation, or clean up the wastes. It was only after continued struggle, that the US courts ordered DOW to cleanse the area of toxic wastes in July 2004, 20 years after the tragedy. Even then the MP government, dragged its feet till almost the last day, until there was huge public outcry against the delay. [Greenpeace website]. This case shows the environmental callousness of large MNCs, and the ineffectiveness of local Indian government rules to control them. In spite of this gigantic industrial tragedy, the economic policy in India, still does not give weightage to industrial and environmental safety measures.

b) The Soft Drinks Case: The giant MNCs – Coke and Pepsi, finding loopholes in the Indian environmental laws on safe levels of pesticides in food, did not remove dangerous pesticide residues from their bottled drinks in their Indian factories. This is contrary to the claims of the pollution haloes thesis that states that the environmental performance of international companies is carried over to the host countries. In that case there should have been no pesticides in the colas and bottled water of TNCs. But the American and European standards for pesticides in food items (which are set at zero levels) were not followed. Samples tested by the Centre for Science and Environment, New Delhi, found that the levels of pesticides in many of the samples of bottled water from TNCs' exceeded EEC standards – nearly 23 times for Aquafina of Pepsi, to more nearly 109 times for Kinley of Coca Cola. [*Down to Earth*, Feb 15, 2003]. Lindane, a deadly insecticide, was 35 times more than EEC norms in Coca Cola samples, while DDT was about 16 times higher in Pepsi cola. High levels of other pesticides were also found in the samples. But samples of the two drinks from the USA showed no trace of the pesticides 13. [*Down to Earth*, Aug.15, 2003].

Other foreign investors breaking environmental regulations in India include DOW chemicals, Atochem, Kumaia, Bayer, and Mitubishi etc. These companies have set up their agro-chemical plants in India to produce banned or restricted products such as pesticides, without proper environmental safeguards. [Jha 1999] Due to their powerful international links, pressures from donor countries like the USA, European countries, as well as the WB and IMF, such firms are let off the hook. The Indian government is too weak to deal with such violators, and it is up to the NGOs, local agitations, and the Green Bench to bring them to book. All this shows that economic globalisation policy in India, is not only breaking environmental rules, but it is also not introducing or initiating sustainable development in the country.

5. Conflict within States

Many State governments are diluting environmental norms to attract FDI. They prefer economic development over environmental protection, and are blatantly contravening environmental rules to attract foreign and private investment. Jha [1999] calls this the 'race to the bottom effect' in India. A number of cases can be citied:

Haryana, constituted a high-power committee to take spot decisions on foreign investments, NRI projects, and 100% export-oriented projects, and to obtain environmental clearance from the PCB in 15 days. This contravenes the environmental impact assessment rules that require three months of deliberations before environmental clearance

¹³ The irony of this situation is that many farmers in India are now using the colas to kill pests effectively and economically in their fields. Farmers in the Durg, Rajnandgaon and Dhamtari districts of Chhattisgarh say they have successfully used Pepsi and Coke to protect their rice plantations against pests, and it reduces the costs of pesticides by Rs.55 - 60 per acre. [*BBC news, Nov. 2004* http://news.bbc.co.uk/2/hi/south_asia/3977351.stm]

can be given to any project.

Punjab has also set up a committee to provide land "off the shelf" and clearance of FDI projects within 24 hours of submission of the proposal. Kerala has set up a green channel to expedite environmental clearances, while Rajastan has reduced the number of industries to be inspected from 15 to 3, for both Indian and foreign companies. [Kothari, 1998].

 In Orissa, the Bhittar Kanika Sanctuary, the largest nesting place in the world for the endangered Olive Ridley turtles, was truncated to accommodate foreign trawling jetties, and yards. [Kothari, 1998].

• The A.P. Government has taken over tribal lands, and given mining leases on them to about 15 mining companies, both Indian and foreign, in the ecologically fragile Eastern Ghats region.

Du Pont-Thapar: This joint venture project wanted to build a chemical factory in Goa, to produce Nylon 6.6. This is a highly hazardous industry, which would have affected the rich ecology of the Goan beaches. But the government gave land at zero cost as well as other infrastructure. Only after the locals protested, did the firm shift – but to Tamil Nadu, where economic incentives were given to it. Thus state governments' urge for industrial growth, has led them to bend many environmental considerations, and MoEf rules.

Conclusion

Theoretical and practical conflicts between economic and environmental globalisation, has led to the domination of the former over the latter. Although sustainable development has to be speedily implemented, there is little indication that the economic globalisation policies worldwide as well as in India, are directed towards its achievement. Globalisation has not led to a uniform consensus on ways of achieving sustainable development. Instead, economic globalisation is forcefully implementing unsustainable development methods worldwide. Environmental globalisation, and environmental measures introduced in economic globalisation, are only end-of-the-pipeline cleanups. There is no move to have a quantum shift towards green, sustainable and environmentally friendly methods of production globally, and to phase-out the environmentally destructive mode of development. Instead, environmental policy is used (if at all), only to mop up the damages caused by the present form of development, rather than as a means to *change* the mode of development towards sustainable methods.

With the awareness of the environmental crisis, and with the knowledge that the entire world will be adversely affected if the world environment collapses, globalisation could have been the key element in the introduction of sustainable practices everywhere. But short term and vested interests of powerful TNCs and industrial countries, have made certain that there is no digression to a sustainable path, which would affect their own profits. Environmental globalisation, trying vainly to chip away the edges of environmental destruction worldwide, is unable to direct the world economies towards sustainable development.

Since sustainable technology and commodities are not available in all sectors, and need to be evolved on the path, both economic and environmental policies should unite to encourage the growth of, and research in alternative methods of production and consumption that are environmentally safe. But both economic and environmental globalisation do not show this perspective. Unless both economic and environmental globalisation policies recognise the fact that a global effort is needed to undertake the move towards sustainable development, short-term economic interests will always dominate, and it will be impossible to achieve sustainable development.

India, as other less developed countries, is in a quandary about whether to follow economic or environmental globalisation. If it wants to follow the former, then it will end up with massive environmental destruction, and if it wants to follow the latter, it needs monetary, technological and other types of help to implement environmental protection. Also since alternative techniques are still not available in the majority of economic activities and industries, the environmentally unsafe path still has to be followed. This earns the condemnation of both types of globalisation – the economic globalisation group faulting India for not following WTO and WB rules, and the environmental globalisation band for continuing on an environmentally destructive path, and contributing to global

environmental degradation.

Difficult choices have to be made. If economic globalisation is used as a platform for introducing environmental globalisation, then it is possible to move towards an environmentally sustainable path. If the same amount of subsidies, incentives, coercion, and research, as well as free trade that is directed at present to unsustainable development, is instead directed to green industries and products, then there is hope that the environmentally destructive path of the present globalisation regime will be averted, and sustainable development will become a reality.

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