

Chapter IV

Globalism, Industrialism and Environmentalism

The term ‘globalism’ is a set of ideas which is congruent with different ideologies of globalization. As a mode of operation, globalization justifies worldwide sharing of power, knowledge and capacity to make the world ‘borderless’ and a small ‘village’. In a particular stage of the evolution of human civilization, modern state systems have initiated globalization as political, economic and cultural method of action or tool by which the process of modernization and development can be accelerated. The origin of ‘industrialism’ as a super-ideology has become conducive indeed to market globalism or neo-liberal globalism because industrialism is characterized by large scale mass production, the accumulation of capital and relentless growth.¹ On the contrary, ‘ecologism’ and ‘environmentalism’ both are counter ideologies. It would not be an exaggeration to note that, the Southern or the Third World environmentalism is the product of anti-globalization and anti-industrialization movement. From a broader perspective, both environmentalism and ecologism emerge within the context of a discussion on so-called ‘global environmental crisis’. Environmental theorists, ecological activists, subaltern movements view huge mining project, automobiles and chemical factories, reckless construction of dam, even tourism as industrial development that are the root causes of global environmental crisis. Thus springs out ‘global environmentalism’ as a counter ideology against neo-liberal globalism and industrialism. Popular developmentalists, environmentalists and human rights activists of the North and South share the common concept that the poor would be the worst sufferer of the environmental crisis. On the contrary, another disquieting note is that, as a result of

¹ Heywood, Andrew, 2007, *Political Ideologies: An Introduction*, Palgrave Macmillan, New York, p. 265.

global environmental change a decline in biodiversity would take place. From these concerns, environmentalism or green politics emanates and becomes a global social movement.

Green politics strongly criticize modern developmental paradigm which is dominated by market globalism. Market globalism is closely associated with technological determinism to shape new economic structure and create new economic values where capitalism would survive in a sound health. Victory of capitalism and modern technological hegemonism would impose excessive burden over natural environment in the name of fruitful resource use which include extraction and transformation for the so-called ‘development’. Such developmental paradigm does not ensure security for the poor who are dependent on natural resources for food, fodder, fuel, fertilizer etc. In this context, the problem is mostly ‘local’ than the ‘global’. But globalized activities of industrial development are creating local problems. Contemporary social movements, in the form of environmentalism, feminism, identity politics etc., attempt to sort out the local problems. Therefore, the developmental policies should be formulated on the basis of local aspirations and requirements instead of the requirements of global market otherwise several micro-movements by the powerless grassroots masses on local issues will be increasing and would take radical anti-authoritarian turn. But such argument will convince few sovereign nation states of the Third World to formulate developmental plan concentrating on the requirements of the poor. Many of the Third World countries are dependent on Foreign Direct Investment (FDI), technological assistance for their development, India is no exception. They believe that, modern development include efficiency in production system, proper management in import and export of goods and material, resource utilization, accommodation of a huge number of people into the developmental programmes etc. But ultimately natural environment of the global South faces serious challenges due to the more dependence over industrially developed countries.

Globalization, Global Environmental Crisis and Anti-globalization Movement: Concepts and Context

Globalization creates a complex network and an interaction between local, regional, national and international state and non-state actors, communities, groups and individuals regarding the share of power, knowledge and capacity. Joseph Stiglitz defined globalization as ‘the closer integration of the countries and peoples of the world which has been brought about by the enormous reduction of costs of transportation and communication and the breaking down of artificial barriers to the flows of goods, services, capital, knowledge and (to a lesser extent) people across borders’.² The process of globalization has opened global international trade which helped many countries to develop promptly so far as economic growth is concerned. Export led growth of international trade was the counter-piece of the industrial policy which enriched much of Asia and left millions of people there far better off as many people of the world have developed their standard of living and now-a-days live longer than before.³ But in the era of globalization, a system of global governance has become very essential for environmental protection. Global warming; emissions of greenhouse gasses (Co₂) are increasing day-by-day; depletion in ozone layer is occurring imperceptibly and all these are happening because of the use of fossil fuels and chlorofluorocarbons (CFCs) by the industrial countries. People of the entire world are facing the adverse effects of these environmental changes. Global collective actions have been taken through international conventions for the very protection of environment; the Montreal Protocol of 1987 is a good example to prevent ozone problem.⁴

Anthony Giddens defined globalization ‘as the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa. This is a dialectical process because such local happenings may move in an obverse direction from the

² Stiglitz, Joseph E., 2002, *Globalization and Its Discontents*, W. W. Norton & Company, New York, p. 9.

³ *ibid*, p. 4.

⁴ *ibid*, p. 223.

very distanciated relations that shape them. Local transformation is as much a part of globalization as the lateral extension of social connections across time and space'.⁵ Giddens defined globalization linking it with modernization. There are four institutional dimensions of modernity: capitalism, industrialism, surveillance and military power. Capitalism is concerned with the commodity production where both owners and non-owners of capital sell their labour to produce commodity. Secondly, industrialism transforms nature for the development of 'created environment', i. e., an environment of action which is nodoubt physical but no longer just natural. Thirdly, the power of surveillance, this is the control of information and social supervision of the activities of subject populations in the political sphere. Fourthly, the military power is characterized by the control of the means of violence in the context of the industrialization of war.⁶ In terms of world capitalism, industrialism and nation states, the organizational clusters universalize the global network and produce 'time-space distanciation', i. e., the conditions under which time and space are organized so as to connect presence and absence which makes local-global interface a complex problem.⁷ In modern society, there is a close inter-connection between capitalism and industrialism. As Karl Marx explored, capitalism encourages unbridled competition for economic growth and generalized process of commodification. On the other hand, capitalism puts impetus to the industrial production and associated constant revolutionizing of technology for more efficient and cheaper production processes transforming natural resources. Thus with the combined forces of science and technology, nature becomes subject to human control. Consequently, human beings face drastic changes in the world of natural environment, whereas, in pre-modern culture, human actions on natural food production, tending of cattle etc. were fully dependent on nature's moods and vagaries.⁸ Destructive changes occurred in traditional mode of production and in

⁵ Giddens, Anthony, 1990, *The Consequences of Modernity*, Polity Press, UK, p. 64.

⁶ *ibid*, pp. 58-60.

⁷ *ibid*, p. 14.

⁸ *ibid*, pp. 60-61.

most of the landscape pattern. Gradually, ecological or green movements as counter-culture movement emerged against post-modern culture.⁹

Ulrich Beck defined globalization as ‘the processes through sovereign national states are crisscrossed and undermined by transformational actors with varying prospects of power, orientations, identities and networks’.¹⁰ Globalization has been criticized by Beck as the whole array of global modernization processes which are destructing natural environment and creating situation like nuclear war. As a result ‘risk society’ emerged. A ‘risk society’ is one which can be defined as a ‘systematic way of dealing with hazards and insecurities induced and introduced by modernization itself’.¹¹ Beck examined that due to implicit consequences of industrialization, forests have been dying for some centuries. Through reckless overcutting for industrial development, many countries have transformed forests land into fields. Consequently, environmental pollution is increasing as ‘risk’.¹² The process of deforestation is shrinking economic value of land and forests and destructing the natural habitat of wild species. Even toxic accidents and improper waste management create severe problem of air and soil pollution. On the contrary, chemical reactions have been measured among the aquatic life of the sea. As a result, it is not only the non-vegetarians who face health related problems after eating envenomed fishes but also the fish-workers also face survival crisis. All these are, what Beck actually called, ‘ecological devaluation and expropriation’.¹³ However, as a counter modernity or the expressions of reflexive modernization beyond the outlines of industrial society, environmental movements are emerging as new social movement. Beck called it as ‘new risk’ situation.¹⁴

The ‘end of ideology’ and ‘end of history’ theorists like Daniel Bell and Francis Fukuyama were cautious about the effects of global capitalist development and technological advancement. Keeping in view the expansion of capitalism, Bell

⁹ *ibid*, p. 161.

¹⁰ Beck, Ulrich, 2000, *What is Globalization*, Polity Press, Cambridge, p. 11.

¹¹ Beck, Ulrich, 1992, *Risk Society: Towards New Modernity*, Sage Publications, London, p. 21.

¹² *ibid*, p. 21.

¹³ *ibid*, pp. 38-39.

¹⁴ *ibid*, pp. 11, 90.

analyzed the distinctive features of pre-industrial, industrial and post-industrial society. The economy of pre-industrial society was based on mining, fishing, forestry, agriculture etc. and the life of the humans was ‘a game against nature’ where one’s sense of the world was conditioned by the natural elements like seasons, storms, drought, soil fertility, floods etc. In industrial society, people enter into a manufactured world and use sources of energy, machines and technology to manufacture goods. It is an environment of industrialization and the life is ‘a game against fabricated nature’ where certain belief system has been developed that the people have a lower dependence on nature and a greater dependence on technology, machines and bureaucracy. On the contrary, the post-industrial society is based on development of technology and service economy. Here agricultural and manufacturing sectors are assimilated with the information technology sector. It is a transformation into an information society where the world view is ‘a game between persons’. This is a very complex, communal society in which the social unit is the community rather than the individual because information is the central resource. Here people’s daily life is dominated by information exchange and continual communication between other people.¹⁵ In different societies, the resource use pattern and management were different. Development of world economy and world society have given the rise to the problems of resource management on an international scale. A greater concern has been measured about the effects of technologies over environment and the world societies have urged for international monitoring of changes in the environment, UN conference of Stockholm of 1972 was a great example. But similar kind of international mechanisms are needed for the oceans, weather and energy resources. Fishing rights are in constant threat, whale and seal populations are decreasing from the sea; icecaps are melting rapidly, saline proportions are changing from the ocean waters and excessive extraction and stocking of energy resources all these are instances of global environmental crisis

¹⁵ Bell, Daniel, 1973, *The Coming of Post-Industrial Society*, Basic Books, New York, pp. 126-128.

and manmade hazards which can be controlled through the international organizations.¹⁶

According to Francis Fukuyama, globalization is a move towards ‘end of history’. As a consequence of globalization, market capitalism will be expanded and hence liberal democratic system would be a more popular political system which will inevitably ensure both political and economic liberty to the individuals. However, Fukuyama demonstrated that it is not altogether correct that after the demise of USSR, the world has witnessed the victory of liberal democracy as a result of the decline of communist or socialist principles rather several new ideologies like religious fundamentalism, nationalism, environmentalism etc. have emerged as a reaction against capitalism and Western advanced industrial societies. Most coherent and articulate source of opposition to a technological civilization comes from the environmental movement. Emerging environmentalism comprises many different groups and strands of thought but the most radical expression takes anti-science position. They suggest that man might be happier if nature was not manipulated but returned to a given situation which was prevailing in the original pre-industrial state.¹⁷ Fukuyama viewed that the green movements emerge from the effects of destructive technologies over environment. The German greens and other environmental extremists have recognized that the most realistic solutions to environmental problems would be the creation of alternative technologies or technologies to actively protect the environment.¹⁸ However, Fukuyama viewed that it is neither capitalism nor socialism which would be the effective ideology or tool to protect environment rather it is the democracy which can be best suited for environmental protection. People want both economic growth as well as safe environment for themselves and for their children and that is why it is the duty of a state to find a fair trade-off between the two and to spread the costs of ecological protection around so that no one sector will bear them unduly. Such governance is possible in a democratic system itself as experience has shown the democratic

¹⁶ Bell, Daniel, 1976, *The Cultural Contradictions of Capitalism*, Basic Books, New York, pp. 211-212.

¹⁷ Fukuyama, Francis, 1992, *The End of History and the Last Man*, The Free Press, New York, p. 83.

¹⁸ *ibid*, p. 86.

political systems reached much more quickly to the spread of ecological consciousness in the 1960s and 1970s.¹⁹

Globalization is a mutual understanding and a broad communication, such interconnection is closely associated with commercial activities and the expansion of open market economy. Industrial and its underpinning values, like competitive individualism and consumerism are deeply entrenched economic version of globalization. In this sense globalization can be seen as a form of hyper-industrialism.²⁰ Many greens see industrialism as a ‘super ideology’. The features of industrialism are:

- a) **Technological Hegemonism:** A devotion to economic growth and industrial expansion and continuous technical innovation,
- b) **Material Advancement:** A belief in the overriding importance of satisfying people’s material needs,
- c) **Bureaucratic Authoritarianism:** Large scale centralized bureaucratic control,
- d) **Supremacy of Science:** Scientific rationality is the only kind of reasoning that matters,
- e) **‘Big is Beautiful’:** Large scale units as in industry, administration etc. are most efficient,
- f) **Patriarchal form of Domination:** A predominance of particularly and an emphasis on ‘masculine’ values of competition, aggression and assertiveness,
- g) **Destructive Strategy:** An anthropocentric view that sees the earth and all that lives on it as simply there to be exploited for any human purpose,
- h) **Unequal Power Relations:** A hierarchical social structure where power and wealth is concentrated at the top,
- i) **Decline of traditionalism:** Economic considerations predominating in society and moral, social and artistic values being of lesser importance.²¹

¹⁹ *ibid*, p. 114.

²⁰ Heywood, Andrew, 2007, *ibid*, p. 278.

²¹ Adams, Ian, 2001, *Political Ideology Today*, Manchester University Press, Manchester, p. 248.

The negative consequences of industrialization are – continual climate change resulting from global warming, reduced levels of male fertility caused by pollution, the eradication of animal and plant species due to deforestation etc. Under these circumstances green politics and anti-globalization movements are emanating to search for an alternative to growth obsessed industrialism.²² The environmental movement in this context addresses three general problems:

- a) *Resource Problems* – it seeks to conserve natural materials through reducing the use of non-renewable resources, like coal, oil, natural gas etc., increasing the use of renewable resources, like wind, wave and tidal power etc., and reducing population growth, thereby curtailing resource consumption,
- b) *Sink Problems* – it is an attempt to reduce the damage done by the waste products of economic activity, like reducing pollution levels, increasing recycling and developing less polluting technologies,
- c) *Ethical Problems* – it attempts to restore the balance between humankind and nature through wildlife and wilderness conservation, respect for other species and changed agricultural practice.²³

Heywood observes two broad traditions in green politics: a) reformist ecology and b) radical ecology. Reformist or modernist ecology endeavours to make a balance between modernization and sustainability. It is a form of humanist or ‘shallow ecology’ which claims that there are ‘limits to growth’ and environmental degradation threatens prosperity and economic performance. The reformist ecology tends to advocate three main solutions to environmental degradation: i) introduction of ‘market ecologism’ or ‘green capitalism’, i. e. the attempts to adjust markets to take account of the damage done to the environment, making externalities internal to the business or organization that are responsible for them, ii) human ingenuity and the development of green technologies, i. e introduction or growth of drought resistant crops, energy-efficient forms of transport and ‘clean’ coal. The capacity

²² Heywood, Andrew, 2007, *ibid*, p. 278.

²³ Heywood, Andrew, 2011, *Global Politics*, Palgrave Macmillan, New York, p. 384.

building for the invention and innovation that created industrial civilization in the first place which can be used to generate an environment friendly version of industrialization and iii) international regimes and systems of transnational regulation, i. e. a system of global environmental governance which offers the prospect that the impact of ‘tragedy of commons’ can be reduced.²⁴ Heywood also asserted that ‘as the faltering process of implementing the 1997 Kyoto Protocol on climate change demonstrates concerted state action in this area is difficult to achieve because of the economic sacrifices involved’.²⁵ On the other hand, radical ecology believes that the capitalist modernity, its values, structures and institutions are the root cause of environmental degradation. Radical ecology takes a form of social ecology which develops a balance between humankind and nature largely by reference to social structures. It demands for a radical social change. Eco-socialism, eco-anarchism and eco-feminism are few expressions of radical environmental politics. Eco-socialism criticizes capitalism, eco-anarchism criticizes hierarchy and authority and eco-feminism criticizes patriarchy.²⁶

Deepak Nayyar defined globalization ‘as a process associated with increasing openness, growing economic interdependence and deepening economic integration between countries in the world economy’.²⁷ ‘Economic openness’ does not signify only the flows of trade, investment and finance but also introduces a wide extend meaning adding the flows of services, technology, information and idea across national boundaries. ‘Economic interdependence’ is asymmetrical in nature. A high degree of interdependence can be observed among the industrialized countries and between the developing countries and even between the developing countries and industrialized countries. But there is much less interdependence among the countries of the developing world. ‘Economic integration’ made national boundaries free and open as the process of liberalization lightened the significance of borders in economic transactions. It is on the one hand, an integration of markets for goods,

²⁴ *ibid*, pp. 388-389

²⁵ Heywood, Andrew, 2007, *Politics*, Palgrave Macmillan, New York, p. 142.

²⁶ Heywood, Andrew, 2011, *op. cit.*, pp. 389-390.

²⁷ Nayyar, Deepak, 2002, “Towards Global Governance” in Deepak Nayyar edited *Governing Globalization: Issues and Institutions*, Oxford University Press, New York, p. 6.

services, technology, financial assets and even money on the demand side and on the other hand, it is an integration of production, both horizontally and vertically on the supply side. Thus, as Deepak Nayyar illustrated, there are three manifestations of globalization: international trade, international investment and international finance which constitute its cutting edge.²⁸ Nayyar pointed that few countries and some people of the developing world have been benefited by the very process of globalization but it has many shortcomings too. Among all the discontents, environmental destruction is one which continues due to the accent on deregulation which accelerated the overexploitation and degradation of common property resources.²⁹ Hence, we need to create new rules or governing system worldwide to impose restrictions against the ‘public bads’, like environmental degradation, the arms trade or drug traffic etc. For the interest of ‘public goods’ like sustainable environment and or environmental preservation, coordination between countries is essential in terms of the management of world economy.³⁰

Samir Dasgupta viewed that ‘globalization panoramically refers to the extension and expansion of global linkages, the organization and institution of social living on a global parameter and the growth of a global consciousness, and hence to the consolidation of world society. This ecumenical definition is not enough to explore the real meaning of globalization... the recent trend of globalization means uprooting traditional ways of life, and threatening livelihoods, life style patterns, social and moral values, and cultures’. Because the forces of globalization have dismantled the traditional form of institutions, identity, values, religious ethos and social sanction.³¹ Samir Dasgupta regretted that we are going towards the ‘dark age’ as in the age of globalization the growth of technology is creating serious risk in the sphere of environment in the forms of pollution, deforestation, ecological imbalance etc. Globalization has drastic effects on the weather, biodiversity, physical health and on the life of the poor. Mostly the poor or the marginalized communities, in many of

²⁸ *ibid*, pp. 6-7.

²⁹ *ibid*, p. 5.

³⁰ *ibid*, pp. 13-14.

³¹ Dasgupta, Samir, 2006, “Globalization and its Future Shock” in Samir Dasgupta and Ray Kiely edited *Globalization and After*, Sage Publications, New Delhi, pp. 143-144.

the Third World countries, suffer a lot. Trade globalization is uprooting traditional communication and local ways of life and threatening livelihood patterns, style of living and cultures. Hence, protest against globalization or anti-globalization movement is emerging for a global social justice.³²

The theorists and critics of globalism have illustrated the influence of globalization, recommended for global environmental governance and justified the necessity for anti-globalization movement for environmental purity. The environmentalists of the developing countries are anxious about the loss of indigenous knowledge system and culture of the traditional communities as an adverse consequence of globalization. The tribal people of a rich natural resource area with less exposure to the market become more susceptible to the adverse effects of globalization. United Nations Environment Programme (UNEP) calculated that out of nearly 5,000-7,000 spoken languages of the world, 4,000 languages are of the indigenous people. More than 2,500 languages are in the way of extinction and many of them are losing their natural world. Such loss of languages is an indication of the disappearance of traditional knowledge of plants, herbs, trees, flowers and parts of animals and their use as medicines.³³ Now-a-days ‘environment’ has become a ‘global symbol’, environmental movements are ‘global phenomena’ and these movements are closely interconnected with ‘anti-globalization movements’. Environmental and human rights issues are most prominent to current anti-globalization movement and the participants of the movements generally follow non-violent direct action principles like other contemporary new social movements across the globe. These movements erupt through large scale mass mobilization by micro-organizations or small autonomous groups and the style of revolves around mass civil disobedience. A remarkable instance of anti-globalization movement, in ecological and environmental terms, was the mobilization against the World Trade Organization (WTO) in Seattle in late November and early December of 1999 in United States. Trade unionists and liberal environmental organizations joined the

³² *ibid*, pp. 161-165, 171.

³³ Rath, Gobinda Chandra, 2006, Introductory part in Gobinda Chandra Rath edited *Tribal Development in India: The Contemporary Debate*, Sage Publications, New Delhi, p. 37.

movement and demonstrated over the course of several days. The radical activists were engaged in civil disobedience principle but it was the young anarchists who blockaded the meetings of the WTO, fought the police, 'liberated' the streets of Seattle and the militant actions came at the serious attention by the media persons. In Seattle – anarchists, feminists, trade unionists and environmentalists formed alliance which was loose and has remained so at subsequent anti-globalization protests across the globe, most particularly in the minority or developed world.³⁴ Anti-globalization movement is not a movement by a particular caste, class or professional groups. However, participants can be identified or classified by their ideological position to which they adhere. Victimized farmers and tribals join the movement raising agrarian principles (agrarianism) and tribalism, these are the ideologies which talk about the protection of farming rights and tribal solidarity; human rights and social activists participate favouring feminism, localism, multiculturalism etc., these are the ideologies which support gender equality and justice, local development and ethnic identity; environmentalists take part in the movement justifying environmentalism and ecologism, these are the ideologies which uphold environmental justice and sustainability. In inflicting multiple havocs on multiple communities, corporate globalization also inspires multiple resistances against destructive character of globalization. The oppositional diversity can be found in indigenous movements and the movements by the unionists, farmers, environmentalists and feminists, they unite together to resist globalization.³⁵

Northern and Southern Environmentalism and Global Environmental Negotiations: Context and Contours

The nature of environmentalism of the Third World countries is different than that of the First and Second World countries because of the issues, concern, agenda and strategies of environmental movements that emerged in different contexts around the globe. Ramachandra Guha and Martinez Alier have distinguished

³⁴ Doyel, Timothy, 2005, *Environmental Movements in Minority and Majority Worlds: A Global Perspective*, Rutgers University Press, USA, pp. 161-164.

³⁵ Curran, Giorel, 2007, *21st Century Dissent: Anarchism, Anti-Globalization and Environmentalism*, Palgrave Macmillan, New York, p. 52.

between the ‘full stomach environmentalism’ of the North and the ‘hungry belly environmentalism’ of the south. Southern environmental movements, to some extent, were motivated by the Northern movements, because apart from the demands for the rights over natural resources, Southern movements also highlight the issues of pure and clean environmental space. Guha and Alier observed that, in the Southern movements, issues of ecology are interlinked with the questions of human rights, ethnicity and distributive justice. In these movements, actual participants are the peasants and tribals who are in defense of the locality and local communities against the nation. Thus environmental conflicts became more vibrant and issues of survival and subsistence remained more important. But environmental movements arose in the southern countries as a part of critique of consumerism and of uncontrolled economic development.³⁶ Ramachandra Guha wrote that, in Southern environmental movement, the question of sheer survival is more important than the ‘quality of life’ issues, such as environmental protection; secondly, the question of equity as well as economic and political redistribution have got equal importance.³⁷ Gadgil and Guha made a sharp distinction between First World and Third World environmentalism. They viewed that, environmental movements in the North are the product of post-industrial economy and post-material society but in India, environmental movements emerged when the process of industrialization started. On the contrary, in India, environmental groups follow lobbying and litigation strategies and they turn to courts as supplement to popular protest but in America, militant environmentalists disgusted with the incremental lobbying of mainstream groups and they follow direct action to protect threatened wilderness. Remarkably, in the First World countries, scientists, biologists have played an important role in the environmental movements but in case of India, journalists, Gandhians and environmental activists have played a significant role in the environmental movements.³⁸

³⁶ Guha, Ramachandra and Juan Martinez Alier, 1997, *Varieties of Environmentalism: Essays North and South*, Earthscan Publications, London, p. 18.

³⁷ Guha, Ramachandra, 1989, “Radical American Environmentalism and Wilderness Preservation: A Third World Critique” in *Environmental Ethics*, Vol. 11, No. 1, p. 81.

³⁸ Gadgil, Madhav and Ramachandra Guha, 2007, “Ecological Conflicts and the Environmental Movements in India” in Mahesh Rangarajan edited *Environmental Issues in India: A Reader*, Dorling Kindersley (India) Pvt. Ltd., New Delhi, pp. 420-424.

In the West (Northern countries), dominant issues of environmental movements are proper consumption, productive use and conservation or protection of natural resources. But in Southern countries, like India, environmental movements are based on use and alternative use of as well as control over natural resources.³⁹ Such comparison can further be illustrated from Arne Naess's distinction of ecology movements, viz., shallow and deep. Shallow ecology movements are the fight against pollution and resource depletion. Central objective of these movements are the health and affluence of the people in the developed countries. On the contrary, deep ecology movements in the developed nations are clearly and forcefully normative in character because deep ecology movement expresses a value priority system only in part based on results, or even lack of results of scientific research. Perspectives of deep ecology movement have been suggested, inspired and fortified by the ecological knowledge and the life style of the ecological field workers.⁴⁰ Arne Naess viewed that the shallow ecology movement is 'anthropocentric' and deep ecology movement is 'bio-centric'. Shallow ecology movement highlights humans' first value system but deep ecology movement respects for the intrinsic worth of all beings where humans are the single part of entire biological diversity.⁴¹ Thus deep ecology supports ecologism and shallow ecology emphasizes on environmentalism. It would be pertinent to view that, deep ecologism deeply encourages anti-growth principle but shallow ecologism suggests for sustainable growth. Due to several tensions between deep and shallow ecologism, alternative idea would be to 'social ecology' which implies a belief in natural harmony and the need for a balance between humankind (shallow ecology) and nature (deep ecology).⁴² Ramachandra Guha observed that the deep ecologists ignore the problems of social inequality both within the countries of the North and between the North and the South. The cities of deep ecology take a radical strand which inspires environmental justice movement.

³⁹ Shah, Ghanshyam, 2004, *Social Movements in India: A Review of Literature*, Sage Publications, New Delhi, pp. 252-253.

⁴⁰ Naess, Arne, 1973, "The Shallow and the Deep, Long-Range Ecology Movement: A Summary" in *Inquiry*, Vol. 16, No. 1, pp. 95-100.

⁴¹ Drengson, Alan and Bill Devall edited, 2008, *The Ecology of Wisdom: Writings by Arne Naess*, Counterpoint Press, USA, p. 27.

⁴² Heywood, Andrew, 2007, *Political Ideologies: An Introduction*, 4th edition, Palgrave Macmillan, New York, p. 261.

The nerve center of deep ecology is in the wild but shallow ecology has its root primarily in human habitations.⁴³ The environmental justice movement in United States redefined environment to include where people live, work, play, go to school and how these activities interact with the physical and natural world. Loose alliances of grassroots and national environmental and civil rights leaders have conducted the environmental justice movement in United States.⁴⁴

In India, environmental movements, organized by both state and civil society, both deep as well as shallow perspectives can be found. State has enacted several laws and regulation to protect both human and non-human species, for example – Wild life Protection Act and it's amendments deeply emphasize on the protection and preservation of endangered/extinct/vulnerable species; on the contrary, The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (2006) accentuates on the people's rights over the natural resources. Civil society organizations, on the contrary, exercise pressure politics for the welfare of humans and non-humans; for example – Chipko movement was both for forest conservation and livelihood security and the Silent Valley movement was organized to save biodiversity. Movements against Tipaimukh and POSCO project also had common ideology. Protestors from India and Bangladesh argued that the Tipaimukh dam will devastate aquatic life and as a consequence a number of fishermen will lose their livelihood. On the contrary, *POSCO Protirodh Sangram Samiti*, *POSCO Kshatigrasth Sangharsh Samiti* and other civil society organizations viewed that, in the name of industrialization, the Korean company will capture the port areas and they will extend the Paradeep port and as an adverse reaction, several aquatic creatures will be extinct from the area and then fishermen will suffer this loss. But social ecology concern is very significant in the movements by civil society. Contemporary civil society organizations are more concerned about the social ecology and their actions are very transformative, distributive and reformative in nature against anti-environmental trends. From that perspective, environmental

⁴³ Guha, 2000, *Environmentalism: A Global History*, Longman, New York, p. 87.

⁴⁴ Doyel, Timothy, 2005, *op. cit.*, p. 25.

pressure groups emerge and apply generally non-violent techniques of pressure politics for environmental and ecological justice.

Since last century, the environmental movements are emerging in many parts of the world on behalf of the civil society organizations. In developed and underdeveloped nations, majority and minority world, these movements pose a serious challenge to state authority and unfold the environmental and ecological values. These movements raise slogans for smooth environmental governance, endeavour to restrain the authoritarian role of the state and assert democratic rights over natural resources. However, global environmental movements that have been organized through the participation of international state actors on certain guidelines and preferred agenda were more or less conducive to policy based change in the national as well as in international boundary. Stockholm conference of 1972 on population, environment and development; Montreal Protocol of 1987 on the prevention of Ozone layer depletion; Earth Summit of 1992 on population control; Kyoto Protocol of 1997 on climate change; Earth Summit of 2002 on sustainable development; Copenhagen Accord of 2009 on the future prospect of Kyoto Protocol; Cancun Summit of 2010 on the reduction of CO₂ emission; Durban conference of 2011 on climate change and Rio+20 or Rio Earth Summit of 2012 on waste management, pollution control and savings of water were the instances of global environmental negotiations to fortify environmental governance worldwide. While global warming and ozone layer depletion are the major environmental problems in the developed nations, in the developing countries pollution, deforestation, land degradation, livelihood crisis of the forest dwellers etc. are prime concern when dealing with environmental damage. Anil Agarwal and others argued that, ‘unless all environmental problems are addressed within integrated perspectives that taken into account the local and global, there will be little confidence within the developing world that their concerns are being taken into account into the global environmental agenda’.⁴⁵

⁴⁵ Agarwal, Anil, Sunita Narain and Anju Sharma edited, 1999, *Green Politics: Global Environmental Negotiations I*, Centre for Science and Environment, New Delhi, p. 8.

The UN conference on Human Environment held in Stockholm in 1972 and UN conference on Environment and Development at Rio de Janeiro in 1992 have forced India to follow legal actions on ecology and environment. Political elites and leaders were acquainted with the excessive growth of population and under this pressure it was quite difficult to prepare a blueprint for sustainable development in relation to environment poverty. Hence, Indira Gandhi said at Stockholm that, 'poverty is the greatest pollutant'. Stockholm conference actually intended that: a) Western industrially developed countries are only concerned about the global environmental problems, b) disseminating the logic of environmental problems, Western countries are trying to block the developmental process in the context of Third World and c) Western nations have certain belief system about the negative impact of science and technology over environment and ecology.⁴⁶ The Earth Summit of 1992 displayed 21 point programme to make a harmony between environment and development. Agenda-21 suggests for adopting certain policies which will be development oriented and environmentally sound. Sustainable development, poverty reduction, biodiversity conservation, prevention of deforestation, protection of bio-sphere, pollution control etc. were the declared objectives of Agenda-21. But central theme was sustainable development which got more deliberative response after Earth Summit – 2000 of Johannesburg. In India, all the mentioned objectives were reflected through National Environmental Policy, 2006. The policy highlighted livelihood security of the poor, integration of environmental concerns in economic and social development, efficient use of environmental resource, effective environmental governance, enhancement of resources for environmental conservation, conservation of critical environmental resources etc.⁴⁷ But, since many state governments of Indian Union are formulating new policies on economic development using natural resources, proper implementation of national environmental policies is facing several challenges. Poor and marginalized people are organizing protest movements against the state

⁴⁶ Sethi, Harsh, 1993a, "Survival and Democracy: Ecological Struggles in India" in Ponna Wignaraja edited *New Social Movements in the South: Empowering the People*, Vistaar Publications, New Delhi, p. 126.

⁴⁷ MoEF, 2006, *National Environmental Policy, 2006*, Ministry of Environment and Forests, Government of India, New Delhi, pp. 8-9.

governments asserting their traditional rights over natural resources. However, the state authorities consider national environmental laws and regulations with greater importance when they provide environmental clearance for huge industrialization and dam projects. Noticeably, in twenty-first century India, under the pressure of environmental activism of the marginalized section, which the theorists called ‘environmentalism of the poor’, the state governments in many contexts, have abandoned huge economic developmental programmes supported by multinational and transnational corporations.

Globalization, Developed and Underdeveloped Nations: Debate and Differences

Stiglitz raised the questions against the management procedure of globalization. He accused that due to the improper management of globalization, many of poor people of the world are facing several challenges. There is no effective management on environment and on the other hand, globalization is not working for the stability of the global economy. Transition from communism to a market economy was a ‘bad’ or unjustified management by which, except China, Vietnam and a few East European countries, poverty situation has been increased. It has also been observed that the East Asia’s success was based on globalization because of the development in the sphere of trade and increased access to markets and technology. Even globalization brought positive changes in proper health care services and ‘global civil society’ movements for more democratization and greater social justice have become more popular due to global networks between the people. Therefore, ‘the problem is not with globalization but with how it has been managed’. Problem lies with the international economic institutions like International Monetary Fund (IMF), World Bank (WB) and World Trade Organization (WTO) which served the interests of the more advanced industrialized countries rather than those of the developing world.⁴⁸ The critics of globalism often argue that the globalization has created a broad inequality between the North and the South and created two major sections: profiteers/beneficiaries and the losers/victimized. Multinational

⁴⁸ Stiglitz, Joseph, 2002, *ibid*, p. 214.

corporations and the advanced industrialized countries are the profiteers and Third World countries are the victimized. The Third World countries have few weaknesses like excessive poverty problem at the countryside, insufficient wage levels and minimum degree of restriction over trade and commerce etc.; more importantly, the production system is not managed concerning the internal requirements, instead it is managed concentrating on the requirements of the global market. Hence, Third World countries are facing several negative consequences of globalization. Andrew Heywood comments that ‘global tension have come to be seen less in terms of East versus West and more in terms of North–South divide’.⁴⁹

In matters of global environmental crisis, the countries of the both North and South put blames on each other. Northern countries view that the Southern countries are not cautious about the ‘sink problems’ which cause environmental degradation. In turn, the Southern countries state that the Northern countries are responsible for the growing ‘resource problems’ and the increasing ‘ethical problems’ and hence, the environmental destruction is taking place and the poor who suffer the negative consequences mostly. During the WTO Ministerial conferences at Cancun and Seattle, a substantial number of protestors argued that industrialization and further trade expansion are environment degrading strategies. A section among the protestors was sponsored by industrial interests in rich countries to use the term ‘environment’ as an argument to keep Third World exports away. At the Seattle inter-ministerial conference, the rich countries have proposed a set of rules by the name of ‘environment standard’ to themselves. They argued that ‘environment standard’ can be applicable to all the countries of the world ostensibly to protect the environment. In case of the ‘labour standard’, the rich countries claim that they are environment friendly and paying considerable attention for environmental protection in various ways but the poor countries make their products cheap at the cost of the environment. Therefore, the argument developed by the rich countries is that the poor countries are gaining by continuing environmental degradation and hence enjoy an unfair trade advantage over the rich countries. Thus creates dumping because the

⁴⁹ Heywood, Andrew, 2002, *ibid*, p. 141.

offered prices of the products produced by the poor countries to release in the global market are less than the cost of their production once the environmental cost of declining natural wealth is taken into account.⁵⁰

Vandana Shiva, an eco-feminist, alleges that Western industrialization, modern technologies and patriarchal form of domination are the important factors for environmental deterioration. Shiva viewed that globally powerful institutions like multinational corporations and multilateral development banks are behind it. International institutions and organizations considered all environmental problems a 'global' problem and their solution can be 'global'. But the 'green' or 'environmental movements' grew out of local awareness and local efforts to resist environmental damages, *Chipko* and *Narmada Bachao* movements of India are examples. Emissions of greenhouse gas, decline in biodiversity, pollution and depletion of ozone layer are considered as global environmental problem in view of international institution, like World Bank (WB). Global Environmental Facility (GEF) was established at the WB for remedial actions against the environmental crisis. But the environmental problems like forest crisis, water crisis, toxic and nuclear hazards, even livelihood crisis have been raised by the local environmental protests.⁵¹ Shiva pointed out that, 'the environmental movements revealed the ecological and social costs generated by the forms of maldevelopment conceived and financed by agencies such as the World Bank. Yet, the language of the environment is now being taken over and being made the reason for strengthening 'global' but hegemonic institutions'.⁵²

Another form of domination by the international institutions can be observed in the name of 'biodiversity conservation'. World Bank emerged as a protector of biodiversity through GEF. As a consequence, North or the developed nations demand free access to the biodiversity of the South through Biodiversity Convention by which the control by the local communities and sovereign rights of the nation

⁵⁰ Dasgupta, Biplab, 2005, *Globalization: India's Adjustment Experience*, Sage Publications, New Delhi, pp. 94-95.

⁵¹ Shiva, Vandana, 1994, "Conflicts of Global Ecology: Environmental Activism in a period of Global Reach" in *Alternatives: Global, Local, Political*, Vol. 19, No. 2, pp. 195-197.

⁵² *ibid*, p. 196.

states over the natural resources have been neglected. Globalization has become a political means to ensure an erosion of the customary rights and sovereign rights and a means to shift control over and access to biological resources from the gene-rich South to the gene-poor North. Thus, the ‘global community’ is working as a weapon for the North to gain worldwide access to natural resources and raw materials and on the other hand it has become a force for worldwide sharing of the environmental costs that has generated while retaining a monopoly on benefits reaped from the destruction.⁵³ There is a broad difference between the biodiversity conservation strategy followed by the international institutions and the biodiversity conservation plan of the global south. The international institutions have formulated the conservationist strategies for commercial purpose worldwide. Hence, the strategy is known as ‘commercialized conservation’. This conservation plan was developed by the World Resources Institute (WRI) in collaboration with the International Union for the Conservation of Nature (IUCN), the World Wide Fund for Natures and the United Nations Environmental Programme (UNEP). In accordance with the ‘commercialized conservation’ plan, new biotechnologies have been introduced to transform the genetic richness of this planet into strategic raw materials for the industrial production of food, pharmaceuticals, fibers, energy etc. and the value of conservation is measured in dollars and the plan justifies the value on the grounds of its present or future profitability. The concerned strategy has failed to see biodiversity as having an inherent ecological value in itself.⁵⁴ On the contrary, in contrast to commercialized conservation, ‘People’s Biodiversity Conservation Action Plan’ urged for: regenerating diversity for conservation as well as production in agriculture, forestry, energy and health care etc; decentralized type of conservation management; proper care for indigenous knowledge system and traditional communities; protection of rights and equality, legislation and institutional

⁵³ Shiva, Vandana, 1994, *ibid*, p. 199.

⁵⁴ Shiva, Vandana, 1992, “Globalism, Biodiversity and The Third World” in Edward Goldsmith, Martin Khor, Helena Norberg-Hodge, Vandana Shiva and Others edited *The Future of Progress: Reflections on Environment and Development*, Green Books in association with International Society for Ecology and Culture, UK, pp. 56-57.

safeguards to proper genetic resources, proper monitoring and analysis of the activities of international agencies; initiative for local development etc.⁵⁵

Practically advanced industrialized countries are behind global warming and drastic climate change problem because at the first time they have introduced and popularized the use of chemicals and fossil fuels, like coal and oil, for agricultural and industrial development. As a result, level of the emissions of the carbon dioxide, chlorofluorocarbons, methane and toxic gases has been increased. While, in 1990, with 16.2% of the world's population, India was emitting just 6% of the world's carbon dioxide and 14.4% of the world's methane, with just 4.7% of the world's population, United States emitted 26% of the carbon dioxide and 20% of the methane. But World Resources Institute (WRI) counter-charged that it is not the advanced industrialized countries, like USA and Japan, rather a number of poor countries are responsible for the global environmental change. Through a statistical calculation, WRI permitted 2,519 million tonnes of carbon dioxide and 35 million tonnes of methane produced by USA to be cleaned away by the earth's environment, whereas, India, with a population 3.4 times that of USA, is given only a share of 604 million tonnes of carbon dioxide and 26 million tonnes of methane to be cleaned away by the earth's natural sink.⁵⁶ Carbon dioxide is a most important greenhouse gas and an inevitable waste product for fossil fuel burning which has been the key to industrialization since the early days of industrial revolution. If a country wishes to develop living standard of its citizen through industrialization, either the country will have to emit greenhouse gases or find dramatically new ways of living status or new technologies. Indian environmentalists view that the climate change is a malaise of fossil-fuel addicted industrialization and consumerism. These are the products of the North. In accordance with the databases on carbon emission from 1850-2000

⁵⁵ *ibid*, 65-67.

⁵⁶ Agarwal, Anil and Sunita Narain, 1991, "Technology Control, Global Warming and Environmental Colonialism: The WRI Report" in *Social Action*, Vol. 41, No. 3, p. 19; Agarwal, Anil and Sunita Narain, 1991, *Global Warming in an Unequal World: A case of Environmental Colonialism*, Centre for Science and Environment, New Delhi, p. 10.

provided by the Carbon Analysis Indicator Tool, industrialized countries are responsible for about 77% of the accumulated stock of greenhouse gases.⁵⁷

The concept of Marxist ecology would be pertinent here to describe the global environmental crisis, socialist movement against globalization and international labour flows. Marxist ecology does not emphasize on the social causes of environmental problems, nor does it analyze the political solutions to it. It argues that environmental crises are something to do with capitalism; but exactly what they are, why they arose, what can be done about them, are problems that are still largely hidden.⁵⁸ Marx's ecological insights were derived from a systematic engagement with the seventeenth-century scientific revolution and the nineteenth-century environment via a deep philosophical understanding of the materialist conception of nature. From this perspective, Marx analyzed the human alienation from nature in a sophisticated and ecologically sensitive form and this tendency was reinforced by his concern regarding human subsistence and the relationship to the soil and the whole problem of capitalist agriculture. Central theme of this analysis was a concern regarding the antagonistic division between town and country.⁵⁹ From the theoretical bases of neo-Marxism and neo-Weberianism, key problems of Third World political ecology have been identified. During 1970s to mid-1980s, neo-Marxist thought, developed by A. G. Frank, I. Wallerstein, Samir Amin and Alain de Janvry, explained local conflicts and change as outcome of global production process. This explanation was critical of neo-Malthusianism and cultural ecology; it specified patterns of surplus extraction and class relations as the key problem of Third World political ecology. It is important to note that, opposite to this 'deterministic' neo-Marxism, during late 1980s to 1990s, neo-Weberian thinkers, like Theda Skocpol and Charles Tilly; social movement theorists, like J. C. Scott; and household and feminist thinkers, like Guyer and Peters, Bina Agarwal explained conflict and change at all scales as outcome of interaction of various actors possessing unequal power

⁵⁷ Dubash, Navroz K., September 2009, *Environmentalism in the Age of Climate Change*, Seminar 601, p. 64.

⁵⁸ Layfield, David, 2008, *Marxism and Environmental Crises*, Arena Books, UK, p. 84.

⁵⁹ Foster, John Bellamy, 2000, *Marx's Ecology: Materialism and Nature*, Monthly Review Press, New York, p. 20.

capabilities. This explanation specified unequal power relations between actors and motives and interests of various actors as key problem of Third World political ecology.⁶⁰

The Marxists convict capitalism for environmental crises, because, they argue, it is the capitalism which imbues over-production at the cost of over-use or over-exploitation of natural resources. Hence, the Marxists rely on scientific socialism, a movement through planned economy, to halt over-exploitation of natural resources and man-nature alienation. Multinational and transnational corporations, in twenty-first century world order, are the real threats for Third World's country's natural resources. Therefore, state must impose restrictions over MNCs and TNCs. In matters of technological aids, the socialist countries propose to focus efforts on the development of industrial production in the public sector of developing countries. The socialist countries emphasizes on the improvement of the mechanisms of cooperation. They recommend:

- a) Expansion of the functions of international bilateral commissions for scientific, technological and economic cooperation to broaden the scope and improve the quality in the field of economic information and to deepen the contacts between planning organs of socialist developing countries by means of developing cooperation in fields which are of mutual interest;
- b) Development of the practice of working out long-term programmes of cooperation in the field of foreign trade, industry, science and technology;
- c) More frequent application of the practice of compensatory agreements in order to develop the export branches of developing countries;
- d) Assistance be given to interested countries in working out the plans and programs for their economic development;
- e) Ensuring assistance in the field of raw materials processing;

⁶⁰ Bryant, Raymond L. and Sinéad Bailey, 1997, *Third World Political Ecology*, Routledge, New York, p. 14.

- f) A search for possibilities of effecting clearing operations with developing countries on a multilateral basis; and
- g) Promotion of cooperation between the Council of Mutual Economic Assistance (CMEA) countries, International Investment Bank and developing countries by providing funds from a special credit fund within the framework of economic and technological assistance.⁶¹

In the discussion on Marxist ecology, Locke's labour theory is more significant. Human labour is considered as a valuable resource for a country's agricultural production, food processing, animal husbandry, aquaculture, textile industry and many other productive activities that are performed being connected with nature and natural laws. Without making an intricate relationship with nature man cannot perform these actions because for production man should understand the laws of nature. Close connection with nature means the better understanding of nature's capacity and livelihood strategies. Through trial and error tendencies man developed ecological wisdom or traditional knowledge system which is mostly required for water harvesting, food production, building a survival shelter, clothing, herbal treatment and veterinary medicine etc. But, basically, the human labour and untiring efforts of man produced the ecological knowledge. In other words, man's ecological knowledge is the product of human labour that is applied to understand the nature. John Locke's argument is that, rather than the natural plenty, it is the human labour that creates most of what is useful and valuable to humans.⁶² For Karl Marx man is rooted in nature and as a natural object man has certain 'natural wants' which include food, clothing, shelter, fuel etc. But man is different from other animals as man produces wealth applying labour.⁶³ In the labour-process, with the help of technology, human activity transforms natural matters and generates use value. Thus alteration takes place in the environmental system and natural resources

⁶¹ Agarwala, P. N., 1983, *The New International Economic Order: An Overview*, Pergamon Press, New York, p. 210.

⁶² Zvesper, John, 1996, "Locke and Aristotle on Property" in Richard Bellamy and Angus Ross edited

A Textual Introduction to Social and Political Theory, Manchester University Press, New York, p. 95.

⁶³ Evans, Michael, 1975, *Karl Marx*, Routledge, New York, p. 54.

become a pre-requisite of economic activity.⁶⁴ In the age of globalization, natural resources produced commodities, even human labour are in the process of serious flow from one place to another. In the late nineteenth century, international labour migration was enormous, passports were seldom needed. Considerably, there were no restrictions on the movement of the people across national boundaries. But now the cross-border movement of people is regulated as well as restricted.⁶⁵ However, international institutions have imposed immigration laws to restrict the cross-border movements of the people. But industrialized countries seek to protect their interests through international institutions and rules. The multilateral framework of WTO is most important medium. Institutional framework for globalization has created a striking asymmetry. National boundaries should be opened for trade flows and capital flows but should be restricted for technology as well as labour flows. In other words, the developing countries would provide access to their markets without a corresponding access to technology and would accept capital mobility without a corresponding provision for labour mobility. This asymmetry is basically an unequal treatment of international laws and regulations because while the movement of capital is free, movement of labour across the borders is un-free.⁶⁶ However, the cross-border movement of the people, i. e. labour flows, immigration and frequenting across the national boundaries, as Deepak Nayyar observed, is economic migration. In contrast, environmental migration, from eco-centric and anthropocentric point of views, is forced migration in which migrants are forced to move away from their homes as a result of the loss of livelihood and living space because of environmental change and the migrants who are forced to migrate, temporarily or permanently, to the alternative place within or outside the national boundary in search of sustenance.⁶⁷ In the developing countries environmental migration causes conflicts at three levels:

⁶⁴ Scholz, Roland W., 2011, *Environmental Literacy in Science and Society: From Knowledge to Decisions*, Cambridge University Press, New York, p. 269.

⁶⁵ Nayyar, Deepak, 2002, "Cross-border Movements of People" in Deepak Nayyar edited *Governing Globalization: Issues and Institutions*, Oxford University Press, New York, p. 156.

⁶⁶ *ibid*, p. 158.

⁶⁷ Swain, Ashok, 1996, "Environmental Migration and Conflict Dynamics: Focus on Developing Regions" in *Third World Quarterly*, Vol. 17, No. 5, p. 966.

- a) *State versus State Conflicts:* Massive transborder environmental migration induces conflicts between the receiver and sender states. Giving permission to the migrants to enter into its own territory may strain the relationship between the two states. Sender states may allege that the receiving country is encouraging migration and the receiving state may counter-allege that the sender state is incapable of handling the migration crisis. After being settled in the host country, the migrants may move towards anti-government activities against their native government. Increasing demands of migrants for natural resources may pose a structural threat to a developing host country. The environmental migrants may try to enter into the fragile domestic political process of the host country and may exert pressure on its government. Under this circumstance, the host country would face serious law and order problem. If the native citizens of the host country pressurize the government to send the migrants back to their own country, it may worsen the relationship between the sender and receiver states which would incite an armed struggle.
- b) *State versus Group Conflict:* Implementation of big environmentally disastrous projects, like dam project, industrialization etc., generates rapid urbanization and as a result a number of people would be displaced from their agricultural land, fishing habitats etc., and they would move to the nearby urban areas in search for alternative sources of livelihood. In the developing world, the anti-authoritarian or anti-state movements arise on such social problems as the environmental migrants perceive that the state authority is the real culprit of their misery. This is the conflict between state and the groups which could be the result of a transformation of popular dis-enhancement into an organized political struggle. The political actors may take the advantage of these struggles against the state and such changing situation may intensify a serious conflict in the developing society and may pose a threat to the government of democratic elected regimes.

- c) *Group versus Group Conflicts:* Group versus group or the native versus migrant communities conflict may take place due to internally as well as because of transborder migration of environmentally displace people taking the issue of the access to common property resources, like water, grazing areas, forests etc. *Bhoomiputras* or the ‘sons of the soils’ demand for their own right over common property resources at their own countryside and claim that the migrants should go back to their own place within the countryside or outside the countryside. This is the tension of retaliation by the natives and such reprisal may be used by the elites in the migrant community to counter their native counterparts. Such conflicts between the native and the migrants may breed a feeling of insecurity among the elites of the both communities and it is an attempt to protect their interest against each other.⁶⁸

For the international labour migration, globalism would be a positive force because the sender states will be capable of providing labour resources of the workers to the receivers and the receivers will be getting sufficient human power from outside its borders. Besides, ordinary working class people will have more opportunities to perform their actions across the borders. As a consequence, both sender as well as receiver states will enjoy a healthy relationship between each other. However, in this context the international laws for labour migration should have to be enough supportive for the interests of developing countries and their labour organizations. On the contrary, the environmental migration takes place as an adverse reaction of neo-liberal globalism. For the implementation of the developmental projects, like installation of big dams, setting up of huge industrialization etc., a country needs to receive foreign aids and assistance without which perhaps no developing nation state possesses adequate capacity for having modern economic developmental project to be established. Here lies the problem, because land acquisition, resource extraction, transformation and supplying of production to the global markets etc. are the inalienable parts of modern economic

⁶⁸ *ibid*, pp. 967-970.

development. Consequently, massive environmental migration would be an obvious phenomenon.

Globalization, Industrialization and India's Environment: Policy, Process and Protest

In case of India, globalization as a policy and process is primarily economic and directly political in nature. The history of globalization and its implication on Indian economy and politics is not a new phenomenon. At its required moment, globalization has changed its nature and its shape. After a long term evolutionary phases it has acquired new dimensions in the era of 21st century. At one point of time India was under imperial-colonial form of globalization, later on emerged neo-colonial and neo-imperial form of globalization under which India's environment came under the control of multinational corporations and international institutions and the process continued to exist. In moment of need, globalism acquires new nature and compels the political system of the Third World countries to continue domination and external control at the series of market led growth or developmental process which is going on uninterruptedly. However, in 1946, the Advisory Planning Board of the Interim Government, precursor to India's Planning Commission, was against the forces of foreign control. It clearly stated that the basic industries of the country should be free from foreign control. Foreign capital should not be allowed to enter into those spheres where it is already existed even it should not be expanded to the non-basic industries such as consumer goods. But if necessary, the country should rely on imports. At the necessary moment it would be possible to restrict or discontinue foreign imports but foreign vested interests once created would be difficult to dislodge.⁶⁹ After the formation of Planning Commission, the initiated economic policy was known as Mahalanobis model. It has been assumed that, as a closed economic model in which imports were to be allowed in accordance with the requirement in order to extend industrialization and imports were restricted to capital goods. Even, in the model, export earnings that could finance some of the external

⁶⁹ Alamgir, Jalal, 2009, *India's Open-Economy Policy: Globalism, Rivalry, Continuity*, Routledge, New York, p. 83.

resources required for economic development. Therefore, both policies on import and export were restricted. Nationalist project of Nehru and his followers favoured large industrial townships and were less enamored by humdrum rural development. Nehru wanted to be free from ‘economic bondage’ and ‘political subjugation’ and in his economic nationalism supported by big industrialization, science, modernity and urbanization got a deep significance whereas, Gandhiji was looking at the traditional rural society where small handicrafts would be the suitable source of economic development.⁷⁰

The flow of international trade had accelerated from the 1870s to 1913 and had decelerated from the middle of the 1920s. In case of India, the ratio of foreign trade to national income was declining over the period from the 1950s to early 1970s but slowly it increased again from the late 1970s. The rise in the ratio of Indian foreign trade to national income has been measured in the late 1970s. There was much less induction by policy than by developments in the world economy particularly by the growth of demand for Indian exports in West Asia and some other oil-exporting regions. Amiya Kumar Bagchi observed that, ‘...global recession in the early 1980s brought down the share again. In 1985-86, the share of India’s exports to India’s GDP was 4.7 per cent. The corresponding figure rose to 6.8 per cent on the eve of the spate of liberalization measures adopted in June-July 1991’.⁷¹ In 1980s, many of the Third World countries were deeply influenced by the International Monetary Fund (IMF) programmes of ‘stabilization’ coupled with World Bank (WB) programmes of ‘structural adjustment’. The programmes of economic stabilization has two fundamental objectives: a) to pre-empt a collapse of the balance of payments situation in the short-term by reducing the deficit on current account as much as possible, b) to curb inflation. Both the balance of payment and inflation were considered as the problems for the Third World countries. However, in matters of the problems like unemployment, poverty or economic deprivation, India’s social movements receive no more than passing mention in stabilization. Devaluation, as

⁷⁰ *ibid*, pp. 83-84.

⁷¹ Bagchi, Amiya Kumar, 1999, “Globalization, Liberalization and Vulnerability: India and Third World” in *Economic and Political Weekly*, Vol. 34, No. 45, pp. 3219-3220.

standard IMF-WB measure, has been recommended to improve the balance of payments. India also implemented devaluation measure as a package of policies. The package provided the rationale for a sharp reduction in the fiscal deficit of the government, the adoption of a tight monetary policy and a substantial devaluation of the rupee in July 1991.⁷² On the contrary, the structural adjustment and reforms seeks to shift resources by two ways: a) from the non-traded goods sector to the traded goods sector and within the latter from import competing activities to export activities, b) from the government sector to private sector. These are the process of reallocation of resources. Besides structural reforms seeks to improve resource utilization by: a) increasing the degree of openness of the economy and b) changing the structure of incentives and institutions in favour of private initiative and against state intervention. Thus a general economic philosophy has been developed in which more reliance in market forces can be followed, dismantling of controls can be observed relying more on prices and another tendency, i. e. wind down the public sector expecting that the vacuum will be filled by the private sector. The underlying presumption was that the growth of industry based on state intervention may lead to inefficient allocation and utilization of economic resources. Such tendency does not recognize that the success at industrialization does not merely come from the allocation and utilization of existing resources at a micro-level. It is a step for, as much as possible, the mobilization and creation of resources at a macro-level. Thus importance has been given on: a) resource allocation through relative prices and b) resource utilization through deregulation and openness. But it was heavily biased in its disproportionate emphasis as it fails to recognize that more liberal policy regimes can allow things to happen but cannot cause them to happen. In India, a wide-ranging policy reformation process came to as seen in July 1991. Reformation process took place in the industrial sector, the trade regime, foreign investment, foreign technology, the public sector and in the financial sector.⁷³

⁷² Bhaduri, Amit and Deepak Nayyar, 1996, *The Intelligent Person's Guide to Liberalization*, Penguin Books, New Delhi, pp. 30-31.

⁷³ *ibid*, pp. 33-34.

The New Economic Policies have a severe social and environmental impact as enumerated by Ashish Kothari: a) the drive towards an export-led model of growth which is rapidly sacrificing natural resources to earn foreign exchange, as especially seen in the fisheries and mining sectors, b) the move towards liberalization has 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, c) the directive to reduce government expenditure is resulting in cuts in social and environmental sectors. This is leading to a reduction in programmes for the conservation and regeneration of natural resources, d) opening up of the economy is bringing in companies with a notorious track record on environment (including pesticide manufacturers who have almost wound up in their parent companies) and wasteful consumer goods and toxics which were adding to the country's garbage and health problems.⁷⁴ Several problems in the sphere of society and environment were identified due to some budgetary cuts in the budget of 1992-93 prepared by the then Finance Minister Manmohan Singh. Allocation for the prevention and control of pollution has been cut by 35.5% at a time when the policies are likely to increase the pollution problem. On the other hand, rural sanitation programmes have suffered a cut of 46.8% and the rural water supply project of the Water Mission has been shared of 39.3% of its budget. Other programmes have also suffered, for example, wastelands development (down by 23.5%) and promotion of non-conventional energy sources (cut by 26.3%). However, the heaviest reduction, i. e. 61%, is in the biomass development programme. This cut has been added with increasing privatization of common property resources that displays total apathy towards the 30 crore people (40% of the total population of the concerned time period) whose very existence was tied up with the health and availability of biomass fuels and fodder. Though Finance Minister Dr. Manmohan Singh in a lecture on 'Environment and the New Economic Policies' stated that the environment is 'here and now' for the majority of India's people. Finance Minister also argued that these cuts are

⁷⁴ Kothari, Ashish, 1995, "Environment and New Economic Policies" in *Economic and Political Weekly*, Vol. XXX, No. 17, p. 924.

temporary only and greater allocations will be possible once the economy stabilizes but in reality his budgetary cuts did not reflect ‘here and now’ ethics.⁷⁵

In India, before industrial reform, there was a constant effort to harmonize agriculture with industry. Industrial development took place in such a way so that both agriculture and industry can be complementary to each other. But when the neo-liberal globalization endeavoured to be adaptive in context to India, Indian agriculture faced drastic changes and simultaneously the cultivators first became the protestors of globalization. Modern industrialization started with plantation industries like Indigo, tea and jute. An eminent jurist, Mahadev Govind Ranade observed that, with the development of agro-based industries, a considerable transition took place from agricultural country to a manufacturing country. Such development came at the surface of Indian economy due to the growth in the production of indigo, tea, coffee, oils, sugars, beer and tobacco etc. and simultaneously jute, cotton, silk, woolen, paper and flour-milling industries were set up.⁷⁶ At the time of Indian independence, the economy was well-equipped with entrepreneurial ability, factor availability and social and economic overheads. At that time, industrialization was relying primarily on market forces which were feasible. Secondly, industrial planners of India were forcing industrial economy into a strait-jacket of heavy industrialization of Soviet type. Thirdly, the policies on heavy industrialization were disastrous because allocational criteria of efficiency were completely ignored. Since 1950s to 1960s the entire industrial sector was divided into three sectors: a) consumer goods industries, b) raw materials and intermediates and c) investment goods. But mainly several technological and economic problems were there rather than the ideological. Hence, ‘heavy industries first’ policy faced several constraints.⁷⁷

⁷⁵ Kothari, Miloon and Ashish Kothari, 1993, “Structural Adjustment vs. Environment” in *Economic and Political Weekly*, Vol. 28, No. 11, p. 473.

⁷⁶ Majumdar, Sumit K., 2012, *India’s Late, Late Industrial Revolution: Democratizing Entrepreneurship*, Cambridge University Press, New York, p. 87.

⁷⁷ Alagh, Yoginder K., 1971, “Indian Industrialization: Fact and Fiction” in *Economic and Political Weekly*, Vol. 6, No. 30/32, pp. 1677-1679.

The features of Indian industrialism, as explored before new economic policy regime, were:

- a) '*Industrialism in a Single Country*': The industrial policies were influenced by the doctrine of "industrialism in a single country" which implied that the development of an export oriented sector in industry and services are unnecessary. The requirement is to extract some export surplus by sharing the domestic market or to encourage the industry to build up an export market by utilizing the excessive capacity more fully.
- b) '*Balanced Development*': A strong faith was placed in the doctrine of 'balanced development' for the Indian planning. Planning Commission considered improved standard of living, employment opportunities, economic and social equality to be of vital importance for the betterment of democratic governance.
- c) *Import Substitution*: A strategic decision was taken to set up industries primarily with the objective of import substitution in hope that the domestic market would determine the overall size of new industries, domestic availability of industrial materials, the costs, the quality and the actual scale of production.
- d) *Capacity Building for Public Sectors*: A critical decision was taken to construct a foundation of most of the basic and capital goods industries in the public sector in hope that these sectors alone could provide the industrial materials and tools for industrialization.
- e) *Growth of Capital-Intensive Industries*: A strategy for setting up of highly capital-intensive industries has been followed for manufacturing intermediate industrial inputs. The aim was to create an integrated industrial complex which would be technologically feasible.
- f) *Encouragement for Labour-Intensive Industries*: A balance provided by the vast expanse of medium and small-scale industries which are

essentially labour-intensive and invariably employs traditional-obsolete machinery produced within India.⁷⁸

Today, for industrial development, state authorities are following few steps like land acquisition in the name of ‘national interest’ applying ‘eminent domain’ clause and then transformation of land and other natural resource extraction. These include transformation of agricultural sector into Special Economic Zone (SEZ), transformation of forest land into an industrial estate or power generation centre etc. with the help of FDI on the one hand and use of natural resources like water, forests and other minerals for producing commodities or generating power etc. through modern technologies on the other. Environmentalists and the human rights activists have pointed out that: a) State actions on the transformation of agricultural sector into SEZ, b) Over emphasis on the necessities of global markets than the requirements of the poor, c) increased dependence on the FDI, e) excessive use of modern technologies, d) growing tendency towards natural resource extraction are not only destructive for our natural environment but also harmful for social environment. From eco-centric and anthropocentric perspectives, it has been argued that as negative upshot of such actions or policies, problems like: a) deforestation, b) extinction of wild species, c) severe geographical and climatic change, d) global warming, e) decrease in agricultural production and decline of agro-based economy, f) immense poverty and unemployment at the rural settings, g) survival and identity crisis of traditional communities and depravity of indigenous knowledge systems, h) resource use conflicts regarding extraction, allocation and plundering of natural resources etc. may arise.

It was quite a scandal whenever the question of development rose. Always there were the problems of policy, technology and ideology choices. Always both at the old industrial policy regime and new industrial policy situation, natural and social environment were under severe threat. Rajni Kothari observed that under globalization, the nation state is facing several challenges like decline in democracy,

⁷⁸ Johri, C. K., 1990, “Industrialism and Industrial Relations in India: The Task Ahead” in *Indian Journal of Industrial Relations*, Vol. 25, No. 3, pp. 231-234.

environmental catastrophe, legitimacy crisis etc. Desertification is growing up following a mindless model of growth, global warming is increasing rapidly, posing almost an agenda of collective suicide. The condition of women and children is declining and endangering their very survival with honour and dignity. However, as Rajni Kothari argued, the environmental movement is paying less and less attention to this social and environmental crisis. The situation is too surprising because of the growing influence of money power and permissive lifestyle on environmental NGOs and the ‘activists’ who are playing a dominant role.⁷⁹

Scholars like D. L. Sheth and Sanjay Sanghvi argued that, against globalization, grassroots organizations are playing an important role following non-violent strategies of social resistance. Therefore, civil societies are becoming very strong to resist global capitalist forces. D. L. Sheth viewed that, several micro-movements against globalization have redefined the issues of environment, gender, human rights and democracy in radical terms. The issue of environment is no longer seen as a political process or a movement for reorganizing the economy and socio-cultural life locally and globally on the basis of primary ecological principles, rather the ecological/environmental issues have been reformulated in constantly shifting terms of ‘tolerable limits’ and ‘admissible costs’ of environmental damage that are expected to occur in increasingly higher proportions with escalating rates of economic growth that are expected and desirable.⁸⁰ Like few development specialists, the grassroots ecology movements do not see ecology merely as a cost-factor in development. On the other hand, like the policies of hegemonic globalization, the movements do not specify the tolerable levels of ecological destruction necessary for achieving higher levels of economic development, rather the ecology movements view ecology as a basic principle of human existence that can yield higher level principles for reorganizing the economy in a humanistic way and refocus development in terms of well being as Mahatma Gandhi enumerated the

⁷⁹ Kothari, Rajni, 1995, “Under Globalization: Will Nation State Hold?” in *Economic and Political Weekly*, Vol. 30, No. 26, pp. 1597, 1601.

⁸⁰ Sheth, D. L., 2005, “Micro-Movements in India: Towards a New Politics of Participatory Democracy” in Boaventura de Sousa Santos edited *Democratizing Democracy: Beyond the Liberal Democratic Canon*, Verso, New York, p. 12.

earth has enough capacity to fulfill the needs of a man but not the greed.⁸¹ Much before the Indian independence, Gandhi was aware about the negative consequences of Western industrialism. Gandhi strongly criticized Western industrialization as a form of economic development. Gandhi wrote, ‘industrialism depends entirely on your capacity to exploit, on foreign markets being open to you, and on the absence of competitors... the future of industrialism is dark... And my fundamental objection to machinery rests on the fact that it is machinery that has enabled these nations to exploit others...’⁸² Sanjay Sanghvi explored that the movement for environmental socialism as a ‘new’ movement has been interrelated with the global political-economic relations and policies. Before the advent of the new economic policy and liberalization-privatization-globalization (LPG) syndrome, the movements against toxic gas leak of Bhopal and against Narmada dam have been opposing the industrial and financial powers. Contemporary struggle against the ‘The People’s Global Action’ against WTO and free trade has become a process that asserts the equality, environmental sustainability and justice along with the resistance against all kind of domination and exploitation. People of the entire globe are organizing themselves to confront several destructive consequences of globalization. This is what Sanghvi called ‘new internationalism’.⁸³

POSCO and Tipaimukh Project: The Consequences of Globalization

Radical environmentalists and human rights activists view that, neo-liberal globalism is not a popular ideology for holistic development and not even healthy for country’s natural resources. But the social and political elites would remark that the people’s voices of anti-globalization and to some extent anti-industrialization and people’s anti-authoritarian behaviour through social and political movements have become the real hindrances to any developmental project. After independence, in India, many times social tensions emerged whenever the question of development

⁸¹ *ibid*, p. 17.

⁸² Khosloo, T. N. and John S. Moolakkattu, 1995, *Mahatma Gandhi and the Environment: Analyzing Gandhian Environmental Thoughts*, Teri Press, New Delhi, pp. 49-50.

⁸³ Sanghvi, Sanjay, 2003, “The New Politics of Environmental Socialism in India” in P. G. Jogdand and S. M. Michael edited *Globalization and Social Movements: Struggle for a Humane Society*, Rawat Publications, New Delhi, p. 235.

was raised by the political system. Protest movements, state repressions, ordinary litigations as well as Public Interest Litigations (PIL) became the common occurrences and the practices to hold a full organizational, legal and judicial trial to deal with the modes, means and the plausible consequences of development. Tensions arise particularly when the marginalized sections of society think that they have been deprived due to the loss of political rights to choose policy, technology and ideology that would be favourable to local development, i. e. their standard of living and basic opportunities for survival and subsistence. Such consciousness generates social resistance against government's decisions on huge modern economic developmental processes which are influenced by the foreign capitalist forces. Gradually social resistance takes the shape of a critique of modern economic developmental process. Protests against neo-liberal globalism emphasize on multiculturalism, localism and tribalism and hence anti-globalization movements through grassroots politics advertise a challenge against modern science and technological hegemonism that threaten the natural resources of the country.

Anti-POSCO movement of Odisha was basically a movement against SEZ and MNCs; on the contrary, Tipaimukh anti-dam movement of Manipur and Sylhet district of Bangladesh was a movement against probable water crisis and adverse impact of dam on environment that can be seen as a result of river and forest diversion through modern technologies. In both cases the issues of ecology and environment were significant. Both the movements raised voice against the rampant use of natural resources. In both cases, the movement supporters raised a popular voice against globalization to save local natural resources. This is what the theorists called the global vs. local conflict. The capitalist globalization believes that the resources of the planet are virtually infinite because of the scientific and technological ingenuousness released by the capitalist system. But the green or environmental movements believe that 'the sources of the planet are finite and have to be carefully tended'.⁸⁴

⁸⁴ Sklair, Leslie, 2006, "Capitalist Globalization and the Anti-Globalization Movement" in Samir Dasgupta and Ray Kiely edited *Globalization and After*, Sage Publications, New Delhi, p. 297.

For the setting up of POSCO steel plant in Jagatsinghpur district of Odisha, all clearances and approvals of the Central Government were required through the State Government of Odisha. Company felt for the requirement of additional land pockets for the development of ‘Transportation Project’, ‘Water Project’ and other infrastructural facilities. In the MoU between the Government of Odisha and POSCO, it is written that the Government of Orissa must agree to acquire and transfer all land required for the overall development of the project free from all the hindrances or burden through Orissa Industrial Infrastructural Development Corporation (IDCO) on payment of the cost of land. For private land, the company shall pay a particular amount of cost determined by the Land Acquisition Act and incidental charges as mutually agreed upon. For Government vested land,

payment should be made as per the rates determined by the prevailing Industrial Policy Resolution on the date of signing the agreement. For forest land, the company will decide a particular rate of compensation determined under the applicable rules. Promptly and within a reasonable time frame, the State Government should hand over the land to the company. For non-forest Government land, the company has completed all the formalities. Private land acquisition will be processed on priority basis. For the displaced families, Rehabilitation and resettlement packages would be implemented on the basis of prevailing guidelines and practices.⁸⁵

Office of the POSCO Project at Nuagaon Village of Jagatsinghpur District, Odisha



Source:

http://cached.newslookup.com/cached.php?ref_id=207&siteid=949&id=5587036&t=1397187207

⁸⁵ Memorandum of Understanding (MoU) between the Government of Orissa and M/s POSCO for establishment of an Integrated Steel Plant at Paradeep, 22nd June, 2005, available at www.orissa.gov.in/posco/POSCO-MoU.htm accessed on 11th January, 2011.

The Water Resources Department of Odisha said that POSCO can draw 138,000 cumecs (cubic feet per second) of water from Mahanadi River.⁸⁶ For the use water, MoU states that the company will get its adequate water from the *Mahanadi* barrage at *Jobra* in Cuttack district or any other suitable source for construction and operation of the overall project in accordance with the prevailing rates and appropriate terms and approval of the Water Allocation Committee. At its required

Jobra Barrage over Mahanadi River, Cuttack, Odisha



Source: <http://www.downtoearth.org.in/news/posco-to-get-water-from-mahanadi--44274>

moment, the Company will inform the Government of Odisha about the water requirement for each component. In accordance with the agreement, the Government of Odisha should permit implementation of a suitable water supply scheme prepared jointly by the company and the Department of Water

Resources, Government of Odisha. The State Government of Odisha should allow the company to operate and maintain necessary infrastructure including creation of water bodies, setting up of pipeline etc. to supply required quantity of water for the development and operation of the project. The State Government should facilitate the various approvals and clearances promptly in this regard.⁸⁷

⁸⁶ POSCO get water from Mahanadi, Ashis Senapati, Wednesday 07 May, 2014, available at <http://www.downtoearth.org.in/news/posco-to-get-water-from-mahanadi--44274> accessed on 11th April, 2016.

⁸⁷ *MoU between the Government of Orissa and M/s POSCO for establishment of an Integrated Steel Plant at Paradeep.*

In matters of the use of raw materials like coal, iron ore, chrome ore and manganese ore, the MoU clearly states that the Government of Orissa should provide basic infrastructural facilities to the Company for the mining resource extraction and its transformation. Following the agreement, the State Government must agree to recommend to the Government of India for allotment of suitable coal blocks for captive coal mining for the project either directly or through Public Sector Undertakings.

The Company will use around 600 million tonnes of iron ore to meet the requirements of the proposed Steel Project of 12 million tonnes per annum. The Government of Odisha will allow the company to hold lease for the project initially for 30 years and if the company appeals again in future then the term period will be extended for another 20 years. The Government should facilitate suitable long term arrangement with Orissa Mining Corporation and other lessees for the supply of chrome ore to satisfy the requirement of the plant. The State Government must consider assigning appropriate priority to an application of the Company for mineral concession for manganese ore in the state when available with the ambit of Mines and Minerals (Development and Regulation) – MMDR Act and Mineral Concession Rules.⁸⁸

POSCO Mining in Sundargarh District, Odisha



Source: <https://counterview.org/2013/07/30/transitions-from-skilled-cultivators-to-industrial-labourers-employment-promises-and-realities-in-the-mining-and-metals-industry/>

⁸⁸ *ibid.*

Through the signing of MoU, the company imposed spare responsibility to the Government of Odisha to provide environmental clearance and other approvals but surprisingly the company took the accountability of Environmental Impact Assessment programme. In MoU, it was clearly mentioned that: a) the Government of Odisha should agree to facilitate and use its best efforts to enable the Company to obtain a ‘No Objection Certificate’ through the State Pollution Control Board in the

Office of the POSCO Project at Gobindapur Village of Jagatsinghpur District, Odisha



Source: <http://in.reuters.com/news/picture/posco-may-scrap-planned-12-billion-india?articleId=INKCN0PQ1K520150716&slideId=1064743714>

minimum possible time for the development for the development and operation of the project, b) the Company will conduct a rapid Environmental Impact Assessment (EIA) and prepare a detailed EIA Report and an Environmental Management Plan (EMP) for the project.

But the Government of Odisha should provide any assistance requested by the company during the time of EIA programme and EMP preparation, c) the Government of Odisha agrees to use its best efforts to procure the grant of all environmental approvals and forest clearances from the Central Government within the minimum possible time for the project.⁸⁹ Therefore, the MoU was the first step to seize the controlling power over India’s natural resources. Several micro movement organizations strongly criticized the MNC’s unexpected control and asserted local people’s rights over land, water, forest and mining resources.

⁸⁹ *ibid.*

On 31st January 2011, The Ministry of Environment and Forests (MoEF) processed an order for the environmental clearance which states that the proposed POSCO project would have some economic, technological and strategic significance. Therefore, specific laws on environment and forests must be implemented seriously and must provide a comprehensive package of measures that the project will not be detrimental from an ecological and local livelihood perspective. For steel-cum-captive power plant, the final order imposed 28 additional conditions with the environmental clearance facilitated on 16th July, 2007. The most significant issues were air pollution control, water resource management, green area plan, risk and disaster management and social development. For captive minor port, the order included 32 additional conditions with the environmental clearance stipulated on 15th May, 2007. The most significant issues were prevention of high erosion, shoreline protection measures, protection of marine resources, monitoring of Ocean management, protection of the rights of fishing communities etc.⁹⁰ Several studies on the proposed area for POSCO have measured erosion characteristics. The study for Odisha and more particularly for that 3.48 km stretch of the Orissa coast from Gopalpur to Paradip where POSCO's captive port is proposed reveals the following:

Table 1: Erosion Characteristics at the proposed site for POSCO

Erosion Characteristics	Distance (in meter)
High Erosion	200
Medium Erosion	2000
Low Erosion	940
Stable Coast	340
Low Accretion	Nil
Medium Accretion	Nil
High Accretion	Nil
Total	3480

Source: MoEF, 31st January 2011, *POSCO: The Final Order and Other Relevant Documents*, Ministry of Environment and Forests, Government of India, New Delhi, p. 4.

⁹⁰ MoEF, 31st January 2011, *POSCO: The Final Order and Other Relevant Documents*, Ministry of Environment and Forests, Government of India, New Delhi, pp. 1-8.

But on 30th March 2012 National Green Tribunal (NGT) has suspended the MoEF's final order on environmental clearance. NGT's judgment was based on the appeals against the final order dated 31st January 2011 of the MoEF. Appeals have been submitted by the social and environmental activists, the marginal farmers and others. Social and environmental activists were at the forefront of the struggle against POSCO. During struggle they raised several objections through written petitions to the Orissa State Pollution Control Board. Another appellant, who is a marginal farmer and also a priest of the village temple of Dhinkia Gram Panchayat, wrote that the project will take over his land in which he and his family carry out paddy and betel cultivation. If it is acquired, he would lose his livelihood and if the project is to be set up, it would pose a severe threat to environment, agriculture and water resources. Hence, the NGT has suggested for a fresh review.⁹¹

The possibility of the overexploitation of natural resources was acute in context to industrialization in Odisha by Korean multinational company POSCO. Similarly, during protest against Tipaimukh dam, the protestors in Manipur and many parts of Bangladesh reiterated the possibility of water crisis as a negative impact of the dam which was designed to be installed over International River Barak. The people of Bangladesh were the fierce critic of Tipaimukh dam as the sharing of

Women and Children take part in a Protest against Land Acquisition for proposed POSCO Project at Gobindapur Village in Jagatsinghpur District, Odisha



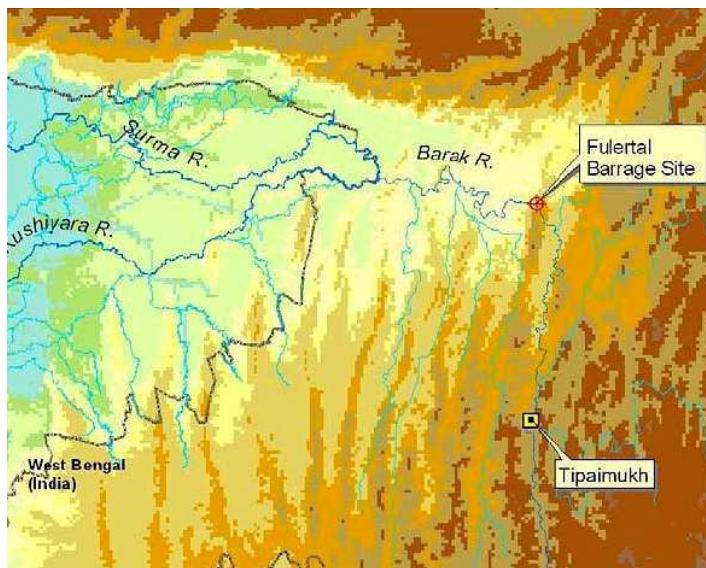
Source:

<http://www.newindianexpress.com/states/odisha/article1452385.ece>

⁹¹ *National Green Tribunal*, Principal Bench, New Delhi, Appeal No. 8/2011, Friday, 30th day of March, 2012, available at http://indiaenvironmentportal.org.in/files/file/final_order.pdf accessed on 7th April, 2014.

river water through Barak was an important question. The main objective of Tipaimukh project in Manipur was to generate 1500 Mega Watts hydroelectric power and flood control on 2,039 square kilometer areas. For Tipaimukh project, the total land requirement was about 31,950 hectares. Out of the said amount, 26,237

Proposed Location of Tipaimukh Dam



Source: <https://www.scribd.com/doc/124331342/Assignment-on-Impact-of-Tipaimukh-Dam>

hectares land was under forest cover and 5,713 hectares of land was under private ownership.⁹² Beside this land requirement, the project requires huge amount of water resources for the reservoirs. For power generation, the Tipaimukh dam will use river waters from Barak river of Manipur and Tuivai river of Mizoram. For the first time a blueprint for

Tipaimukh dam was prepared in 1972 in New Delhi at the meeting of India-Bangladesh Joint River Commission. In 1974, the project site was identified at 500 meters downstream of the confluence of Barak and Tuivai rivers. In 1984, Central Water Commission of India estimated that the total estimated cost of the project would be Rs. 1,078 crore. In 2008, Satluj Jal Vidyut Nigam Limited estimated that the cost would be Rs. 9,211 crore and according to the estimation done by Government of Manipur, the cost would be Rs. 5,885 crore.⁹³ In 2001, Governor of Manipur approved the project under President's rule without the consent of people. On 28th December 2002, the Manipur Cabinet approved the MoU which was signed between the Government of Manipur and the North Eastern Electric Power

⁹² Letter addressed to Chairman and Managing Director, North Eastern Electric Power Corporation Ltd. on 24.10.2008, Ministry of Environment and Forests, Government of India, New Delhi.

⁹³ Hangal, Ninglun, 16th September 2013, "Polls may Stall India's Tipaimukh Dam Again", *The Third Pole*, <http://www.thethirdpole.net/polls-may-stall-indias-tipaimukh-dam-again/> accessed on 3rd May 2014.

Corporation. On 15th December 2006, Mr. Sushil Kumar Shinde, the then Power Minister laid the foundation for the project. Later on the MoU has been revised and on 28th April 2010, the MoU was signed between the Government of Manipur, North Eastern Electric Power Corporation and Satluj Jal Vidyut Nigam Limited without the prior consent of the local communities.⁹⁴ Therefore, the initiators were accelerating the process without considerable public consensus. On the other hand, environmentalists and politicians of Bangladesh were protesting the proposed dam against environmental injustice and unequal sharing of river water which were the most probable negative consequences. It has been observed that Bangladesh receives seven to eight per cent of water from the Barak and millions of people are dependent on this river water for agriculture and fishing in the Sylhet region. Environmentalists were arguing that after the construction of the project, Bangladesh will be deprived from the equitable sharing of river water through International River Barak.⁹⁵ The UN Convention on the Law of Non-Navigational Uses of International Watercourses (1997) adopted two key issues, e. g., ‘no harm’ and ‘equitable sharing’. In accordance with this convention, upper riparian country can never take any step for withdrawing or diverting the natural flow of water without the prior consent of lower riparian country. If India takes any such steps without deliberating the harmful influences on Bangladesh and equitable sharing of river waters between these two countries, it will be a violation of UN convention on the law of Non-navigational uses of International Watercourses.⁹⁶ After the construction process, a huge number of people who are the fisherman and residing at the Tipaimukh and Tuivai river basin of India and Surma and Kushiyara river basin of Bangladesh would be affected.

⁹⁴ Yumnam, Jiten, 18th February 2014, “Tipaimukh Dam Plan & Its Uncertainties”, *Imphal Free Press*, available at <http://www.ifp.co.in/nws-17592-tipaimukh-dam-plan-its-uncertainties/> accessed on 3rd May 2014.

⁹⁵ Islam, Md. Saidul, 2013, *Development, Power and the Environment: Neoliberal Paradox in the Age of Vulnerability*, Routledge, New York, pp. 157-158.

⁹⁶ Banu, Nargis A., a seminar paper on *Protect People and Nature from Controversial Tipaimukh Dam* presented in the Australian National University, 3rd July 2009, pp. 3-4, available at <http://community.eldis.org/?233@@.59c62948!enclosure=.59c62949&ad=1> accessed on 7th April 2013.

There are other international laws and regulations which forbid dam to be constructed in the place where country should have to be very cautious about the protection of natural and social environment. In accordance with the Helsinki Rules (1966), every country with Common River must consider the usage of water in a way that does not affect any country's economic and social environment. UNEP Convention on Biological Diversity (1992) states that it should be the duty of every country to preserve the environmental and biological atmosphere of the world. UNESCO's Ramsar Convention on Wet Lands (1971) affirms that every country in the world is committed to safeguard water reservoir for the preservation of aquatic ecosystem and natural environment. World Commission on Dams (1998), established by World Bank and International Union for Conservation of Nature, further it notes that if any country wants to construct a big dam, it must consult with the inhabitants of the river basin so that the project is acceptable to them. However, the acceptance must be by the people of the river basin not by the government. In a concluding observation of the seventieth session from 19th February to 9th March, 2007 and in a special communication made on 15th August, 2008; 13th March, 2009 and 23rd September, 2009, the UN Committee on Elimination of Racial Discrimination has urged the Government of India not to construct the Tipaimukh dam. The forum also urged the authorities concerned to follow free, fair and prior informed consent of the people under the International Labour Organization Convention 107.⁹⁷ Notably, for the protection of natural and social environment, big river projects are under control by many international laws and regulations. But in case of huge industrialization or mining project, the situation is slightly different because huge industrialization is strongly supported by the process of globalization which allows the MNCs to use natural resources of other country where environmental damage is inevitable as an adverse effect of huge industrialization. However, in India, the process of industrialization is regulated through several national policies and acts on environment, society and economics.

⁹⁷ Assignment on Impact of Tipaimukh Dam, February 07, 2013 by Rishaduzzaman <http://www.scribd.com/doc/124331342/Assignment-on-Impact-of-Tipaimukh-Dam>, accessed on 4th May 2014.

In 2003, the Government of Odisha introduced SEZ and started to implement Orissa Industrial Facilitation Act in 2004 for encouraging industrialization.⁹⁸ The POSCO project is a great initiative for the implementation of this Act. On 18th April 2007, hundreds of boys and girls from Dhinkia, Gobindapur, Patana and other villages mobilized themselves and raised a slogan '*POSCO hatao, ama vita-mati bachao*' (POSCO go back and save our land).⁹⁹ Thus the resistance against POSCO became an anti-SEZ and anti-globalization protest through which the victimized groups were demanding the withdrawal of government's sanction from the proposed Integrated Steel Project at Paradip and simultaneously such resistance was a collective mobilization by the people's action group to save the natural resources from the possible harm of global capitalist forces.

Project at Paradip and

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possible harm of

global capitalist

forces.

In case of

Tipaimukh anti-dam

Protest against Tipaimukh Dam in Dhaka City by Environmental Groups



Source: <https://www.scribd.com/doc/34346303/Tipaimukh-Dam-in-India-Environmental-Resistance-Beyond-Borders>

movement, environmental groups and civil societies of Bangladesh played an important role; they formed National Tipaimukh Dam Resistance Committee (TDRC). Apart from TDRC, Sylhet Division Unnayan Samiti, supported by BNP and hardliner Bangladesh Jamaat-e-Islami (BJI) organized protest movement through 'Long March' as one of the preferred agenda. On July 2009, in the United States, the Human Rights and Development for Bangladesh (HRDB) held a massive

⁹⁸ *POSCO Protirodher Dinlipi* (Diaries of Resistance against POSCO), January 2008, Manthan Samayiki, Kolkata, p. 10 available at <http://sanhati.com/wp-content/uploads/2008/03/posco-pamphlet1.pdf> accessed on 3rd January, 2012.

⁹⁹ *ibid*, p. 14.

demonstration in front of United Nations to resist the construction of Tipaimukh. At that moment, more than 600 people from New York participated in the movement. In United Kingdom a number of people who were from Sylhet but living in London were in the way of protest and followed several strategies of protest. The protestors wrote their opinion in newspapers; sent petitions to the Government of UK to create pressure on the Government of India, to organize seminars and symposiums, to create environmental awareness and resistance against Tipaimukh.

Resistance through internet world was another highly noticeable agenda. In August 2009, in Canada, Bangladeshi community raised slogans to stop the construction of Tipaimukh dam and to save Sylhet. Using several social networking websites, mostly the Facebook, the protestors formed global civil society to resist Tipaimukh. More than 80 Facebook groups have been opened which include ‘Protest Tipaimukh Dam’, ‘Stop Timaimukh Dam’, ‘Protest against Tipaimukh Dam’ etc.¹⁰⁰ Thus at the epoch of ‘global village’, the civil society movements are taking new dimensions and undoubtedly Tipaimukh anti-dam movement became a global social movement. Through social network websites the protestors do not use banners and placards but only use the digital web pages to disseminate the orders of protest beyond borders.

¹⁰⁰ Islam, Saidul Md., a conference paper on *Tipaimukh Dam in India: Environmental Resistance beyond Borders* presented in International Sociological Association World Congress, 2010, pp. 6-11, available at <https://www.scribd.com/doc/34346303/Tipaimukh-Dam-in-India-Environmental-Resistance-Beyond-Borders> accessed on 7th April 2013.