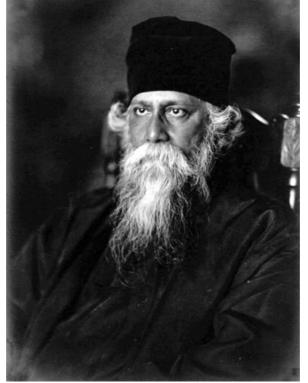


RABINDRA BHARATI UNIVERSITY CENTRE FOR DISTANCE & ONLINE EDUCATION



Self-Learning MaterialsforM.A. (POLITICAL SCIENCE)(Under CBCS)(Under CBCS)Semester0.E.C.Units44.21-8

Rabindra Bhavan, EE 9 & 10, Sector-II, Salt Lake City, Kolkata-700091, Phone: (033) 23584014/ 4016/ 4018 Website: www.rbudde.in, E-mail: director.cdoe@rbu.ac.in

COURSE CONTRIBUTORS

NAME	DESIGNATION	INSTITUTIONAL AFFILIATION
Dr. Priya Banerjee	Assistant Professor in Environmental Studies	Rabindra Bharati University, Centre for Distance & Online Education
Dr. Pallavi Mitra	Assistant Professor in Environmental Studies	Rabindra Bharati University, Centre for Distance & Online Education
Dr. Madhurilata Basu	Assistant Professor	Department of Political Science, Sarojini Naidu College for Women
Dr. Rajeshwari Roy	Guest Faculty	Guest Faculty, Department of Environmental Studies, Rabindra Bharati University

COURSE EDITOR

NAME	DESIGNATION	INSTITUTIONAL AFFILIATION
Prof. Aniruddha Mukhopadhyay	Professor	Department of Environmental Studies, University of Calcutta

EDITORIAL ASSISTANCE

NAME	DESIGNATION	INSTITUTIONAL AFFILIATION
Smt. Sreetapa Chakrabarty	Assistant Professor in Political Science	Rabindra Bharati University, Centre for Distance & OnlineEducation
Shri Kaushik Paul	Assistant Professor in Political Science	Rabindra Bharati University, Centre for Distance & OnlineEducation

April, 2024 © Rabindra Bharati University

All rights reserved. No part of this SLM may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Rabindra Bharati University, Kolkata.

Printed and published on behalf of the Rabindra Bharati University, Kolkata by the Registrar, Rabindra Bharati University.

OEC: 4.2

Politics of Development and Environment

Contents

Unit Number	Unit Name	Page Numbers
1	Political Economy of Development: Contending Perspectives and Issues	1 – 9
2	Neo-Liberal Policies, Structural Adjustment Programmes and Challenges to Governance	10 – 19
3	Globalization and its impact on development	20 - 38
4	Development and Displacement: Areas, Issues and Resistance	39 - 68
5	Political Ecology: Concepts and Issues	69 – 79
6	Conservation, Sustainable Development and Environmental Governance	80 - 94
7	Environmental Movements: Ideologies, Typologies and Issues	95 – 115
8	Climate Change: Global Initiatives, Impacts and Resistance from Below	116 – 129

O.E.C: 4.2

Unit-1

Political Economy of Development: Contending Perspectives and Issues

Contents

- 1.1 Objectives
- **1.2 Introduction**
- **1.3 Political Economy and the Earth**
 - 1.3.1 The Earth Charter
- 1.4 Equity, Justice and Environment
- 1.5 International Political Economy and Environment (IPEE)
- 1.6 A hark back
 - 1.6.1 The Westphalian Treaty
 - 1.6.2 Globalization The North- South Debate, General Agreement on Tariffs and Trade
- (GATT), World Trade Organization (WTO)
- **1.7 Economy and Environment**
 - 1.7.1 Environmental Kuznets Curve (EKC)
 - **1.7.2 Environmental Externalities**
 - **1.7.3 Polluters Pay Principle**
 - 1.7.4 Environmental Standards and Environmental Taxes
- **1.8** Conclusion
- **1.9 Self-Assessment Questions**
- 1.10 Suggested Readings

1.1 Objectives

The objectives of this unit are as follows:

- To familiarize the learners with various debates surrounding the political economy of environment and development.
- To explore various aspects of the interrelation between economy and environment such as the Environmental Kuznets Curve and Polluters Pays Principle.

1

• To explore the relation between globalization, economy and environment.

1.2 Introduction

In the past days, political economics was limited to production-distribution and consumption of goods and the management of the economy in this regard. Later on, in around the 18th to 19th centuries, political dominance over the economy remodeled the concept and economic interests became the major upshot. In the later part of the 19th century, economics and politics have become two entirely distinct schools thus removing complexity from both. Nowadays, the political economics is upgraded with a consideration of the resource storages and limitations as to exploitation, waste generation, and pollution. Restrictions are imposed on all, be it governmental or a private organization or a combination of both. In other words, the policymakers and the government formulate and implement cappings on the usage of the resources, mostly the scarce ones, and thus the entire economy and society, financial systems run keeping these in proper ways. A portion of society might suffer from inequalities due to these restrictions.

1.3 Political Economy and the Earth

The earth indicates human lives and their living standards. Here are sixteen principles under four major pillars and named The Earth Charter.

1.3.1 The Earth Charter

This international concept was originated in 1987, at the Club of Rome following the United Nation's call for worldwide charters for a sustainable future. The drafting of the charter took six long years of international discussions. Finally, in 2000, the final text of the charter got approved by the Earth Charter Commission, UNESCO, Paris.

The Text contains a preamble:

We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that amid a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and future generations.

The Charter includes four pillar- principles, under which a few concepts are mentioned (Table 1). The Charter was endorsed by UNESCO, IUCN, several universities, countries, and organizations. With time, changes and modifications have been employed in the charter. A few oppositions have also been received from different religious, philosophical, societal, and conservative groups.

 Table 1: The Principles of the Earth Charter

Source: The Earth Charter Draft Document (2000)

1.4 Equity, Justice and Environment

If we take the literal meaning of equity, it is much like equality that comes from the idea of Egalitarian Societies [A society in which all are considered equal in all aspects]. While it is pronounced with the word environment, it refers to the ill effects of environmental degradation. Thus, Environmental Equity is all the burdens of environmental pollution that should be carried by every person living in human society. Besides, the proportion of resources must get equally distributed too. The concept of environmental equity came from racism in the US from the 1960s to 1970s. Minors were highly deprived of access to resources, even lands for living. Moreover, the pollutants and wastes were dumped near their living spaces of them. The movements for equity in the environment emerged from them.

As per the Environment Protection Agency (EPA), environmental equity might have two separate aspects, *viz.*, fair treatment and meaningful involvement.

Fair treatment denotes that no single section of a population should suffer from any environmental crises and laws and policies should be implemented accordingly.

Meaningful involvement states that each sector of a society should be involved during the decisionmaking procedures; their opinion should be considered as significant as the other. Policymakers must be aware of the inputs given by all the parts of a community.

Environmental Justice

Environmental justice emphasizes equal human rights to enjoy natural resources and healthy lives. Exposure to the pollutants must not be biased hence pushing the backward communities towards more pollution. There must be a standard rule for waste dumping site selection, no particular group should be affected. Thus the protection of the entire human population from environmental hazards and risks is the prime goal of environmental justice.

Movements for environmental justice - in India

Bishnoi Movement

The movement took place in the 1700s in Khejarli, Rajasthan. The incidence was a result of uncontrolled destructions of the khejri forest for building a palace of the local king Amar Singh. The forest and the animals in the forest were considered Holy by the local inhabitants. Thus, the movement took place led by Amrita Devi and her daughters and several villagers joined the movement later on. Unfortunately, 363 villagers were killed and the king declared the khejri forests as the protected area afterward.

Chipko Movement

This movement became a milestone among all the environmental movements throughout the globe. Undoubtedly it got inspired by the Bishnoi movement, and the strategy was to tie sacred threads and hug the trees which were getting cut for commercial purposes, in the Garhwal District of Uttar Pradesh. Sundarlal Bahuguna, Gaura Devi, Bachni Devi, etc are the leading faces who took the lead. The movement started in the year 1973 and got momentum in 1978. Finally, the judgments were in support of the villagers.

Jungle Bachao Andolan

In 1982, the movement was initiated by the tribal inhabitants of Singhbhum, Bihar against the feeling of the sal forest for commercial plantation of teak plants. Later on, this movement had spread over Orissa and Jharkhand.

Apikko Movement

The Apikko movement is sometimes referred to as the south Indian version of the Chipko Movement. It took place in the year 1983 at Uttar Kannada and Shimoga Districts of Karnataka. Here also the villagers hugged the trees to save them from cutting by the forest department for commercial purposes. This movement included street plays, marches, etc. Promotion of plantations, conservation of ecosystem, use of alternative energies were the other goals that were added to the objectives of the movement successively.

Narmada Bachao Andolan

This movement (1985) started off to stop the random establishments of dams on the course of the river Narmada. Medha Patker several other environmental and human rights activists took part and the major goals were conservation of the river, adjacent ecosystems, and human displacements for building big dams like the Sardar Sarovar Dam. Although the *Andolan* didn't get proper success, it moved the supreme court and the world bank as well. Ecology and human rights have been taken under consideration in future dam projects.

1.5 International Political Economy and Environment (IPEE)

The global environment came into the spotlight with the publication of The Silent Spring by Rachel Carson in 1962. The book pointed out the destructive impacts of unplanned uses of pesticides and harmful chemicals for agricultural productivity which downturn the living of the creatures even other than the targeted ones. This was followed by several discussions, opinions, arguments, debates and within a decade, the United Nations came up with a global conference on the environment. The Stockholm Conference, 1972 was the foremost transboundary conference that had been organized for environmental protection, policies, and practices and resulted in a document entitled Stockholm declaration and Action Plan for the Human Environment and many more resolutions.

The concept of the International Political Economy (IPE) got initiated with the collapse of the Bretton Woods Monetary System and the first oils shock in the 1970s. The developing nations demanded an improvised international economic order. This had shaken up the global thinkers of international relationships. Although transboundary war and peace were the major issues previously, global concerns got a new platform of international political economy since the same decade. Bringing

international political affairs and global economy under the same umbrella was indeed tedious and resulted in traditional interdisciplinary schools of thought besides of a few distinguished political economists with their historic publications in the nineteenth and twentieth century.

These analytical practices, eventually, raised concerns regarding the environment. The global economy is highly dependent upon the availability of natural resources, moreover, once the trade is under the limelight, the environment must be a major consideration. Thus, the international political economy got added on with the environment. Meanwhile, *Our Common Future* or the Bruntland Report, 1987, came in focus making the perception of sustainability even stronger. In 1992, the Rio Summit on environment promoted the agenda in favor of environmental protection. Environmental concerns started to become keen once global trading institutions like World Trade Organization (WTO) came across.

1.6 A hark back

1.6.1 The Westphalian Treaty

The treaty was signed in the year 1648, after the long wars of thirty years by the Germans and that of the eighty years between Spain and the Dutch. This was a treaty for introducing sovereignty and thus named the *Peace of Westphalia*. This was indeed a remarkable treaty in global politics. The terms lead to definite geographical boundaries of the countries and the implementation of sovereignty over the territories of the same. This brought a far-reaching result in a long-term struggle against the monarchies, especially in Roman and German emperors. The princes started losing power with time. At around 300 kings were depowered along with deprivation from their materialistic properties. This became the fundamental law of Germany and was sustained until the breaking up of the Roman Empire in 1806. Although the treaty could define boundaries enclosing the nations, it could not enclose the environment and its pollution within a border. The environment remained global as always. Thus, the borderless environmental quality became the heart of global politics.

1.6.2 Globalization

The literal meaning of the term might be focusing more on economy and society; hence, globalization may simply be referred to as the unrestricted exchanges of cultural forms, economic forms, or strategies along with knowledge and technologies on an international platform. Many of the experts have formally noted globalization as if it equally involves the entire earth. Though a particular school of thought, especially the environmentalists *viz*., Vandana Shiva argue with the fact that there is asymmetric globalization around the globe. They claim that there lies a huge difference between the 'global north' and the 'global south.

The North- South Debate

The problem started with the distinct imparities of socioeconomic, cultural, and politics among the countries. Global north must not be mistaken as the entire northern hemisphere, and the south as the southern one, in reality, most of the global south countries are also in the northern hemisphere. The huge difference in living, energy access, production, and pollution makes a prominent difference

among the first world or global north countries and the third world or the global south countries. It is indeed very clear that environmental pollution, climate changes are transboundary issues and certain parts of the globe are the major sources of these pollutants while all are the sufferers. As the latest report projects, the developed nations own 80% of the world's economy having 25% of the total human population and the developing world is just the reverse. Hence, the global asymmetry is vivid while the largest contributor of greenhouse gases is the first world nations. Although world trade has improved a lot, it is not at all sustainable in terms of the environment.

General Agreement on Tariffs and Trade (GATT)

This agreement was signed by 23 countries in 1947, just after world war II. The intention was to conclude the pre-existing era of protections and quotas on global trades. It wasn't a single round agreement, it went on for several years with improvisations and inclusions of countries. The final result was the formation of the World Trade Organization (WTO) in 1995, currently having 164 countries under the agreement.

World Trade Organization (WTO)

The body was primarily formed to design and implement rules for international trades. Moreover, the organization takes part in monitoring and international negotiations interfere in the transboundary trade-related disputes to resolve them, initiates transparent decision making, actively participates in worldwide economic managements, supports the third world nations in global businesses. Helping the developing nations in global trade-related platforms, was a prime goal of GATT too, the goal has been executed more effectively by the WTO. WTO has included intellectual properties as a key component of the global economy. Besides, the number of the member countries spiked up calling forth more product coverages than that of the GATT. Hence, the global open-access market increased in the truest sense.

1.7 Economy and Environment

Economy and environment are two interrelated, crucial parts of any human civilization, and must run concurrently with each other. However, in reality, these two sectors are so contrasting in nature that if one is prioritized, the other would be ignored. This conflict between the two branches is continuing since the historic ages. The pillar of a good economy entirely depends upon the productions which are again based on the availability of resources. Raw materials, energies all are important for a steady economy. Now, how the environment is being treated for the sake of the economy? A life cycle analysis of any commercial product reveals, the consumption of the raw materials, water, land, and energies from nature, processing, production than marketing. What is left behind are the by-products that are mostly useless and some toxic emissions and discharges. Moreover, the services by the environment to humankind are unaccountable. The entire biosphere is being sustained by the ecosystem or the surrounding environment. These days, with global climatic changes being a major issue, there are no other ways left other than giving precedence to the environment. An agro-based economy like that of the Indian economy, once, used to be lesser damaging to the ecosystem but with

7

time more than 60% of the country's economy has turned into income from the manufacturing sectors. Agriculture is declining steadily, but still holds a good position in global rankings.

1.7.1 Environmental Kuznets Curve (EKC)

A quality environment can be demanded only once we are well fed and can own land to survive. Hence, we must seek a good economy first, once it is acquired, we can manage the degradation that took place, as we will be able to afford good technology and strategies thereafter. This "pollute first; clean up later" hypothesis is famous as the Kuznets Curve hypothesis (EKC). The curve is an inverted U- shaped curve showing the sharp rise at the left, marked as the pre-industrial environmental pollution, then a stability region – the turning point and finally, a sharp fall of environmental pollution marking the post-industrial recovery phase. In reality, there are several exceptions to the EKC hypothesis, thus resulting in an ever-increasing trend of pollutants. Greenhouse gas is one of the pollutants among them and is worth mentioning.

1.7.2 Environmental Externalities

Now, let's consider certain producers producing consumables that have a good demand in the market. The trader increases the product value as the demand is high. Once he finds that the rising cost is causing the fall in the demands and hence he recalculates the value and the final value of the good is now affordable to the consumers and hence the supply-demand system attains an equilibrium. This is the very basic rule of economics. But, things get complicated once another component called externality enters into the system. Environmental externality may be referred to as any kind of addition of by-products, be it in solid, liquid, or gaseous form causes pollution to the environment. Although externalities might be positive too, an environmental externality is always a negative externality. The question is, who is liable for the pollution? who will compensate for the harm? If the trader himself takes the charge of mitigating the damage, he has to install technologies, hire experts and that would impact the price of the product. Again, going back to the simplest law of economics, the price increase would lead to a decline in demands, and the disbalance in production and demand would result in market failure.

1.7.3 Polluters Pays Principle

The polluters or the stakeholders of the units which emit pollutants must pay the equivalent compensation which is required to manage the created loss. This principle emphasizes greenhouse gases too. This principle is an important part of sustainable development as documented in the Rio Declaration, 1992.

1.7.4 Environmental Standards and Environmental Taxes

We've already discussed the environmental taxes, that are paid by the polluters themselves. There's

another universally accepted and conventional method of pollution control, namely, environmental standards. This is nothing but sector-wise limitations or capping on the amounts of emission or discharge of pollutants from any production house. Both are equally effective for the environmental protection from the harms caused by the economic sectors.

1.8 Conclusion

Finally, after coming across a discussion on several perspectives and issues regarding economy, politics, and environment, we may sum up that all the three components are highly linked. If any kind of inconsistency falls out on any of the three, the other two would be immensely disoriented. Good global politics is essentially called for, and eventually, that would influence the economy and the environment as well. International cooperations are the utmost necessity of this hour.

1.9 Self-Assessment Questions

- a) What are the principles of the Earth Charter?
- b) What do you understand by environmental justice? Discuss any of the movements for environmental justice.
- c) How would you relate International Political Economy and Environment (IPEE)?
- d) What is the role of the book *The Silent Spring* in global environmental concerns?
- e) Discuss the Peace of Westphalia.
- f) What do you understand by the term *the north-south debate*?
- g) Write notes on GATT and WTO.
- h) State your opinions regarding the effectiveness of the EKC hypothesis, polluters pay principles, and environmental tax vs environmental standards.

1.10 Suggested Readings

- a) Dobson, A., (2016), Environmental Politics, A very short introduction, Oxford University Press
- b) Erickson, K.H. (2016). Environmental Economics, A Simple Introduction.
- c) J. Black, N. Hashimzade, and G. Myles. (2009) "Externality."
- d) Kolstad, C. D. (2012), Environmental Economics, Oxford University Press
- e) Pearce, D.W. and Turner, R. K., (1990), Economics of Environment and Natural Resources, Harvester Wheatshef, New York, Chapter 5.

9

O.E.C: 4.2

Unit-2

Neo-liberal Policies, Structural Adjustment Programmes and Challenges to Governance

Contents

- 2.1 Objectives
- 2.2 Classical Liberalism
- 2.3 Laissez- Faire
- 2.4 Neo-liberalism
 - 2.4.1 Features of Neo-liberalism
- 2.5 Structural adjustments
- 2.6 Neo-liberalism and Environment
 - 2.6.1 Eco-consumerism
 - 2.6.2 The role of modern-day Environmental Activism
 - 2.6.3 The Doughnut Economy by Raworth
- 2.7 Neo-liberalism and Human Rights
- 2.8 Neo-liberalism and sustainable development
 - 2.8.1 The Business Charter for Sustainable Development and the Rio Earth Summit
- **2.9** Conclusion
- 2.10 Self-Assessment Questions
- 2.11 Suggested Readings

2.1 Objectives

The objectives of this unit are as follows:

- To explore neo-liberalism as a concept, including neo-liberal policies
- To learn about the relationship between neo-liberalism and environment, three vital aspects of which are eco-consumerism,
- To explore the role of environmental activism in the contemporary times, and Raworth's Doughnut Economy
- To understand the changing nature of human rights within the paraphernalia of market economy

• To understand the relationship between neo-liberalism and sustainable development.

2.2 Classical Liberalism

In a Literal sense, neoliberalism is a restatement of classical liberalism. Let's have a brief idea about liberalism before we enter into the concept of neoliberalism. John Locke, the father of liberalism, was strictly against absolute monarchy and opined in favor of the limited powers of the government. To him, the lives before the governments were created, where the *state of nature*. Nature used to be the only controlling agent. Thus, classical liberalism offers priorities to freedom at an individual level, be it social or political. It is a spectrum of ideas based on the abomination of the commoners to the compulsions set by some ruling bodies in social, and political living. The ideology emphasized especially on individual freedom. Classical liberalism had indeed been well enjoyed for years; until a few issues came up in recent decades. The problem arose while deciding the extent of liberty; *i.e.*, what would be the limit of freedom. Moreover, none was there to arbitrate if someone misuses his power over the others. Although it was well accepted that there shouldn't be many controls or bindings on the social, and political activities, the extent remained controversial. The philosophy came about between the 17th and 18th centuries, with the emergence of the industrial revolutions.

2.3 Laissez- Faire

It is a French term meaning "allow to-do", denoting the least interferences of the government to the economic matters, from individual to societal levels. History reveals the origin of the term; it might be coined during the monarchy of King Louis XIV in France. The economists following the Laissez-Faire, are mostly found to be associated with the Physiocrats, the foremost organized economic theorists, of the 18th century. The policy was well admired by economists and got established in Great Britain and highly influenced the great philosopher Adam Smith. The book entitled Principles of Political Economy (1848) by John S. Mill was a commendable milestone to ensure the non-involvement of the government in economic activities. Individuals started to perform up to their bests, whereas, the rulers had to keep track of the safety, and security of the civilians. In the second half of the 19th century, this philosophy started becoming inadequate as the rapid industrial growth led to huge productions. At the beginning of the 20th century, the Great Depression came up, and the economy had to rely upon the governments to nullify the massive unemployment. Later on, the philosophy got revived with the help of monetarism.

2.4 Neo-liberalism

Neo- liberalism is the reassertion of economic liberalism as practiced in classical liberalism, and was halted after World War II. In the 1970s the economists started claiming the noninterference of the governments in the economic activities; this time it was not considered as the freedom of the individuals, instead, it was marked as the freedom of the market. Hence, a huge difference has been brought in liberalism by transforming it from human-centric to market-centric.

The new developmental economy was brought forth as the major part of the globe had been spotted as underdeveloped. Thus the economy got lifted to around 5% per year as recorded in the developed world. This leaded prosperity of the countrymen and the industrial powers received a stronger platform. This newly emerged economic principle points out that development might not be equal for all but there would be an overall development throughout the earth. This unfettered market mechanism started to offer financial output up to its optimal level. Several contemporary documents published by the United Nations over that period reflected these "economic dreams". Huge changes have been brought in conventional social institutions and ancient philosophies. These perhaps terminated the ancient thoughts of racism and castes to some degree and influenced economy-based cultural and societal tagging. Imperialistic sentiments became evident and an immense transformation in the societies has led to the markedly dissimilar ways of life in the developing and developed world. Moreover, the emergence of the "third world" which was indirectly dominated by the "first world" clearly portrayed that neo-liberalism has served the interests of the developed world. This made the weak world even weaker.

2.4.1 Features of Neo-liberalism

- *Promotion of Privatization*: Privatization means selling governmental ownership to certain private groups, institutes, or companies. Thus, the authority becomes free to operate and expand; the trade using resources of that particular country. Privatization has been observed in several sectors starting from education, health, transportation, banking, and so on. The idea behind this was, that more efficiency in operations is expected in private sectors. The negative side is, that the wealth has started to get concentrated within a few heads of the society, the prime target became profitability, and hence, the public goods didn't remain public in a literal sense.
- *Deregulating economic activities:* Deregulation is the reduction of governmental controls on certain trades, like the minimization of taxes. This might lead the companies to increase their financial gains.
- *Globalization in trade:* International exposures to resources and markets are a milestone for the economy of any nation, as it offers the utter freedom to the traders to move their capitals beyond the geographic boundaries. However, this unregulated worldwide trade might not be suitable for a few countries.
- *Reduced public expenditures:* A change has been observed in the expenditures on public services like schools, hospitals, etc by the governments. This forced the commoners in trouble to access the basic exigencies. Though a few private bodies came up with the services for the public.
- *Societal inclination towards self-development:* A huge change came about in an individual's living. Most people started to concentrate on their economic profits, but on the public goods and social well-being.

12

2.5 Structural adjustments

Economic changes had brought disparities between the developed and the developing countries, squeezing down the chances of the poorer nations to meet the huge debts from the commercial banks in the rich nations. Rising inflation led to an economic recession. As many countries started to default on their debts, many economists predicted that the world economy would collapse. Effective intervention by the World Bank and International Monetary Fund could stave off the crises. These organizations took active parts in the promotions of the structural adjustments as directed by the neoliberals.

The proper market allotment of resources, lesser expenses for public sectors, promoted free trades, lesser controls of the states on trades, privatization, etc were the central visions of the structural adjustments. These encouraged the producers and the consumers to directly decide regarding the trades. Although structural adjustment policies were made to improve the global economy, they utterly failed to liberate third-world countries from the poverty loop. Consequently, societal inequality arose and grew with time as the poor started to get deprived of social services *i.e.*, health benefits, living standards, and so on.

2.6 Neo-liberalism and Environment

It is well understood that the environment would be the most ignored aspect while the society fully concentrates upon the liberal economies. Loss of control of the trades is detrimental to ecosystems. The present policy impedes the state interventions, thus any tax, subsidy, or legal framework would no more be advocated in the trades. The negative externalities due to industrial and other production-related pollutions would sustain and there wouldn't be any person or authority to implement taxation (*viz.* Pigovian tax) nor there be any principle (*viz.* polluter pays). Moreover, no capping could be effectuated in resource exploitations. Hence, the neoliberal frame fails to offer a quality life to humanity. The so-called never-ending economic growth brings forth global climatic changes and there is no way to reverse the process anymore. The only thing that scientists and experts are trying hard is to minimize the depletion but recovery.

2.6.1 Eco-consumerism

Eco- consumerism could be the only answer to this complicated issue. Once, consumers are aware and convinced to shift the conventional behaviors such as picking, up the cheaper products ignoring the life cycle of the production, generation of massive wastes, overutilizing the resources available, and so on; the mess might get partially sorted out. Practically, spending more on eco-friendly products cannot be a regularized process and this could curb the people's participation in eco-consumerism. Although several awareness programs are being run by the government, non-governmental organizations, and even by individuals, things are not working out perhaps due to the lack of direct support from the governments. Besides, eco-consumerism is intangible; a few would be interested to participate for a prolonged period for this. Though the tangibility of large-scale green (/ eco) consumerism has been discussed and discussed; people are aware of climatic changes, and they have

to think globally by acting locally, which could be the only escape from these ecosystem emergencies.

2.6.2 The role of modern-day Environmental Activism

The climate emergency has shaken up a few activists worldwide, as the continuous non-interventions of the states have escalated the urgency of moving the human race as the climate emergencies have already started to hurt the environment, biodiversities, and humans. In some parts of the globe, people are dying due to climatic adversities and a dearth of resources to survive. Rachel Carson properly named the 'mother of environmental movements' was the foremost person to bring forward the indifference of commoners as well as the states towards environmental health. The book entitled *Silent Spring* is inspiring the environmental movements even after six decades. The recent movement by the Swedish young activist Greta Thunberg has shaken the earth. Her demand for the changes in neoliberal systems and government-led policies addressing the issues of environmental emergencies has received remarkable support worldwide.

2.6.3 The Doughnut Economy by Raworth

"Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist" (2017) is a book by the Economist Kate Raworth that has moved the world's economists by the wonderfully depicted relations between the ecosystem and economics with a model of a doughnut (Fig 4.1). The book analyzes the journey of the world economy from the pre-modern era to the neoliberal free-market economy. She explains neo-liberalism is indirectly the detention of totalitarianism hence pushing the market fundamentalism. The industrialists funded the education sectors and a global establishment of neo-liberalism took place when it attained the holds on the leading academic institutes. This concept underestimated societal values, political strengths, and democracy. Neo-liberals considered the earth as a resource that could be exploited uncontrollably. She explains how the market-oriented economy had put the world on the verge of ecological, financial, and societal failures. She also suggests that this could be the highest time when neo-liberals must leave the leading position and the economy which could be the most suited in this particular era should come up.

The doughnut model, as suggested in the book, must have an idea of the bigger picture that includes the economy society, and nature which is fundamental for democracies. It is indeed important to empower the states to take charge of the entire thing to improvise the health, education, and other developmental sectors. The concept of a rational economic man has to be transformed into the concept of a socially adapted man. There must be a growing GDP but not at the cost of nature or society.

14

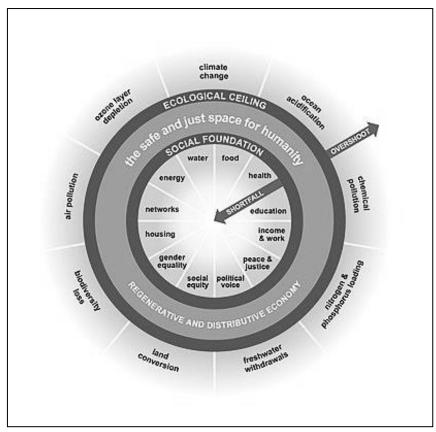


Fig.4.1. Doughnut Economy (Source: Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist, 2017)

2.7 Neo-liberalism and Human Rights

It is indeed needless to state that these two phrases do not coexist at all. Neo-liberalism had been a gigantic concept regardless of several conventional views proposed by many politicians, social thinkers, and global personalities. However, human right is a versatile field as it differs from the context of the studies. In general, the supremacy of a part of the society had been pointed out in all aspects including political harmony. Gradually, the rights have changed their nature with the market economy and the common rights became the matters of hostility. The economic and social rights might be equitable while certain levels of interventions of the states would be allowed. The political economy and social morality can be brought forward in this way.

2.8 Neo-liberalism and sustainable development

In 1983, Gro Harlem Brundtland, the prime minister (former) of Mexico launched a Commission and the report *Our Common Future* (1987). The debate was initiated even before the commission was made, while the issues regarding the debts started to come up and Mexico declared an economic failure. The term 'sustainable' had been criticized as 'unsustainable' for development by the proponents of neoliberalism, such as the World Bank.

Sustainable development proposes cutting the forests for the economy but in a planned way, to utilize the resources but more of the renewable ones, etc. The preoccupied neo-liberal economy didn't support all these well-planned uses of natural resources. The advocates of sustainable development had also emphasized the word 'sustainable' over development. Brundtland Report, in its initial stage, became popular worldwide as it had an appealing framework for trades. Although an opposition rose claiming that sustainable development is nothing but 'environmental socialism', overall the concept was accepted worldwide.

2.8.1 The Business Charter for Sustainable Development and the Rio Earth Summit

The International Chamber of Commerce issued The Business Charter for Sustainable Development (1991) which contained 16 principles focussing on environmental management as an integrated part of the businesses.

The principles are as follows:

1. Corporate priority

To recognize environmental management as among the highest corporate priorities and as a key determinant to sustainable development; to establish policies, programs, and practices for conducting operations in an environmentally sound manner.

2. Integrated management

Integrate these policies, programs, and practices fully into each business as an essential element of management in all its functions.

3. Process of improvement

To continue to improve corporate policies, programs, and environmental performance, taking into account technical developments, scientific understanding, consumer needs, and community expectations, with legal regulations as a starting point; and to apply the same environmental criteria internationally.

4. Employee education

To educate, train and motivate employees to conduct their activities in an environmentally responsible manner.

5. Prior assessment

To assess environmental impacts before starting a new activity or project and before decommissioning a facility or leaving a site.

6. Products and services

To develop and provide products or services that have no undue environmental impact and are safe in their intended use, that are efficient in their consumption of energy and natural resources, and that can be recycled, reused, or disposed of safely.

16

7. Customer advice

To advise, and where relevant educate, customers, distributors, and the public in the safe use, transportation, storage, and disposal of products provided; and to apply similar considerations to the provision of services.

8. Facilities and operations

To develop, design, and operate facilities and conduct activities taking into consideration the efficient use of energy and materials, the sustainable use of renewable resources, the minimization of adverse environmental impact and waste generation, and the safe and responsible disposal of residual wastes.

9. Research

To conduct or support research on the environmental impacts of raw materials, products, processes, emissions, and wastes associated with the enterprise and on the means of minimizing such adverse impacts.

10. Precautionary approach

To modify the manufacture, marketing, or use of products or services or the conduct of activities, consistent with scientific and technical understanding, to prevent serious or irreversible environmental degradation.

11. Contractors and suppliers

To promote the adoption of these principles by contractors acting on behalf of the enterprise, encouraging and, where appropriate, requiring improvements in their practices to make them consistent with those of the enterprise; and to encourage the wider adoption of these principles by suppliers.

12. Emergency preparedness

To develop and maintain, where significant hazards exist, emergency preparedness plans in conjunction with the emergency services, relevant authorities, and the local community, recognizing potential transboundary impacts.

13. Transfer of technology

To contribute to the transfer of environmentally sound technology and management methods throughout the industrial and public sectors.

14. Contributing to the common effort

To contribute to the development of public policy and to business, governmental and intergovernmental programs, and educational initiatives that will enhance environmental awareness and protection.

15. Openness to concerns

To foster openness and dialogue with employees and the public, anticipating and responding to their

concerns about the potential hazards and impacts of operations, products, wastes, or services, including those of transboundary or global significance.

16. Compliance and reporting

To measure environmental performance; to conduct regular environmental audits and assessments of compliance with company requirements, legal requirements, and these principles; and periodically provide appropriate information to the Board of Directors, shareholders, employees, the authorities, and the public.

A commission was set by the UN in the Earth Summit, 1992 in the name of the Council on Sustainable Development. The council would find out the ways of sustainability in international trade. The documents on sustainable development portray the function of the state as a subsidiary and complementary to the world business. The state is entitled to create frameworks in such a way that the traders would have to focus on the innovation, and alteration of technologies for sustainability.

As a consequence, a few countries, especially, in Latin America started to face economic crises and a detrimental impact has been reported on vegetation, water bodies, the natural environment, and human health. An incongruity was clear between the laws and the exercises, while the state was under the oath of protecting the environment, the multinational traders started to wipe out the greeneries thus intoxicating the environment. Sustainability and development both had stopped altogether due to malpractices like overfishing, uncontrolled solid waste disposals on ocean and lands, enormous burning of fossil fuels, and huge production of ozone-depleting gases. A widespread opposition rose against this peculiarity of neo-liberals. Indigenous people and peasants, landless came forward to lead the conflicts. Communities such as Zapatista, Ogoni blacks, and European Greens left their footprints in the history of the resistance against neo-liberal development. In the late 1980s to 1990s the neoliberals could foresee the danger and rapidly included sustainable development under the banner of the trades.

Although neither development nor sustainability could be achieved properly since business and the environment can never walk hand-in-hand, moreover, the damage already done can never be repaired; the activism, intellectual discussions, and movements have contributed a lot.

2.9 Conclusion

We need to find ways to connect emerging alternative approaches to redefine and organize the origin and distribution of wealth and to counterfeit new relationships between people and nature. The rest of the universe functions in ways that we can act with or complement each other. This doesn't at all mean a unification for socialism or any other single post-capitalist "economic" order, but rather the building of cooperative links between different projects. Nor does it mean an unconnected and divisive localism. It means putting together a new mosaic of interconnected alternative approaches to meet our needs and create our desires. It means inventing new policies that welcome differences but provide interactive processes to minimize bitterness.

2.10 Self-Assessment Questions

- a) Write a detailed note on the political background of the emergence of neo-liberalism.
- b) How neo-liberalism does differ from conventional liberalism?
- c) What are the major features of neoliberalism?
- d) Define eco-consumerism.
- e) Discuss the doughnut economy as described by Raworth.
- f) State the relation between the environment and neo-liberal policies.
- g) What are the sixteen principles integrating environmental management and trade as per The Business Charter for Sustainable Development (1991) by the International Chamber of Commerce?
- h) Why do neo-liberalism and sustainable development couldn't go hand in hand?

2.11 Suggested Readings

- a) MacNeill, J., Winsemius, P., Yakushiji, T., Beyond Interdependence: The Meshing of the World's Economy and the Earth's Ecology,(1992), Oxford Publication.
- b) Brown, L. R., Flavin, C., Postel, S., Saving the Planet: How to Shape an Environmentally Sustainable Global Economy, (1992), W. W. Norton and Company, New York.
- c) Sachs, W., Global Ecology: A New Arena of Political Conflict, (1993), Zed Books Ltd.

O.E.C: 4.2

Unit-3

Globalization and Its Impact on Development

Contents

- **3.1 Objectives**
- **3.2 Introduction**
- 3.3 Meaning and perspectives
- 3.4 Key characteristics of globalization
- 3.5 Impacts of globalization
 - 3.5.1 On economy and trade
 - 3.5.2 On education and health systems
 - 3.5.3 On culture
 - 3.5.4 On environment
- 3.6 Common impact of globalization on the developing nations
- 3.7 World Commission on the Social Dimension of Globalization
- 3.8 The governance of globalization
 - 3.8.1 At local levels
 - 3.8.2 At global levels
- 3.9 SWOT analysis of globalization for developing countries
- 3.10 Disparities of development in developing countries
 - 3.10.1 Issues and challenges of disparities
 - 3.10.2 Measures to reduce disparities
- 3.11 Conclusion
- 3.12 Self-Assessment Questions
- **3.13 Suggested Readings**

3.1 Objectives

The objectives of this unit are as follows:

- Understanding how globalization and development are linked with each other;
- Learning about the impacts of globalization especially on developing nations;

- Understanding the role of World Commission on the Social Dimension of Globalization;
- Learning about the governance of globalization at both national and international levels;
- Analysing the strengths, weaknesses, opportunities and threats of development in developing nations;
- Learning about the disparities of development between developing countries measures to reduce the same.

3.2 Introduction

Globalization is a process of global economic, political and cultural integration. It has made the world become a small village; the borders have been broken down between countries. 'The history of globalization goes back to the second half of the twentieth century, the development of transport and communication technology led to situation where national borders appeared to be too limiting for economic activity. Globalization is playing an increasingly important role in the developing countries. It can be seen that, globalization has certain advantages such as economic processes, technological developments, political influences, health systems, social and natural environment factors. It has a lot of benefit on our daily life. Globalization has created new opportunities for developing countries. Such as, technology transfer hold out promise, greater opportunities to access developed countries markets, growth and improved productivity and living standards. However, it is not true that all effects of this phenomenon are positive as globalization has also brought up new challenges such as, environmental deteriorations, instability in commercial and financial markets, increase inequity across and within nations.

Critics of globalization argue that developing countries were compelled to accept globalization due to the pressure of the West laid by the United States of America. Many considered that it is an indirect intervention of the World bank and the developed nations of the West particularly the United States of America in the economic affairs of developing countries with regard to their economic growth and development. In a nutshell, the conservative, socialist and communist thinkers believe that globalization was thrust upon developing countries of the East by the developed countries of the West. However, the liberalists and the supporters of globalization believe that it is a potent instrument to augment economic growth and development of developing countries. With the passing of years, the globalization process has engrossed the economic growth and development process of the developing world. Its effects have been realised by both developed and developing countries to gain mutually through open trade of goods and services, exchange of technology and technical ideas, migration of people and outsourcing. In other words, the globalization process has promoted, encouraged and energised the interaction between the nations, economies and people of the world. The process of globalization has brought all the nations of the world to a common platform of understanding with regard to mechanisms of promotion of economic growth and development.

The rich Western Nations believe that the globalization process will help developing countries to improve their economic growth and development through free trade and other economic relationships proposals. However, it is acknowledged in various studies that globalization has produced both positive as well as negative effects on the various dimensions of development in developing countries, although it has benefited largely the developed nations. Now in the new millennium, it is amply clear that globalization is gripping almost every part of the world. Like a snowball rolling down a steep mountain, globalization seems to be gathering more and more momentum.

However, the impact of globalization on different nations and the different sections of population is disproportionate, and it has benefited the rich more and affected the poor worst, while the middle class is the silent sufferer. Globalization has opened up new and extensive opportunities for worldwide development, but, however, this is not '*progressing evenly*' as some countries are becoming integrated into the global economy more rapidly than other with the evidence of fast growth and reduced poverty. UNDP has remarked that the challenge of globalization in the new century is not to stop the expansion of global markets but to find the rules and institutions for stronger governance - local, national, regional and global - to preserve the advantages of global markets and competitions; and also, to provide enough space for human, community and environmental resources to ensure that globalization works for people.

3.3 Meaning and perspectives

Globalization, like development, is a multidimensional concept and is more used than it is understood. As it is a forceful and dynamic concept, it is very difficult to define it comprehensively to universal satisfaction. Globalization means the spread of free market capitalism to virtually every country in the world. Globalization means increasing interdependence of economic, social and political activities across national boundaries. As per the World Bank, 'globalization' refers to the growing interdependence of countries resulting from the increasing integration of trade, finance, people and ideas in one global market. Globalization has its own set of economic rules and aspirations, and perspectives that revolve around opening up the economy to the world market, promoting deregulations and privatisations in the economy.

The essential prerequisite of a 'globalized' economy is openness to foreign trade and investment. However, starting from economic globalization, the globalization has gradually fostered social, political, human and cultural openness. Under globalization, all doors and windows of a country remain open to accommodate new knowledge, ideas, technology and so on, blowing from across all looks and corners of the world. The economic globalization refers to free trade and investment, while cultural globalization means exposure of nations to various cultures. For instance, Indian festivals like Holi (the festival of colours) and Diwali (the festival of lights) are seen to be observed in the United Kingdom, the United States of America and Canada, and also by Indians living in different countries of the world. human resources globalization broadly refers to migration of people and more recently migration of technical manpower from developing countries to the developed countries. On the other hand, the political globalization largely refers to exposure to political ideologies and democratic values. the immigrants from developing countries have been elected to the parliaments of the developed countries like the United States of America, the United Kingdom and Canada, and are also found to be holding ministerial seats in the cabinet of a few countries and illustrious example of political globalization. For instance, more recently, people from Indian origin are holding ministerial seat in cabinet of United Kingdom and Canada. The acceptance of globalization has been faster in the developed countries as compared to the developing countries. Like development, globalization is also multidimensional. Generally, it may be referred to as the widening, deepening and spreading up of worldwide interconnectedness in all aspects of contemporary social life, from the

cultural to the criminal, the financial to the spiritual.

Globalization has the following features:

- Promotes free trade among the economies of the world, and in a sense, encourages the concept of boundary-less economic world;
- Gives boost to the free market economy;
- Encourages disinvestment for downsizing the role of public sector in the economic systems;
- It emphasizes on the structural transformation and urges the nation to introduce economic reforms for emboldening market economic system;
- Encourages transfer of technology, manpower and international flow of capital true Foreign Direct Investments (FDIs) and remittances;
- Globalization is multidimensional consisting of economic, social, human, cultural and political dimensions and is a great learning process between various countries regarding each other's economics, political and social system and cultural identities;
- While globalization has positive, innovative, dynamic aspects, it also has negative, disruptive and marginalising aspects;
- Globalization is associated with increased instability of output and employment. This effect among other things job security;
- Globalization may create '*brain drain*' in developing countries, when the knowledgeable and skilled manpower immigrates from developing countries to the developed countries;
- Globalization in the orthodox developing countries have promoted conflict of ideologies between the traditionalists and modernists.

Developing countries embrace globalization for a variety of reasons:

- For the removal of trade barriers and import of fuel, technology, and other goods and services which are useful for the enhancement of their economic growth rate and improvement in their balance of payment position.
- To expand the choices for consumers. Availability of a variety of goods through liberal imports enhances the choices of the consumers in a country.
- To bring down the prices of the products having comparative advantage and thus, raise the real value of workers earnings.
- Foreign investment provides more jobs, new production technologies, infrastructure improvements and a source of capital for local entrepreneurs.
- Exchange of ideas, manpower, technology and finances, helps to enhance productivity and economic growth rate.
- Advantages of domestic business gains resulting in access to both cheaper inputs and vastly market for their products.
- Global tourism and inflow of tourists from the developed countries to developing countries contributes to enhance their GNI. Cultural and religious tourism not only strengthens cultural diplomacy but also improves international relations among the countries.
- Globalization helps in better disaster management. The technical and financial help by various countries during disasters help particularly developing countries to better manage their disaster. The help provided by various countries during the super cyclone of Odisha, India, is an illustrious example.

- FDI and remittances improve the investment climate in the country and create employment. Reverse migration of trained people helps the country in better utilisation of its manpower.
- It helps to improve the socio-economic status of the population. The remittances investment helps to raise the quality of life of the people even at the village level.
- Last but not the least, it brings modernity into developing countries being influenced by traditional beliefs and values.

It is remarked that globalization gives rise to the creation, production, distribution and consumption of goods and services on an unprecedented scale, and that process is meant to increase economic activity for people, enterprises and countries through freer international trade, direct foreign investment and capital market flows. Developing countries with open economies grew by an average of 4.5% per year in the 1970s and 1980s, while those with closed economies grew by only 0.7%. In the same vein, developed countries with an open economy grew by 2.3 % per year while those with closed economies grew by only 0.7%. It is also concluded that nations with relatively open trade regimes grow roughly twice as fast as to those with relatively closed regimes. The globalization index has been calculated by different agencies broadly by comparing five main indicators such as openness to trade, capital flows, exchange of technology and ideas, labour movement and cultural integration. Asian countries except Hong Kong, Singapore, South Korea and Taiwan have not been adequately exposed to globalization. Many African countries are the laggards in the globalized world as compared to other regions of the world.

3.4 Key characteristics of globalization

• *Globalization is not a new western concept*: When ancient Indian scriptures mentioned "*Vasudhaiva Kutumbakam*", they had already viewed the world as a small global village of linked families. When our grandmother started her stories with "*Saat samundar paar*…", she also meant that we are not alone in this Universe, and the world is cohabited by others too at far off places.

• *Globalization is basically a 'Mindset'*: Usually, globalization is seen as another economic theory to enhance business & trade. It must be understood that globalization is basically a mindset that is ready to encapsulate the whole universe into its scheme of things; a mindset that is broader & open to receive all ideas; that takes the whole globe as an area of operation.

• *Globalization is an opportunity*: It is often feared that the implementation of globalization will open up our domestic economy for foreign competition, thereby endangering economic progress & survival of local firms. While it does open our markets for entry of multinationals, it also opens all other markets in the whole world for our products & services too. Why can't it be seen as an opportunity to scale up our operations globally?

• *Globalization means "interdependence"*: We have all grown reading history wherein either a country is independent or a slave of another country. With the advent of globalization, it has been

understood that no country can be said to be totally independent, not needing anything from any other country. Hence, a culture of interdependence has been established between nations.

• *Globalization means "Caring & Sharing"*: The world today is more united and concerned about common problems being faced by the people- be it global warming, terrorism, or malnutrition etc. natural disasters faced or atrocities encountered at any part of the world attract immediate attention all over.

• *Globalization puts technology in service of mankind*: The world would not have shrunk into a small global village without the support of technological innovations like computers, internet, telecommunication, e-commerce etc. Thus, technology has proved to be the major source of the concept of Globalization, and for bringing people nearer.

• *Globalization is inevitable & irreversible*: There have been attempts by fundamentalist forces all over the world to oppose and stop the process of globalization over past quarter century. Yet, despite differences in political ideologies, the ruling parties have gone ahead with implementation of globalization policies. It is rightly said, "*You cannot stop the advent of an idea whose time has come*". Globalization is one such idea.

• *Globalization has linked politics with economics*: Earlier, political ideologies and relations between nations have determined the fate of people over centuries; with economics being subservient to politics. However, in the new era, it is the economics, employment generation and public welfare that determine the need & strength of relations between nations.

• *Globalization means raised standards of living*: With consumers having more choice to pick quality items at right price, and with no boundary restrictions on flow of goods & services, the markets have turned from '*Sellers Market*' to '*Buyers Market*'. This has helped in raising the standard of living for vast populations across the world. It has also raised aspirations among billions of people to upgrade their lifestyles.

• *Globalization demands and respects excellence*: With global level opportunities available to all the countries, the field is wide open for the excellent companies, products and people from any remote part of the world to showcase their excellence and win over markets and contracts. There is pressure on everyone to continuously improve to meet the raised bar of expectations.

3.5 Impacts of globalization

3.5.1 On economy and trade

Globalization helps developing countries to deal with rest of the world, increase their economic growth and solve poverty problems in their country. In the past, developing countries were not able to tap the world economy due to trade barriers. They could not share the same economic growth that developed countries had. However, with globalization, the World Bank and International Management encouraged developing countries to go through market reforms and radical changes by virtue of large loans. Many developing nations began to take steps to open their markets by removing tariffs and freeing up their economies. The developed countries were able to invest in the developing nations, creating job opportunities for the poor people. For example, rapid growth in India and China has caused world poverty to decrease.

Globalization has strengthened the relationships between developed countries and developing nations. It has also made each country depend on another. Developing countries depend on developed countries for resource flows and technology. On the other hand, developed countries depend heavily on developing countries for raw materials, food and oil, and as markets for industrial goods. As a result of globalization, transportation of goods and have also become much easier and faster. Furthermore, the growth in the communication between the individuals and companies in the world helped to raise free trade between countries leading to growth in economy.

However, globalization has also created disadvantages for the poor countries. The benefits of globalization have not been universal. Globalization increased the inequality between the rich and poor. The rich became richer while the poor became poorer. In the past two decades, China and India have grown faster than the already rich nations. However, countries like Africa still have the highest poverty rates, in fact, the rural areas of China which do not tap global markets also suffer greatly from such high poverty. Developed countries set up their companies and industries in the developing nations to take advantages of low wages and in turn causes pollution in countries with poor regulation of pollution. This also badly affects the economy of these developed countries by increasing unemployment.

3.5.2 On education and health systems

Health and education are basic objectives for improving any nation. Globalization has contributed to the development of health and education systems in the developing countries. Globalization has created jobs requiring higher skills set thereby resulting in an increased rate of in recent years. Growth of economy, health and education sectors are strongly interrelated. Growth in economic and living standards improves life expectancy for the developing nations. With more fortunes, poor nations are able to provide good health care services and sanitation to their people. In addition, the government of developing countries can provide more money for health and education to the poor. This has been observed in many developing countries whose illiteracy rates have decreased in recent times.

With globalization, more than 85 percent of the world's population can expect to live for at least sixty years. This is actually twice the average life expectancy recorded 100 years ago. Globalization has also helped doctors and scientists to find cures of many diseases spread by humans and animals (like HIV/ADIS, swine flu, bird flu, etc.). By globalization, many international organizations, such as, non-governmental organizations (NGOs), World Health Organization (WHO) and UNESCO, have undertaken initiatives to eliminate illiteracy and deadly diseases from the world.

However, globalization has also facilitated the spread of new diseases in developing nations through increased travelling between countries. Due to increased trade and travel, many diseases have crossed borders, from developed nations to the developing ones. This has badly influenced the living standards and life expectancy of these countries. Globalization has also forced many highly educated and qualified professionals, such as scientists, doctors, engineers and IT specialists, to migrate to developed countries to benefit from the higher wages and greater lifestyle prospects for themselves and their

children. This has resulted in a decrease in availability of skilled labour in the developing countries.

3.5.3 On culture

Though globalization has many benefits, it has been detrimental to the culture of many developing countries. Cultures of many developing countries have changed to imitate others cultures such as, America and European countries, which would not have been possible prior to globalization. Due to important tools of globalization like television, radio, satellite and internet, it has become possible today to know what is happening in other countries. Moreover, people worldwide can know each other better through globalization. Globalization has also affected the youth in the different poor nations. Teenagers are found to prefer foreign brands like Nike, Adidas, Apple, McDonalds, KFC, etc. They can only be distinguished by their language. Many developing countries are concerned that globalization might destroy their own culture, tradition, identity, custom and language. Moreover, great changes have taken place in the family constitution, as young people are trying to leave their families and live alone when they become 18 years old. The extended family has become smaller than before.

3.5.4 On environment

Globalization is extensively understood in terms of helping individuals, economies, and firms to increase their outsourcing industry, trading goods and services, and mitigating migration at the universal stage. In another sense, globalization attaches all developed and developing countries to share their public policies and culture. It benefits all countries in preceding the process of growth and development, which is necessary to resolve the rising issues of unemployment, poverty, and inequality. Globalization, being a universal phenomenon, has been influencing each human being in all parts of the globe in their political-socio-economic characteristics of life. Globalization typically connects all the nations through foreign direct investment and trade on goods and services, and its effects are abundant. Considerable empirical researches have attempted to point out how enlarged trade and all the dimensions of globalization (social, political, and economy) have directly and indirectly resulted in environmental degradation. Globalization allows the transfer of updated equipment from developed to developing countries, facilitates the promotion of division of labour, and enhances the comparative benefit of different countries. Globalization boots up the total factor productivity (TFP) and economic activities via foreign direct investment and increases financial markets. Globalization increases internationalization, interdependence, and integration. However, regions, social groups, and sectors that are negatively affected by international trade are mainly concerned with CO₂ emissions and environmental degradation.

Environmental degradation resulting from activities of globalization is found to have damaged all economies extensively. For example, as the need increases, the economic growth of a nation than energy consumption will be increased. The process of achieving economic growth via industrialization, urbanization, and energy consumption also results in CO₂ emissions, which deteriorates environmental excellence. The increased defeat of environmental quality is due to global warming, ecological crises, and climate change. Taken together, global warming and climate change influence the socio-economic life of humans in the world. In the last three decades, developing economies have continuously increased their manufacturing industries with an impressive growth rate. These underdeveloped economies have achieved economic growth at the cost of environmental

degradation. Studies have shown that human capital and political globalization have significantly reduced environmental degradation while economic, social, and overall globalization have decreased the environmental quality. The role of globalization has been measured as an essential problem since 1970 in the field of applied energy and has recognized much experiential regularity within the specific panel and time-series data framework. This is also investigative of an increasing tendency in climate change and global warming; the results of which have been felt in society in the form of loss of biodiversity, deforestation and rising sea levels, rainfall, massive crop failures, and unusual wind patterns. Such ecological inequity has become a challenging worry for policymakers, academics, and governments throughout the world. The exponents of globalization argue that it is not detrimental for an economy because it contributes to improved environmental quality by reducing carbon emissions. Nevertheless, the adversary of globalization declares that it is destructive because it causes damage to the environmental quality by enhancing CO_2 emissions Further, researchers argue that globalization encourages economic action at the cost of environmental excellence if the methods of consumption and production processes remain unchanged. Globalization not only enhances economic growth in developing countries but also accelerates environmental devastation and natural resource depletion.

Globalization is positively related to CO₂ emissions which means globalization decreases the environmental quality in the case of developing economies. The government of developing countries may enforce taxes on CO₂ emissions, which is an assured way to minimize carbon emissions in those countries with less strict environmental rules and regulations. Furthermore, the government should sign a number of agreements to minimize environmental pollution. Societies and policymakers of developing economies should be creating more awareness of CO_2 emissions through seminars, conferences, and workshops. As economic development and globalization in developing economies have increased, environmental issues overall will deteriorate with the probable increase in energy consumption. Developing economies should change their energy strategy into renewable energy. Further, the government should focus on trade promotion among the developing economies by environment-friendly supplies, trading renewable energy sources and efficacy technology, i.e., hydropower, sunlight, wind power, biomass power, geothermal heat, waste base energy, solar power, and employ environmental regulation policies such as imposing carbon tax/quota system on emissionintensive products which could help to minimize environmental degradation. It is recommended that developing economies make it necessary for firms in their industrial part to subscribe to green technologies and implement green manufacturing strategies in their production procedures. This will go a long way to improve the environmental quality and minimize the CO₂ emissions connected with expansions in economic growth.

At the broad level, globalization can be interpreted as a procedure or situation of the economic, training, education, political, cultural, technological meeting, ideas and mixing of people, and regional borders which have been supposed to control the environment during the late twentieth and twenty-first centuries. Globalization at the country level may move toward a credible system such as an idea, technology, knowledge, cross border culture, information and openness to international trade, investments in innovations, and well-organized distribution of resources. Globalization and human capital are highly interrelated to control the environment. Human capital can be classified into three elements:

- First, general human capital, including human capital stock, which is a mixture of general experience and education.
- Second, firm-specific human capital, which is related to skills, education, and training.

• Third, task-specific human capital, also known as knowledge, skills, experience, and training. Globalization reportedly increases the efficiency of human capital. Furthermore, human capital is recognized as an important determinant of sustainable economic growth, technological innovation and performance of countries. Interestingly, the economic mechanism through which human capital influences economic growth are also relevant to CO₂ emission/ environmental quality. Human capital helps to minimize the use of energy consumption and fossil fuel in the production process. Technical education increases a human's skill to understand energy security and environmental pollution problems. It is believed that human capital could play a vital role in CO₂ emission reduction by improving energy competence.

3.6 Common impact of globalization on the developing nations

- A widespread sense of instability and insecurity.
- Another common concern is the impact of globalization on culture and identity. This also includes implications for gender equality (both positive and negative).
- The one issue which comes to the fore time and again is employment and livelihoods. While people largely favour more openness and interconnection between societies, they are much less positive when asked about the impact on their jobs and incomes. The rural and informal economies remain on the margins, and the result is persistent poverty. Others are concerned with the loss of jobs as a result of industrial restructuring in the face of competitive global markets, and the downward pressures on conditions of work and workers' rights especially in Europe, North America as well as in middle-income and transition countries.
- Progress of developing countries have been impeded by the unfair rules of the global economy. However, fair rules do not automatically lead to a fair result. Efforts are needed to help those in a weaker position to "*jump on the bandwagon of development*". The current agenda is considered to be too focused on trade and investment, and not enough on human rights and the environment, partly due to a "*democratic deficit*" at the international level.
- There is widespread agreement on the need for a renewed role for the State, built on the rule of law and democratic institutions, and working in partnership with other social actors. While the concept of an all-embracing State has been discredited, globalization had weakened the State too much. In order to respond effectively to globalization, the State needs to be able to develop national capacities, regulate economic activity, promote equity and fairness, provide essential public services and participate effectively in international negotiations.
- People and countries need to invest in education, skills and technological capabilities across the board. Education systems needs reform and illiteracy has to be tackled.
- Migration is another widespread concern, for countries of in-migration and out-migration alike. In many low-income countries there has been criticism of the barriers to broad-based migration to industrialized countries, and concern about the "*brain drain*", which undermined efforts to build national capabilities. Migrants from all regions, particularly women, are often driven into an illegal economy in countries of destination, leaving them vulnerable to exploitation. A fairer framework for the movement of people is essential, and any policy of restriction should be linked to a policy of trade liberalization and development cooperation.

- In all parts of the world, regional integration is seen as a route towards a fairer, more inclusive globalization. Countries are better able to manage the social and economic challenges of globalization by working together. That calls for better integration of social and economic policies in the process of regional integration, as has been the aim in the European Union (EU), the Southern African Development Community (SADC) and the Southern Cone Common Market (Mercosur), among others.
- There have been repeated expressions of support for the United Nations and the multilateral system as the best means of responding to the challenges of globalization.
- One final area of common ground: most countries believe that solutions were possible, and many are already actively seeking or promoting them. Whatever the negatives of the present model of globalization, globalization is a reality. It is necessary to adjust policy priorities to deal with the issues of globalization.

3.7 World Commission on the Social Dimension of Globalization

In his address to the United Nations General Assembly on 23 September 2003, the United Nations Secretary-General, Kofi Annan, succinctly warned the world that it had "*come to a fork in the road*". The World Commission on the Social Dimension of Globalization was established by the International Labour Organization (ILO) to address some of the challenges facing the world as it stands at this fork. This commission sought a process of globalization with a strong social dimension based on universally shared values, and respect for human rights and individual dignity; one that was fair, inclusive, democratically governed and provided opportunities and tangible benefits for all countries and people. This commission called for:

- *A focus on people*. The cornerstone of a fairer globalization lies in meeting the demands of all people for: respect for their rights, cultural identity and autonomy; decent work; and the empowerment of the local communities they live in. Gender equality is essential.
- *A democratic and effective State*. The State must have the capability to manage integration into the global economy, and provide social and economic opportunity and security.
- *Sustainable development*. The quest for a fair globalization must be underpinned by the interdependent and mutually reinforcing pillars of economic development, social development and environmental protection at the local, national, regional and global levels.
- *Productive and equitable markets*. This requires sound institutions to promote opportunity and enterprise in a well-functioning market economy.
- *Fair rules*. The rules of the global economy must offer equitable opportunity and access for all countries and recognize the diversity in national capacities and developmental needs.
- *Globalization with solidarity*. There is a shared responsibility to assist countries and people excluded from or disadvantaged by globalization. Globalization must help to overcome inequality both within and between countries and contribute to the elimination of poverty.
- *Greater accountability to people*. Public and private actors at all levels with power to influence the outcomes of globalization must be democratically accountable for the policies they pursue and the actions they take. They must deliver on their commitments and use their power with respect for others.

- **Deeper partnerships**. Many actors are engaged in the realization of global social and economic goals international organizations, governments and parliaments, business, labour, civil society and many others. Dialogue and partnership among them is an essential democratic instrument to create a better world.
- *An effective United Nations*. A stronger and more efficient multilateral system is the key instrument to create a democratic, legitimate and coherent framework for globalization.

3.8 The governance of globalization

Problems faced by countries are not due to globalization as such but to deficiencies in its governance. Global markets have grown rapidly without the parallel development of economic and social institutions necessary for their smooth and equitable functioning. At the same time, there is concern about the unfairness of key global rules on trade and finance and their asymmetric effects on rich and poor countries.

An additional concern is the failure of current international policies to respond adequately to the challenges posed by globalization. Market opening measures and financial and economic considerations predominate over social ones. Official Development Assistance (ODA) falls far short of the minimum amounts required even for achieving the Millennium Development Goals (MDGs) and tackling growing global problems. The multilateral system responsible for designing and implementing international policies is also under-performing. It lacks policy coherence as a whole and is not sufficiently democratic, transparent and accountable.

These rules and policies are the outcome of a system of global governance largely shaped by powerful countries and powerful players. There is a serious democratic deficit at the heart of the system. Most developing countries still have very limited influence in global negotiations on rules and in determining the policies of key financial and economic institutions. Similarly, workers and the poor have little or no voice in this governance process.

3.8.1 At local levels

There is thus a wide range of issues to be addressed at the global level. But this alone will not suffice. Global governance is not a lofty, disembodied sphere. It is merely the apex of a web of governance that stretches from the local level upwards. The behaviour of nation States as global actors is the essential determinant of the quality of global governance. Their degree of commitment to multilateralism, universal values and common goals, the extent of their sensitivity to the cross-border impact of their policies, and the weight they attach to global solidarity are all vital determinants of the quality of global governance. At the same time, how they manage their internal affairs influences the extent to which people will benefit from globalization and be protected from its negative effects. In this important sense the response to globalization can be said to begin at home. This reflects the simple but crucial fact that people live locally within nations.

From this perspective it is clear that national governance needs to be improved in all countries, albeit more radically in some than in others. There is wide international agreement on the essentials which

all nations must urgently strive for:

- Good political governance based on a democratic political system, respect for human rights, the rule of law and social equity.
- An effective State that ensures high and stable economic growth, provides public goods and social protection, raises the capabilities of people through universal access to education and other social services, and promotes gender equity.
- A vibrant civil society, empowered by freedom of association and expression, that reflects and voices the full diversity of views and interests. Organizations representing public interests, the poor and other disadvantaged groups are also essential for ensuring participatory and socially just governance.
- Strong representative organizations of workers and employers are essential for fruitful social dialogue.

The highest priority must be given to policies to meet the central aspiration of women and men for decent work; to raise the productivity of the informal economy and to integrate it into the economic mainstream; and to enhance the competitiveness of enterprises and economies. Policy must focus squarely on meeting peoples' needs where they live and work. It is thus essential to nurture local communities through the devolution of power and resources and through strengthening local economic capabilities, cultural identity, and respecting the rights of indigenous and tribal peoples. Nation States should also strengthen regional and sub-regional cooperation as a major instrument for development and for a stronger voice in the governance of globalization. They should reinforce the social dimension of regional integration.

3.8.2 At global levels

• Global rules and policies on trade and finance must allow more space for policy autonomy in developing countries. This is essential for developing policies and institutional arrangements best suited to their level of development and specific circumstances. Existing rules that unduly restrict their policy options for accelerating agricultural growth and industrialization and for maintaining financial and economic stability need to be reviewed. New rules must also respect this requirement. The policies of international organizations and donor countries must also shift more decisively away from external conditionality to national ownership of policies. Affirmative action provisions in favour of countries that do not have the same capabilities as those who developed earlier need to be strengthened.

• Fair rules for trade and capital flows need to be complemented by fair rules for the cross-border movement of people. International migratory pressures have increased and problems such as trafficking in people and the exploitation of migrant workers have intensified. Steps have to be taken to build a multilateral framework that provides uniform and transparent rules for the cross-border movement of people and balances the interests of both migrants themselves and of countries of origin and destination. All countries stand to benefit from an orderly and managed process of international migration that can enhance global productivity and eliminate exploitative practices.

• Global production systems have proliferated, generating the need for new rules on FDIs and on competition. A balanced and development-friendly multilateral framework for FDI, negotiated in a generally accepted forum, will benefit all countries by promoting increased direct investment flows

while limiting the problems of incentive competition which reduce the benefits from these flows. Such a framework should balance private, workers' and public interests, as well as their rights and responsibilities. Cooperation on cross-border competition policy will make global markets more transparent and competitive.

• Core labour standards as defined by the ILO provide a minimum set of global rules for labour in the global economy and respect for them should be strengthened in all countries. Stronger action is required to ensure respect for core labour standards in Export Processing Zones (EPZs) and, more generally, in global production systems. All relevant international institutions should assume their part in promoting these standards and ensure that no aspect of their policies and programmes impedes implementation of these rights.

• The multilateral trading system should substantially reduce unfair barriers to market access for goods in which developing countries have comparative advantage, especially textiles and garments and agricultural products. In doing so, the interests of the Least Developed Countries (LDCs) should be safeguarded through special and differential treatment to nurture their export potential.

• A minimum level of social protection for individuals and families' needs to be accepted and undisputed as part of the socio-economic 'floor' of the global economy, including adjustment assistance to displaced workers. Donors and financial institutions should contribute to the strengthening of social protection systems in developing countries.

• Greater market access is not a panacea. A more balanced strategy for sustainable global growth and full employment, including an equitable sharing among countries of the responsibility for maintaining high levels of effective demand in the global economy, is essential. Enhanced coordination of macroeconomic policies among countries to this end is a key requirement. A successful global growth strategy will ease economic tensions among countries and make market access for developing countries easier to achieve.

• Decent work for all should be made a global goal and be pursued through coherent policies within the multilateral system. This would respond to a major political demand in all countries and demonstrate the capacity of the multilateral system to find creative solutions to this critical problem.

• The international financial system should be made more supportive of sustainable global growth. Cross-border financial flows have grown massively but the system is unstable, prone to crises and largely bypasses poor and capital scarce countries. Gains in the spheres of trade and FDI cannot be fully reaped unless the international financial system is reformed to achieve greater stability. In this context developing countries should be permitted to adopt a cautious and gradual approach to capital account liberalization and more socially sensitive sequencing of adjustment measures in response to crises.

• A greater effort is required to mobilize more international resources to attain key global goals, particularly the MDGs. The 0.7 per cent target for ODA must be met and new sources for funding over and above this target should be actively explored and developed.

• The implementation of reforms in international economic and social policy will require worldwide political support, the commitment of key global actors, and the strengthening of global institutions. The UN multilateral system constitutes the core of global governance and is uniquely equipped to spearhead the process of reform. For it to cope with the current and emerging challenges of globalization it has to enhance its effectiveness and improve the quality of its governance, especially

with respect to democratic representation and decision-making, accountability to people, and policy coherence.

• It is essential that the international community agree to increase financial contributions to the multilateral system and reverse the trend towards raising voluntary contributions at the expense of mandatory ones.

• Heads of State and Government should ensure that the policies pursued by their countries in international fora are coherent and focus on the well-being of people.

• Parliamentary oversight of the multilateral system at the global level should be progressively expanded. We propose the creation of a Parliamentary Group concerned with the coherence and consistency between global economic, social and environmental policies, which should develop an integrated oversight of major international organizations.

• A critical requirement for better global governance is that all organizations, including UN agencies, should become more accountable to the public at large for the policies they pursue. National parliaments should contribute to this process by regularly reviewing decisions taken by their countries' representatives to these organizations.

• Developing countries should have increased representation in the decision-making bodies, while the working methods in the World Trade Organization (WTO) should provide for their full and effective participation in its negotiations.

• Greater voice should be given to non-State actors, especially representative organizations of the poor.

• The contributions of business, organized labour, civil society organizations (CSOs), and of knowledge and advocacy networks to the social dimension of globalization should be strengthened.

• Responsible media can play a central role in facilitating a movement towards a fairer and more inclusive globalization. Well-informed public opinion on globalization issues is essential to underpin change. Policies everywhere therefore need to emphasize the importance of diversity in information and communication flows.

3.9 SWOT analysis of globalization for developing countries

• S (Strength)

- \rightarrow Promotes social economic, human, cultural, and political interaction between the economies of the world.
- \rightarrow Promotes free trade of goods and services among the nations.

 \rightarrow Modernization and technological development of developing countries through the transaction of modernity and technology from the developed to the developing world.

- \rightarrow Strengthen the market economies of the developing world.
- W (Weakness)
 - → It can increase economic disparities between the rich and poor nations and also between the skilled and unskilled workforce.

 \rightarrow It benefits more to the rich and less to the poor, as the rich nations are largely the exporters of secondary and tertiary products and the poor developing nations are the exporters of primary products.

• **O** (**Opportunity**)

- \rightarrow Developing nations will gain in terms of FDI and remittances.
- \rightarrow Inflow and outflow of physical, human and financial capital within the country.
- → It will help in the structural transformation of developing world. Manufacturing and service sectors of developing countries will be modernized with the help of developed countries input transfer. As a result, the contribution of manufacturing and service sectors to GDP will be on rise.

• T (Threat)

- → Globalization will adversely affect the economies of developing countries than the developed countries. Developing countries may be vulnerable to international pricing of the products. It can lead to inflation and falling value of currencies against dollar and other powerful currencies.
- → Developing countries will be exposed to the economic conditions of the developing world. For instance, the economic slowdown happening in the United States of America and other Western countries is also affecting developing countries.

3.10 Disparities of development in developing countries

Development disparities have remained a contemporary challenge before developing countries reeling under inequality and discrimination on the basis of cast, class, ethnicity and geography for centuries. Globalization has enhanced disparities in developing countries between the rich and the poor, between the genders and between the skilled and unskilled personnel. Issues of disparity and measures to control the same has been discussed as follows.

3.10.1 Issues and challenges of disparities

Disparities pose insurmountable challenge on developing countries. Few of them are enlisted as follows.

- Disparities are the dark sides of the development which obstruct the speed and pace of development. Developing societies stratified on the basis of caste, ethnicity, religion and gender will not be able to achieve sustainable and inclusive development unless they remove disparities from their land.
- Disparities are friends of a few and foe of many. Therefore, the common philosophy should be that the wishes of many must be respected over those of a few.
- Disparities are undemocratic and unethical in nature and principle. Developing nations must initiate and implement appropriate programs and policies to overcome social, economic and political disparities.

- With globalization, the economic disparities have elongated between various strata of population, at least, in developing countries. Benefits of economic growth and development accrued through globalization are being grasped by the strata that are socio-economically advanced. As a result, the gap between the rich and poor and upper and lower strata of population has elongated.
- Prolonged disparities will lead to social tension and communal violence. It can also give rise to other problems such as theft, pickpocketing, crime, murder and so on.
- Disparities are challenges on inclusive and sustainable development. The main feature of disparity is that it includes a few and excludes many from the process of development. Therefore, in a country which is ridden in disparities, inclusive and sustainable development will remain far away.

3.10.2 Measures to reduce disparities

Some of the suggested measures to reduce disparities are as follows:

- Several developing countries have introduced land reform measures i.e., ceiling on land holding to take away land from the landlord and distribute among the peasants. The effective implementation of land reforms in Kerala has reduced social and economic disparities in rural Kerala. Thus, rigorous implementation of land reform measures will reduce disparities. The goal should be to take away surplus above ceiling land from the landlord and distribute it among the landless.
- A nation state has to take constitutional as well as policy measures for the socio-economic upliftment of the disadvantaged section of the society which are the victims of various types of disparities. Articles 15 and 16 of the Constitution of India prohibits discrimination on the ground of religion, race, caste, sex, descent, or place of birth and emphasizes on equal opportunities for all respectively. The Government of India has launched several programs like Integrated Rural Development Programme, Minimum Needs Programme, NREP, MGNREGA, Public Distribution System, IAY, SSA, NRHM, etc. for reducing socio-economic disparities. Moreover, several state governments have launched different programs for the reduction of disparities and promote social and economic justice.
- Government has to introduce progressive tax system so that the rich pay more tax and the poor less. The tax evasion by the rich income group has to be sternly dealt with. Moreover, wealth tax, property tax, and tax on income earned from agriculture by large scale farmers and rich landlords would also reduce income disparity in rural areas.
- Government has to take strong steps to reduce corruption at the bureaucratic and political level. The money retrieved in the process should be spent for upliftment of the social-economic status of the deprived sections of the society to reduce disparity.
- Control of fertility among the poor having large family size will raise their per capita income. China's one child family norm for several decades was a step in the direction of reducing disparities. Lower fertility rate in Kerala across the caste, class and religious groups is one of the reasons for lower socio-economic disparity in the state.
- Education is a great equaliser. Imparting higher as well as technical and skill education to the women will promote their work force participation and reduce gender-based socio-economic disparities. It will also help to reduce income disparities among families in both rural as well

as urban areas. The skill and vocational education for the population in general, and the socioeconomically backward people in particular, will reduce economic disparities across different caste groups of the population. According to ILO, a combination of good education with training a good quality and relevant to the labour market will:

- → empower people to develop their full capacities and to seize employment and social opportunities;
- \rightarrow raise productivity of both workers and enterprises;
- \rightarrow contribute to future innovation development; and
- \rightarrow when broadly accessible, expand labour market opportunities and reduce social inequalities.

Education is a great social leveller for all kinds of disparities such as social, economic, political and gender-related disparities.

- Raising the social economic status of women, particularly the women belonging to the socioeconomically backward section of the society, will improve the socio-economic condition of the family and reduce disparity. Closing the gender gap in education increases gender equality, which is considered important both in itself and because it ensures equal rights and opportunities for people regardless of gender.
- Developing countries have to curtail the size of the informal sector in their economy. Necessary acts have to be passed for redefining the informal sector. As informal sector is here to stay for a longer period in developing countries, they have to be regulated. People working in the informal sectors have to be registered and their salaries have to be revised from time to time as per the revision of salaries in the formal sector. The provision of dearness allowances should be made mandatory in the informal sector based on price index as adopted for the public sector employees. Developed countries have better regulated their private sector. That is why the size of informal sector is small in these countries.

3.11 Conclusion

The process of globalization has involved all the countries around the world. Developing countries such as India, China, Iraq, Syria, Lebanon, Jordan and some African countries, have been affected by globalization, and whether negatively or positively, the economies of these countries have improved under the influence of globalization. The size of direct foreign investment has increased and a lot of bad habits and traditions have been erased. Nevertheless, globalization has brought many drawbacks to these countries as well. The process of liberalisation, privatisation, and globalization has elongated the income differences between the rich and the poor, the skilled and unskilled labour force, and the have-nots are found to be largely excluded from main stream development. Deficiency of technical knowledge and skills as required by the privatisation and globalization process has marginalised the impoverished in the global market. Instead of mitigating poverty and inequality in developing countries, globalization has elongated them, which has become a matter of concern in these countries. Many customs and cultures have disappeared such as use of traditional clothes and native languages and expressions. Moreover, rise in violence and drug abuse have increased the incidence of several deadly diseases under the influence of globalization. However, in spite of many disadvantages, globalization is believed to have brought the developing countries more benefits than detriments. For

example, people of both developed and developing countries now have bigger opportunities to sell their goods to people. Hence, this may be considered as golden age for business, commerce and trade.

3.12 Self-Assessment Questions

a) What is globalization? Discuss the different perspectives of globalization. Enlist the different features of globalization.

- b) What is globalization? Why do developing countries embrace globalization?
- c) Discuss the key characteristics of globalization.
- d) Discuss the impact of globalization on any *two* sectors:
 - I. Economy and trade;
- II. Education and health systems;
- III. Culture;
- IV. Environment

e) "Globalization is positively related to CO_2 emissions" - Explain. How can such emissions be reduced?

f) What are the three elements of human capital? How is human capital related to globalization?

g) Enlist the different impacts of globalization on the developing nations.

h) Enlist the recommendations of the World Commission on the Social Dimension of Globalization.

"Problems faced by countries are not due to globalization as such but to deficiencies in its governance" - Explain.

- i) Briefly discuss how governance of globalization may be improved at (a) local and (b) global levels.
- j) Write a brief note on:
 - i) World Commission on the Social Dimension of Globalization;
 - ii) SWOT analysis of globalization for developing countries.

k) What are the issues and challenges of disparities associated with development? What measures may be undertaken for reducing these disparities?

3.13 Suggested Readings

- a) Hamdi, F. M. (2013). The impact of globalization in the developing countries. *Developing Country Studies*, *3*(11), 142-144.
- b) Jahanger, A. (2021). Impact of globalization on CO₂ emissions based on EKC hypothesis in developing world: the moderating role of human capital. *Environmental Science and Pollution Research*, 1-21.
- c) Pattanaik, B. K. (2017). *Issues and challenges of development: An introduction*. SAGE TEXTS, SAGE Publications India Pvt Limited.
- d) World Commission on the Social Dimension of Globalization. (2004). *A fair globalization: Creating opportunities for all*. International Labour Organization.

O.E.C: 4.2

Unit-4

Development and Displacement: Areas, Issues and Resistance

Contents

- 4.1 Objectives
- 4.2 Introduction
- 4.3 Growth and development
 - 4.3.1 Indicators of economic development
 - 4.3.2 Factors affecting economic development
 - 4.3.3 New paradigms of development
- 4.4 Development in relation with environment
- 4.5 Approaches to development
 - 4.5.1 Assessment of the conventional approach
 - 4.5.2 Assessment of the normative approach
 - 4.5.3 Core values of development
 - 4.5.4 Antidevelopment
 - 4.5.5 Maldevelopment
- 4.6 Development induced displacement
 - 4.6.1 Displacement for development: Global perspective
 - 4.6.2 Displacement for development: Indian perspective
- 4.7 Impact of development induced displacement
- 4.8 Measures for improved rehabilitation and resettlement (R&R)
- 4.9 Forced displacement and Sustainable Development Goals (SDGs)
- 4.10 Conclusion
- 4.11 Self-Assessment Questions
- 4.12 Suggested Readings

4.1 Objectives

The objectives of the unit are as follows:

- Differentiating between growth and development;
- Understanding the significance of environment in development;
- Learning about different approaches to development;
- Learning about the impacts of development induced displacement in both India and abroad;
- Studying about the rehabilitation and resettlement policies for displaced people; Understanding the impact of forced development and their bearing on achievement of sustainable development goals;

4.2 Introduction

About 15 million people every year are forced to leave their homes to give way for huge development projects such as dams, highways, and mining. In most developing countries, such projects have been noted to increase ecological and social vulnerability, thus leaving the affected people displaced, disempowered and destitute. In most developing countries such as China, India, Zambia, Ghana large scale development projects have rendered increasingly sizeable population homeless, landless, jobless and food insecure, considering that their socio-economic asset base is often destroyed. Globally, it is estimated that in the decade 2010-2019, approximately 15 million people were forced to leave their homes to give way for huge development projects every year. The effects of such development projects; dams, transportation, water supply, and industrial construction has led to subjection of displaced population to being susceptible to environmental and socio-economic changes. Such projects have been noted to increase ecological and social vulnerability of the affected people. Women, the elderly and children often experience the greatest impact due to their inherent social vulnerabilities.

Risks associated with development induced displacements include landlessness, homelessness, joblessness, food insecurity, loss of access to common property resources, increase in diseases, social disintegration. Understanding social vulnerability could act as the first line action in minimizing vulnerability to the consequences of large-scale development induced displacement and resettlement. This unit provides information about different aspects of development and development induced displacement along. It also discusses about the impact of the same on the affected people.

4.3 Growth and development

Even though the terms economic development and economic growth sound similar, there is a significant difference between the two. While both economic growth and economic development are important indicators of a country's economic health, there are important distinctions between the two. Economic development is nearly impossible to imagine without growth. Comparison of economic growth and development have been shown in Table 1.

Basis of comparison	Economic growth	Economic development
Meaning	Economic growth is defined	Economic development
	as an increase in the	entails changes in income,
	country's real output of	savings, and investment, as
	goods and services.	well as gradual changes in
		the country's socio-
		economic structure
		(institutional and
		technological changes).
Factors	Growth is defined as a	Development related to
	gradual increase in one of	human capital growth, a
	the components of GDP:	reduction in inequality
	consumption, government	numbers, and structural
	spending, investment, and	changes that improve the
	net exports.	population's quality of life.
Measurement/ Example	Economic growth is	To assess economic
	measured quantitatively by	development, qualitative
	factors such as real GDP	indicators such as the HDI
	growth or per capita income	(Human Development
	growth.	Index), gender-related
		indexes, Human Poverty
		Index (HPI), infant
		mortality, literacy rate, and
		so on are used.
Effect	Quantitative changes in the	Economic development
	economy are brought about	results in both qualitative
	by economic growth.	and quantitative changes in
		the economy.
Relevance	Economic growth reflects	Economic development
	national or per capita	reflects progress in a
	income growth.	country's quality of life.

 Table 1: Economic growth vs economic development [Source: Sunil Kumar, 2022]

Development without growth is hardly conceivable but growth is possible without development. On the other hand, development is possible without a rise in per capita income for the ultimate rationale of development must be to improve living standards and welfare. An increase in income is not a sufficient condition for an increase in welfare, because an increased income can involve costs as well as benefits. If development is looked upon as a means of improving the welfare of present generation, probably the best index to take would be consumption per man-hour worked.

4.3.1 Indicators of economic development

Economic development is a process whereby the real per capita income of a country increases over a long period of time. An increase of real per capita income is a quantitative change but there are some other qualitative changes occurring in course of economic development. The following are some indicators of economic development.

Net economic welfare (NEW)

- It is a broader concept than Gross National Product (GNP) to measure economic welfare.
- It adjusts GNP by adding the value of beneficial non-market activities such as leisure and subtracting *'bads'* from it such as pollution.
- It is a theoretical concept that highlights the limitations of GDP.

Real per capita income

- Real GDP per capita is a Real GDP divided by the number of people.
- It is used to compare the standard of living between countries and expressed in terms of commonly used international currencies such as the Dollar, Euro etc.
- Real GDP helps to ascertain the country's development status.
- Real GDP is not a satisfactory measure of economic development because:
- It is based on the value but does not consider its various sector composition (agriculture, secondary or tertiary Sector).
- Real GDP does not consider the distribution of National income, i.e., the inequalities present in the society.
- It is silent on the welfare dimension of economic development, namely reduction in poverty, political liberty, literacy etc.
- Real per capita income was used earlier because of the lack of any satisfactory quantitative indicator of economic development.

Physical quality of life index (PQLI)

- It attempts to measure national well-being using social indicators.
- These indicators are: Life Expectancy at birth, Infant mortality rate and Literacy Rate.
- All three indicators are measured on a scale that ranges from 1 to 100, where 1 represents the worst performance, and 100 is the best performance.
- The average value of a three-component is PQLI. Economist Morris David Morris developed it.

Human development index (HDI)

- Economist Mahbub ul Haq developed HDI.
- This index is used to gauge a country's general accomplishment in its social and financial aspects.

42

• The Human Development Index (HDI) was introduced by the United Nations Development Programme (UNDP) in the World Human Development Report in 1990 to measure well-being in terms of the following:

 \rightarrow *A healthy and long life*: Calculated by life expectancy.

 \rightarrow Access to education: Measured by the adult literacy rate and enrolment ratio.

 \rightarrow A decent standard of living: Assessed by Gross National Income (GNI) per capita adjusted for the country's price level.

• The HDI helps the United Nations determine which countries need assistance, specifically Least Developed Countries (LDC).

Gross Domestic Product (GDP)

The gross domestic product (GDP) is a lagging indicator. This is one of the first measures used to assess an economy's health. GDP measurement can be difficult, however there are two primary approaches:

- A rise in GDP indicates that businesses are profiting more.
- It also implies that the citizens of that country will have a higher level of life.

When GDP falls, it means the opposite is true.

Global Positioning Index (GPI)

The GPI aims to provide a more accurate picture of a country's well-being than GDP alone (gross domestic product). The GPI (Global Positioning Index) suggests that as economics expand in GDP, so does economic wellbeing; nevertheless, there comes a point where GPI begins to rise more slowly and finally stagnates. In other words, increased GDP does not always imply economic progress since the costs of expansion outweigh the benefits. GPI uses GDP as a starting point, but it also considers environmental and social concerns like:

- Pollution
- Poverty rates
- Crime rates
- Cost of pollution abatement
- Health standards
- Inequality rates
- Cost of commuting
- Value of housework and parenting

4.3.2 Factors affecting economic development

Economic development depends upon two sets of factors; namely, economic and non-economic. The non-economic factors provide the requisite social climate in which the seed of economic development can germinate to full bloom. Prof. Caimcross emphasizing the non-economic factors writes, "*Development is not governed in any country by economic forces alone and more backward the*

country, the more this true. The key to development lies in man's minds, in the institutions in which their thinking finds expression and in the play of opportunity on ideas and institutions." The factors (shown in figure 1) are discussed as follows.

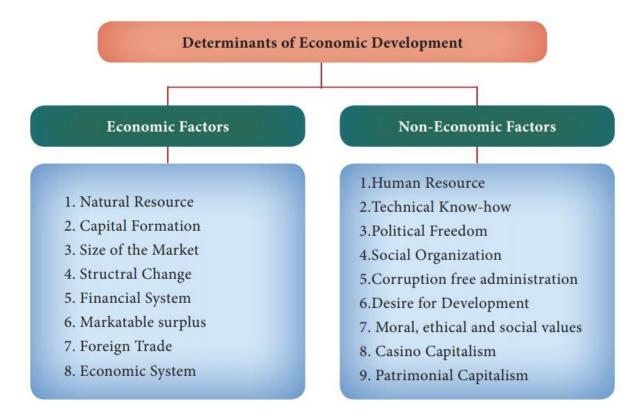


Figure 1: Factors affecting economic development of a country [Source: SCERT, 2019]

Economic factors

• *Natural resource*: The principal factor affecting the development of an economy is the availability of natural resources. Land, mineral resource, forest resource, water resource wind and even solar resource constitute the natural resource of an economy, The countries which are rich with such natural resources can be called developed if these resources are properly utilized for production. A country deficient in natural resources may not be in a position to develop rapidly. But a country like Japan lacking natural resources imports them and achieve faster rate of economic development with the help of technology. India with larger resources is poor.

• *Capital formation*: Capital formation is the main key to economic growth. Capital formation helps to increase productivity of labour and thereby production and income. It facilitates adoption of advanced techniques of production. It leads to better utilization of natural resources, industrialization and expansion of markets which are essential for economic progress.

• *Size of the market*: Large size of the market would stimulate production, increase employment and raise the national per capita income. That is why developed countries expand their market to other countries through world trade organizations.

• *Structural change*: Structural change refers to change in the occupational structure of the economy. Any economy of the country is generally divided into three basic sectors: primary sector such as

agricultural, animal husbandry, forestry, etc; secondary sector such as industrial production, constructions; and tertiary sector such as trade, banking and commerce. Any economy which is predominantly agricultural tends to remain backward.

• *Financial system*: Financial system implies the existence of an efficient and organized banking system in the country. There should be an organized money market to facilitate easy availability of capital.

• *Marketable surplus*: Marketable surplus refers to the total amount of farm output cultivated by farmers over and above their family consumption needs. This is a surplus that can be sold in the market for earning income. It raises the purchasing power, employment and output in other sectors of the economy. The country as a result will develop because of increase in national income.

• *Foreign trade*: The country which enjoys favourable balance of trade and terms of trade is always developed. It has huge forex reserves and stable exchange rate.

• *Economic system*: The countries which adopt free market mechanism (*laissez faire*) enjoy better growth rate compared to controlled economies. It may be true for some countries, but not for every country.

Non-economic factors

•*Human resources*: Human resource is named as human capital because of its power to increase productivity and thereby national income. There is a circular relationship between human development and economic growth. A healthy, educated and skilled labour force is the most important productive asset.

•*Technical know-how*: Technological progress is observed to play a vital role in economic development. Technological progress gives rise to new products, and it has a close relation with learning through education or learning science and technology by doing research and development. Invention and innovation bring forth technological progress which ultimately increases production and enhances development.

• *Political freedom*: The process of development is linked with the political freedom. Dadabhai Naoroji explained in his classic work 'Poverty and Un-British Rule in India' that the drain of wealth from India under the British rule was the major cause of the increase in poverty in India.

• *Social organization*: Mass participation in development programs is a pre-condition for accelerating the development process. Population growth, better utilization of natural resources and accumulation of capital can well contribute to the growth of output. But to achieve substantial growth changes in the organization and the techniques of production are also required. Large scale of production along with division of labour increases the efficiency through specialization which enables production organization to increase production and income thereby leading to economic development.

• *Corruption free administration*: Corruption is a negative factor in the growth process. Unless the countries root-out corruption in their administrative system, the crony capitalists and traders will continue to exploit national resources. The tax evasion tends to breed corruption and hamper economic progress.

• *Desire for development*: The pace of economic growth in any country depends to a great extent on people's desire for development. If in some country, the level of consciousness is low and the general mass of people has accepted poverty as its fate, then there will be little scope for development.

45

• *Moral, ethical and social values*: These determine the efficiency of the market, according to Douglas C. North. If people are not honest, market cannot function.

• *Casino capitalism*: If people spend a larger proportion of their income and time on entertainment liquor and other illegal activities, productive activities may suffer.

• *Patrimonial capitalism*: If the assets are simply passed on to children from their parents, the children would not work hard, because the children do not know the value of the assets. Hence productivity will be low.

4.3.3 New paradigms of development

The ODII (Organizing for Development, an International Institute) report, while defining the term, development paradigm, has mentioned that "development must be human-centred, coming from within, rather than imposed from the outside. In addition, the centre of effort in development needs to shift from resource-based strategies to interactive or participative strategies". Different modern paradigms of development are as follows.

•Less consumerism and more welfare paradigm - At the outset, the modern philosophy of development wants to move from consumerism towards welfare and from the concentration of wealth towards the de-concentration of wealth. The use of terms such as, creative capitalism, or, benevolent capitalism, are steps towards moving away from the consumerism of an elite group, voluntary or forced, either of which would be suitable strategies for better distribution of the benefits of growth.

• The human development paradigm - It considers that the people are the real wealth of a nation. The National Human Development Report – 2001, Government of India, viewed development in terms of three critical dimensions of wellbeing related to *long life*, *education* (ability to read, write, and acquire knowledge), and *command over resources*.

• **Basic needs paradigm** - The basic needs approach is an attempt to deal directly with poverty. The ILO (International Labour Organization) has classified the crucial elements into those required for private consumption (like adequate food, shelter, clothing, etc.) and those for the community at large (such as safe drinking water, sanitation, public transport, health, education and cultural facilities).

•Social development paradigm - Social development is not only influenced by economic development it also influences economic development. Social indicators such as education, health, women's empowerment, and participation by the socio-economically backward people in the development process would promote faster development. Therefore, social inclusion is, today, considered as one of the important factors of growth and development.

• The agriculture – industry interface paradigm - The effective linkage between the agriculture and industries is, today, a development agenda pursued by countries for the concurrent development of both agriculture and industry. Unless strong linkages are established and maintained between agriculture and industry, either sector will face demand bottlenecks, thereby retarding the overall pace of growth and development.

• **Decentralization and development paradigm** - Decentralization of functions, functionaries, and funds to the local self-governments has proved to be an effective strategy for development in many countries. The decentralization of economic decision making and implementation would not only

reduce the cost of development, but would also ensure more equitable distribution of the fruits of development.

• **Inclusive development paradigm** - The concept of inclusive growth and development has gained wider emphasis in many countries, particularly in developing countries, including India. In inclusive development, contributions made by each individual are valued. Thus, inclusive growth, by very definition, implies an equitable allocation of resources with benefits accruing to every section of the society.

• The development with a human face paradigm - Development with a human face means the removal of poverty, hunger, child labour, human morbidities, and preventable diseases. It further means that the rich should invest their resources for the wellbeing of the poorest of the poor, which can be called benevolent capitalism. It calls for pro-poor policies.

• The international vs. national factors paradigm - The developed countries, through different multi-lateral organizations, are investing a lot of money for the economic and social development of developing countries. However, many exponents believe that reforms should be owned by developing countries, rather than being imposed by an outside donor. Nevertheless, the relationship between aid flows and development have been stronger after liberalization, privatization and globalization was adopted by various countries.

• The sustainable development paradigm - Sustainable development can be looked at from a variety of perspectives, such as environmental, economic, social, political, cultural, and technological. Sustainable development is a holistic approach towards development, where the sustainable development vision is shared by the sectors, nations and people. It presupposes that the actors of sustainable development are interdependent, and, not independent.

• **Poverty reduction paradigm** - How to scale up the fight against global poverty is a new development paradigm of the new millennium. Here, scaling up means formulating and implementing programmes, policies, or projects in different places over time and space to fight against poverty. The National Rural Employment Guarantee Programme, a poverty reduction programme implemented by the Government of India in 2002 has provided unskilled employment to millions of disadvantaged people, particularly women, scheduled castes and scheduled tribes in rural areas.

4.4 Development in relation with environment

Development implies economic, social, demographic, technological, institutional and political changes. Economic development is associated with growth of population, generation of affluence and improvement of technology. It generates environmental problems through its impact on population growth and generation of affluence and one of modern technology.

The environmental consequences of economic development were almost totally ignored during the growth-oriented decades of the 1950s and 1960s. Key milestones in increasing environmental awareness were the United Nations Conference on the Human Environment held in Stockholm in June 1972 and the UN Conference on the Environment and Development held in Rio de Janeiro twenty years later.

The linkage between economic growth, energy consumption and carbon dioxide (CO_2) emission are an important aspect of a sustainable growth strategy. As economic growth takes place, the emission level rises due to rising economic activity as well as changes in structure of production in the society.

Sustainable development attempts to strike a balance between the demands of the economic development and the need for protection of the environment. It seeks to combine the elements of economic efficiency, inter-regional equity, social concern and environmental protection. Although the term *'sustainable development'* has many interpretations it generally refers to non-declining human well-being over time. Sustainable development was defined by the 1987 Brundtland commission as the *'meeting of the needs of the present without compromising the ability of future generations to meet their own needs'*.

Brundtland report and other independent writers highlighted the accelerating rate of decline in the land water resources of LDCs. The tragic outcome is a combination of the pollution of affluence and the pollution of poverty. Rapid growth in material output creates pollution as a negative externality in all countries. Larger and faster growing population in today's LDCs lead to more intensive use of resources. In the field of development economics, sustainable development or development concern in regard to environmental protection has now become very important.

4.5 Approaches to development

4.5.1 Assessment of the conventional approach

According to Prof. Denis Goulet, most development professionals simply talk about development in purely descriptive terms. In other words, they describe a certain quantitative level of performance a certain gross national product, a certain investment ratio, a certain level of trading activity, a certain structure of employment. According to him, it is impossible to talk about development except in normative terms because development at least implies a view of a better life or a better society or some kind of improvement. The traditional concept and measurement of development may be achieved in a method that enhances social injustice and unacceptable social inequalities, or in ways that are far too destructive of cultural values, local institutions and networks of solidarity.

4.5.2 Assessment of the normative approach

About the 'normative view of development', Denis Goulet states that simply to reduce development to a high level of consumption or high level of production is not sufficient. Some content must be given to the view of the good life, of the better life, of the humanly fulfilled or realized life and this not in a purely individual way but in some setting in which society's institutions foster, or at least do not impede it. Society's institutions should take into consideration the totality of human dimension, recalling that the human being is not just a producer, a consumer, a voter or technological operator but have spiritual, cultural, and societal dimensions as well.

4.5.3 Core values of development

Prof. Goulet (in 1991) distinguishes three basic components or core values in the wider meaning of development, which are discussed as follows.

• *Life sustenance*: Life sustenance is concerned with the provision of basic needs. The basic needs approach to development was initiated by the World Bank in the 1970s. No country can be regarded as fully developed if it cannot provide all its people with such basic needs as housing, clothing, food and minimal education. A major objective of development must be to raise people out of primary poverty and to provide basic needs simultaneously.

• Self – esteem: Self – esteem is concerned with the feeling of self - respect and independence. No country can be regarded as fully developed if it is exploited by others and does not have the power and influence to conduct relations on equal terms. Developing countries seek development for self – esteem, to eradicate the feeling of dominance arid dependence that is associated with inferior economic status.

• *Freedom*: Freedom refers to freedom from the three evils of want, ignorance and squalor, so that people are more able to determine their own destiny. No person is free if they cannot choose if they are imprisoned by living on the margin of subsistence with no education and no skills.

4.5.4 Antidevelopment

Development does not mean material prosperity only. Today, development implies both external and internal betterment of human beings. The conventional development approach addresses only the external aspect of human beings and human society in terms of quantifying elements like per capita income, employment structure, consumption level, production technique etc. But peace and happiness (the internal aspect of man), the culture, value, social justice, social equality, network of solidarity, etc. i.e., the values of society are not considered. Rather the conventional development is attained at the cost of these larger values. Such a development when judged normatively in the light of these larger values is called '*antidevelopment*'. It is because such development destroys the ethical aspect of the society, thereby ethics of true development.

4.5.5 Maldevelopment

Maldevelopment is the state of an organism or an organization that did not develop in the '*normal*' way. The term was used in medicine e.g., brain maldevelopment of a foetus. It was introduced for the human and social development in France in the 1990s to replace the word underdevelopment. The word maldevelopment did not exist since then. The medical term is malformation or abnormal development. So, the word is a neologism built with the analogy between under-nutrition and malnutrition. The maldevelopment is a global concept that includes the human and social development. The economical development is only a '*tool*' that allows the human and the social development, not the final goal. The underdevelopment is a quantitative notion, implying that a nation has a lack and must gain something to reach a *reference state*. The reference state is the state of the nation that judges a nation as underdevelopment or ill-development; is a qualitative notion, that expresses a mismatch a discrepancy between the conditions (economical, political, meteorological, cultural conditions) and the needs and means of the people.

Maldevelopment, thus, refers to the specifically identifiable and diverse situations of underdevelopment. A simple typology of maldevelopment can be constructed on the basis of the three components of development / underdevelopment in their basic configuration. In this typology, there

are three components of development and their antonyms in all possible combinations. Eight types of combinations (evident from Table 2) are:

- Growth, equality, liberty
- Growth, inequality, liberty
- Stagnation, equality, liberty
- Stagnation, inequality; liberty
- Growth, equality, repression
- Growth, inequality, repression
- Stagnation, equality, repression
- Stagnation, inequality, repression

Table 2: Typology of maldevelopment

Parameters	Growth		Stagnation	
T al ameters	Equality	Inequality	Equality	Inequality
Liberty	1	2	3	4
Repression	5	6	7	8

The limiting types 1 and 8 are of lesser interest and could really be labelled 'development' and 'extreme underdevelopment'. The six other combinations are of central concern here because they define types of maldevelopment. In recent years development economists have come to speak increasingly of 'growth with equity' and 'economic growth with social justice'. The well-known expression coined by the third world economists are 'unequal development' and 'growth without development'. The situation of sustained economic growth without liberty has been studied in recent years by third world specialists. The variety of labels applied to this type of maldevelopment include, 'repressive developmentalism', 'the new authoritarianism', 'authoritarian capitalism' and 'bureaucratic authoritarianism'.

The maldevelopment typology emphasizes specific situations of underdevelopment which are already controversial subjects in development literature. The maldevelopment is reducible to three variable components of development-underdevelopment viz. economic production, equality and liberty, which can be measured either as levels or as rates of change.

4.6 Development induced displacement

Box 1: DPs and PAPs

• The *displaced persons* or DPs are those who are forced to move out of their land when the development projects require acquisition of their homesteads.

• The *project affected persons* or PAPS are those who lose their livelihood fully or partially without being displaced. In some cases, their individual land is acquired and in others the common property resources (CPRs) like forests, fishing grounds etc. that are their livelihoods are acquired.

Development caused displacement means the impoverishment of populations who are deprived of their livelihood, property and occupation owing to the launching of some development projects. These projects include dams, mines, industries, power stations, defence installations, roads, protected forests, biosphere reserves, tourist resorts, urban centres, airports, railway stations and even educational institutions and hospitals. Impoverishment refers to the fact of the Displaced Persons/Project Affected Persons (DPs/PAPs) getting poorer because a project deprives them of their livelihood and not to their state of poverty before the project comes into the area. DPs and PAPs have been defined in Box 1.

Article 21 of the Constitution guarantees to every Indian citizen the right to life with dignity. Those whom development projects deprive of their livelihood are Indian citizens and Article 21 also applies to them. When project deprives them of their livelihood. They too have a right to begin a new life that protects their economic interests, culture and social system. However, if care is not taken to resettle them properly, they are impoverished and deprived of this right in the name of national development. An important reason for development caused involuntary displacement is the ideology behind national development. Most policy makers give priority to economic growth and profit rather than to the livelihood of the people. Very few displaced persons are resettled. Some projects have a resettlement and rehabilitation (R&R) Package, but in most cases their approach to resettlement is faulty.

Development-related Displacement may be divided into two subcategories - direct and indirect.

• *Direct displacement* refers to those cases, where the installation and commissioning of development projects lead to a direct displacement of people who have inhabited these sites for generations together. • *Indirect displacement* emanates from a process whereby installation and functioning of projects continuously push up the consumption of natural and environmental resources, thereby depriving the indigenous people of the surrounding regions of their traditional means of wherewithal and sustenance.

Apart from the cost of displacement and relocation, there is also the problem of deforestation, loss of agricultural land, environmental degradation, and marginalization of the weaker sections. These adverse effects are called the '*backwash effects*.' The benefits of '*spread effects*' are enjoyed by the nation at large, while it is the local population that bear the brunt of the backwash effects.

4.6.1 Displacement for development: Global perspective

Globalization refers to the process of making different parts of the world come together to interchange

various facets of life and business. Globalization reduces the free movement of capital, information, and people thus bringing benefits to the economy and advancement to the society. The world starting with Silk Road is now having a way of gigantic exchange through globalization.

It has made it possible to integrate many facets of world trade, commerce, tourism, textile, and related sectors to yield maximum possible benefits to all stockholders. However, globalization has its inherent problems which are necessitates significant attention. Problems such as employment, social degeneration, and difficulty of competition are the culmination of a globalized way of society. The most important issue of globalization however is forced migration. The Bank's wide review of projects involving involuntary resettlement between 1986 to 1993 shows that 146 active projects with resettlement are spread among 39 countries.

In almost every developing country, a great deal of emphasis has been placed on creating and strengthening infrastructure facilities. Development-induced displacement is a social problem affecting multiple levels of human organization, from tribal and village communities to well-developed urban areas. Development is widely viewed as an inevitable step towards modernization and economic growth in developing countries; however, for those who are displaced, the result is most often loss of livelihood and impoverishment.

Displacement of people from their settlements when their lands are acquired for infrastructure projects is an inevitable process. No infrastructure projects have been completed without displacing people. If development is one side of the coin, displacement is the other side. Urban infrastructure and transportation projects that cause displacement include slum clearance and upgrading, the establishment of industrial and commercial estates, the building and upgrading of sewerage systems, schools, hospitals, ports, etc., and the construction of communication and transportation networks, including those connecting different urban centres.

Globalization encourages migration from one country to another. However, it is increasingly being realized that the receiving country is often laced with laws to prevent the flow of labour. Thus, this increases the problems of the laborers as their work in their native country has lost its value due to globalization. The strong 'pull' and 'push' migratory factors with loss of opportunities are a matter of serious concern. Globalization through promoted free human flow, it is more often results in the trafficking of human beings and the migrants become the victim of traffickers and recruitment agencies who lures them for a better future. This resulted in lifelong suffering and abuse, economically, socially, and physically.

Compensation and rehabilitation policies designed to mitigate the effects of displacement are often unsuccessful largely due to corruption, underestimation of the value of resources, failure of proper planning. Many are often compensated monetarily, without addressing their grievances or political support to improve their livelihood. Poor and indigenous people are mostly affected by displacement as they have very few political and monetary resources. Resettlement policy may be adopted by the state, regional associations, NGOs, but participation in the planning process is crucial to mitigation negative outcomes.

4.6.2 Displacement for development: Indian perspective

The issue of displacement is seen as a necessary evil to construct industries, infrastructures such as dams, mining, roads, and power projects, which are intended to serve the "*greater good*". The drive for land acquisition in the name of modernization and development has been the reason behind the rise in protests by the farmers and tribal people across the country.

Pre-independence era

The negative impact of displacement in pre-independence India was less since land was abundant and the population was small. So, the DPs and PAPs could resettle themselves in a new place without many problems. Displacement assumed alarming proportions under the British and intensified after independence because of planned development. The Land Acquisition Act (1894) formed the basis for displacing people from their habitat.

The British Government needed to change the Indian economy to suit the needs of the British Industrial Revolution. It required raw materials like cotton and tea, and the money to fund it. So, the colonialist had to turn India into a supplier of capital and raw materials for the industrialisation of Britain. To get the raw material, the British needed to acquire as much land as possible for schemes like coal mines, coffee plantations, tea estates, railways and roads. New land laws were enacted in order to transfer land to British mining and plantation companies. This effort culminated in the Land Acquisition Act, 1894 (LAA). The changes in the land laws were integral to the British Government effort in maximizing its gains from countries under British Rule.

Post-independence era

Since the Land Acquisition Act, 1894 (LAA) enacted during the colonial period remains in force; displacement continues even today. It allows the State to displace people without their consent and without specifying the nature of the public purpose for doing so. Thus, the post-1947 thinking on development is not very different from that before independence when profit was the only motive of the colonialist. Most post-independence documents refer to India as a welfare state. However, in practice, most projects give priority to economic efficiency and do not give much importance to well-being of the people affected by them.

Displacement has been intensified since 1951, with the introduction of the first five-year plan and since no official database exists, the number and types of DPs and PAPs is not known. India does not have a rehabilitation act or law therefore it is not possible to work out the exact nature of displacement in terms of numbers and types. Post-independence displacement has the following significant features.

Table 3: Estimate of people displaced by development projects in India during 1951-1990 (in lakhs) [Source: Singh (2020)]

Type of Project	Projects with Resettlement		People Displaced	
Type of Project	Number	%	Number	%
Dams	39	26.6	1,233,000	62.8
Transportation	36	24.7	311,000	15.8
Water supply, sewerage	18	12.3	59,000	3.0

Thermal (including mining)	15	10.3	94,000	4.8
Urban infrastructure	12	8.2	73,000	3.7
Irrigation, canals	7	4.8	71,000	3.6
Environmental protection	5	3.4	74,000	3.8
Industry	4	2.7	2,000	0.1
Forestry	2	1.4	45,000	2.3
Other	8	5.5	1,000	0
Total	146	100	1,963,000	100

• Absence of a reliable database on the number and rehabilitation of DPs and PAPs: An unofficial study puts the number of DPs at a minimum of 21,300,000, between 1951 to 1990. Sector wise displacement has been shown in table 3. Studies also show that most official figures are underestimates e.g., by official count;100,000 people were displaced by the Hirakud dam while researchers put the figure at 180,000. The estimates for Sriramsagar in Andhra Pradesh range from 200,000 to 240,000 DPs.

• Very low percentage of resettlement of DPs: Less than a third of the DPs have been resettled partially. Internally Displaced people broadly fit into three categories: displaced due to natural disasters, displaced due to development activities like dam constructions, and displaced due to instances of violence and conflict. India has laws in place for the first two categories — The LARR Act, 2013 (explained in Box 2), and the Disaster Management Act, 2005. But there is no law as such for the third category of displaced persons in India. Rehabilitation of displaced communities is carried out by the State governments with the help of the Centre through various rehabilitation and assistance schemes. Currently, there are seven sub-schemes under an umbrella scheme called "Relief and Rehabilitation of Migrants and Repatriates" for 2021-22 to 2025-26 with a total outlay of Rs 1,452 crores. Sector wise resettlement of displaced people has been shown in table 3.

• *Low or negligible awareness about the problem of displacement*: Despite the enormity of the problem, awareness about development induced displacement is low as exact numbers of DPs/PAPs are unavailable.

• *Social composition of DPs and PAPs:* Most DPs and PAPs are without any assets and consist of poor rural people like landless labourers and small or marginal farmers. Tribals, who are 8.08 per cent of the population, are estimated to be more than 40 per cent of the DPs and PAPs Another 20 per cent are Dalits and an unknown but large proportion of the rest belongs to other rural poor classes. The fact that most are powerless partially explains the absence of a policy or law.

• *Lack of long-term planning resulting in multiple displacements:* The poorest and most marginalized people are generally hit the hardest by displacement, most often without adequate compensation. Many displaced families have been displaced three or four times. The main cause of multiple displacements is lack of regional planning.

•*Non-quantifiability of displacement-induced suffering*: It is difficult to quantify the suffering caused by deprival. Some PAPs from the economically better off groups, living in "*advanced*" districts, may improve their livelihood by getting a somewhat high price for their not very fertile and productive land. However, most tribals and Dalits experience financial, social and cultural deterioration. In every group, especially the marginalised, women pay the highest price following displacement.

Box 2: The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (LARR)Act, 2013

• Objectives of the LARR Act

 \rightarrow To ensure a transparent process for acquiring land, in consultation with all the stakeholders and local governing bodies.

 \rightarrow To ensure minimum displacement of the existing population, owning or staying on the land.

 \rightarrow To provide fair compensation to the families who are affected or whose land has been acquired or livelihood has been affected, because of the land acquisition.

 \rightarrow To provide adequate provision for rehabilitation and resettlement of the families affected.

• Importance of consent under the LARR Act

hen the government acquires land for public purposes and controls the land bank directly, the land owners' consent is not a necessity. However, when the land is acquired for setting up private companies, the consent of at least 80% of the affected families is mandatory. If the project is undertaken through a public-private partnership, then, 70% of the affected families have to give their consent for the land acquisition process.

• Compensation under the LARR Act

ction 26 of the Act that deals with compensation for the land owners. It outlines the proposed minimum compensation, based on multiples of the market value. Usually, the market value is multiplied by a factor of one of two times, for land acquired in rural and urban areas. The compensation can also be a consented amount, in case the land is acquired for private companies or public-private partnership projects.

• Shortcomings of the LARR Act

The Land Acquisition Act, 2013, was amended in 2015 which resulted in the following shortcomings:

- → The Social Impact Assessment was a must for every acquisition in the Act but the mandatory requirement was removed for security, defence, rural infrastructure and industrial corridor projects in the amendment.
- → Consent is not mandatory for government projects in the latest amendment. This can result in forceful evictions of land owners, without proper alternate arrangements for their rehabilitation and resettlement.
- → Earlier, multi-cropped land could not be acquired for any purpose but according to the latest amendment, even multi-crop irrigated land can be acquired for security and social infrastructure projects.

Areas of displacement

In India, displacement because of developmental activities has been occurring since the 19th century. Many of these developmental projects came up in mineral-rich areas, upper stream of the rivers and coastal belts. In post-independent India, approximately three thousand big and small dams have been constructed in the last fifty years which led to the forced eviction of millions of people. Specific case studies on dams and displacement have been enlisted in table 4. Mining also became one of the major causes of displacement in India. A large part of our natural resources lies in the hilly and forest areas mostly inhabited by tribals – one of the most disadvantaged and suppressed sections of the population. Urban planning, building infrastructure projects, industrialization etc. led displacement in India.

The speed of developmental project construction increased with the adoption of economic reforms in 1991. Since then, foreign investors have increased their presence in India. Various collaboration and joint ventures projects have been launched. For example, in recent years as many as 341 special economic zones (SEZs) have been approved and set up across India. SEZs have been explained in Box 3. Major development induced displacements have been recorded in the following areas.

• The first displacement in independent India was reported during the establishment of Durgapur steel plant in West Bengal in the 1950s displacing around 125,000 people.

• The second case of displacement is a project for port construction and enlargement in Mumbai, which displaced 12,000 people.

• The five dams developed in Maharashtra displaced over 200,000 people.

• The Karnataka programme, involving two dams has displaced over 220,000 people.

• The famous Sardar Sarovar project, a high dam on the Narmada River whose reservoir extends into three Indian states (Gujarat, Maharashtra and Madhya Pradesh) have displaced 300,000 people.

• In the case of large dams in the country there is the occurrence of unplanned displacement as the number of submerged villages has also increased. The people are also displaced by the projects like thermal power plant. For example, a large number of people are displaced by Farakka Super Thermal Power plant in West Bengal. The World Bank has put the number of people displaced by the Farakka Super Thermal Power plant in West Bengal as 63325.

• In Singur, West Bengal, recent development induced displacement phenomenon has occurred for the establishment of automobile project. There was an eminent domain takeover of 997 acres of farm land by citing the land acquisition Act 1894 for the project of Tata Motors at Singur. But unwilling and displaced farmers demonstrated massive protest and joined in save farmland movement of opposition. The project confronted a huge controversy on the question of acquisition of fertile land for the private enterprise. Due to huge protest by local residents and outbreak of violence Tata finally took the Nano factory from West Bengal to Gujarat.

Table 4: Displacements and submergence of lands by some of the irrigation and hydel projectsin India [Source: Reddy, 1993]

Name of Project	No. of villages affected	No. of families displaced	No. of persons displaced	Total land submerged (Ha)
Balimela	89	1,907	7,382	5,272
Bhakra			36,000	16,629
Bhopalapatnam Inchanpalli	200		75,000	1,72,000
Chaskaman	25	5,000	15,000	
Deolong			1,27,000	51,648
Dhom	29		17,784	2,050
Hirakud	249	1,636	20,000	
Jayakwadi			65,300	39,833
Kadana			65,300	17,722
Koyna	100		30,000	11,555
Lalpur	22		11,346	4,300
Machkund	225	2,406		9,109
Mahi	121	6,795	35,000	
Maheswar	58		9,420	4,856
Nagarjunasagar			28,000	28,480
Narmada Sagar	254		1,29,000	91,348
Omkareswar	27		12,295	9,393
Panchet			10,000	15,327
Pong			80,000	30,364
Rengali	164	10,000	60,000	42,877
Rihand	700		1,00,000	
Salia	15	278	1,416	1,134
Sardar Sarovar	237	10,758	2,00,000	34,867
Srisailam	100	20,728	1,00,000	43,289
Tawa			38,600	20,236
Tehri	95		70,000	19,600
Tungabadra	90	11,684	54,454	34,936
Ukai	170		52,000	
Upper Kolab	147	3,067	9,000	32,163

Box 3: Special Economic Zones (SEZs)

A Special Economic Zone (SEZ) is an enclave within a country that is typically duty-free and has different business and commercial laws chiefly to encourage investment and create employment. Apart from generating employment opportunities and promoting investment, SEZs are created also to better administer these areas, thereby increasing the ease of doing business.

The Parliament passed the **Special Economic Zones Act** in 2005 after many consultations and deliberations. The Act came into force along with the **SEZ Rules** in 2006. As of 31st January 2021, 265 SEZs are operational in the country. About 64% of the SEZs are located in five states – Tamil Nadu, Telangana, Karnataka, Andhra Pradesh and Maharashtra.

• Chief objectives of the SEZ Act

- \rightarrow To create additional economic activity.
- \rightarrow To boost the export of goods and services.
- \rightarrow To generate employment.
- \rightarrow To boost domestic and foreign investments.
- \rightarrow To develop infrastructure facilities.

• Challenges faced in SEZs:

 \rightarrow Since SEZs offer a wide range of incentives and tax benefits, it is believed that many existing domestic firms may just shift base to SEZs.

 \rightarrow There is a fear that the promotion of SEZs may be at the cost of fertile agricultural land affecting food security, loss of revenue to the exchequer and cause uneven growth with adverse effects.

 \rightarrow Apart from food security, water security is also affected because of the diversion of water use for SEZs.

 \rightarrow SEZs also cause pollution, especially with the release of untreated effluents. There has been a huge destruction of mangroves in Gujarat affecting fisheries and dairy sectors.

 \rightarrow SEZs have to be promoted but not at the cost of the agricultural sector of the country. It should also not affect the environment adversely.

•Rajarhat, New town project is an urbanization programme undertaken by Government of West Bengal since mid 1990s. The project falls in Rajarhat-Gopalpur municipality and in some panchayat areas. In this case of land acquisition people were forced to change their profession. They became wage labour, caretaker for the housing project and depend mostly on informal relationships. An estimated 130,000 people lost their land and livelihood due to this large-scale urban project. Here the

resistances were not as violent as Singur as people get alternative source of earning and also inhabitants are differentiated and has conflicting views on displacement.

• One of the most important causes of tribal displacement in Odisha is large-scale mining and industrial projects. The most important mining zones within Scheduled Areas are iron ore and manganese mining in Sundargarh and Keonjhar districts and bauxite in Kalahandi, Koraput and Rayagada districts. Apart from displacement, mining and industries also lead to large-scale influx of non-tribals, which often leads to social and political marginalization of the tribals.

Resistance against development induced displacement

Peasant movements like Chipko (northern India) and peasant protests reveal how policies of economic 'development' or 'modernization' formulated at the top levels of states, corporations and international financial institutions are often experienced by peasants, rural women, and laborers- as exploitation. In the strategies of economic development, indigenous people, landless peasants, and women are expected to bear the brunt of industrialization, disease, food scarcity and land hunger testify to the impact of this process. The discontent and dissent of the displaced people resulted in protests and resistance in several cases. Few such cases are discussed as follows.

• The Silent Valley Project: The Silent Valley Project (SVP) was perhaps the 1st instance where the development vs. environment debate gained prominence. In the late 1970s the Kuntipuzha River in Kerala's Palaghat district flowing through a valley was considered an ideal place for constructing a dam. The envisaged benefits were irrigational potential of 10,000 hectares, generation of 240 megawatts of power in addition to job creation. On the other hand, construction of the dam would lead to destruction of one of the world's richest biological heritages. The controversy started with a report of the task force, which recommended that the project be abandoned and the area be declared a biosphere reserve. The project was opposed by Kerala Sastra Sahitya Parishat (KSSP), an effective grassroots environmental body, and an organisation called the Friends of the Trees, both of these being supported by a Save Silent Valley Committee in Bombay supported by World Wild Life Fund (WWF) etc. The movement was successful inspite of the Governments'' determined efforts to carry out the project and the non-interventionist stand adopted by the Kerala High Court.

•The Tehri Dam: The Tehri dam was always perceived as a threat by the local population who consider the river Bhagirathi not only as a means of livelihood, but have religious, cultural and emotional ties with it for generations. As early as in 1965, when Sri K.L.Rao, the noted engineer and Minister visited the area, the people expressed their apprehensions about and the opposition to the project to him. Nevertheless, the Planning Commission approved the project in 1972. In 1973, the Communist Party of India organised an agitation against the project. However, the Government of Uttar Pradesh obtained administrative approval in 1976. In retaliation 35 gram sakhas in Tehri district passed a joint resolution opposing the project. The Zilla parishad also opposed the project but the Government decided to go ahead with it. To oppose the Government's action the Tehri Band Virodh Sangharsh Samiti (TBVSS) was formed, which passed a unanimous resolution opposing construction of the dam. Turning a deaf ear to this, the Government awarded construction contracts which led to severe protests from all sections of the Society. The opposition strategies included press campaigns, reports, seminars and litigation.

The TBVSS filed a petition under Article 32. It contended inter-alia that:

 \rightarrow The dam was seismologically risky posing severe threat to downstream settlements like Haridwar and Rishikesh.

 \rightarrow The State had no right to sanction such projects for temporary benefits, which would permanently alter land use.

 \rightarrow The dam life would not be more than 20 years due to silting up.

 \rightarrow The risks far outweigh the benefits.

However, the dam was constructed and people began to move out from 2001 onwards and different regions were submerged from 2001. Though the land acquisition began from 1979 onwards, the people still unrehabilitated are estimated at 13000 - 18000 families. Some families who were rehabilitated were asked to move again for some other projects- an airport. Though the builders and engineers of the dam call it a marvel, the environmentalists and the affected people call it a dam built on their tears, one of them being Sundarlal Bahuguna. The judgment in the Tehri dam case and the one in Narmada case are perceived as retrogressive and as encouraging other similar projects.

• Koel Karo: In erstwhile Bihar, before its division into Jharkhand, Chhattisgarh and present day Bihar, two dams were proposed to be built on the northern and southern banks of Koel Karo River. The benefits from the dams were generation of 710 MW of power only, as no irrigation was envisaged. It was estimated at that time that the villages and people affected would be 130 and two lakhs respectively. In 1994, the opposition movement gained momentum, and around 70,000 tribal outsee gathered at the submergence zone and organised strong protests. An appeal was filed on their behalf in the Supreme Court, which stayed land acquisition proceedings by the Government for five years. As soon as the five years expired, the Government again announced that it would again build the dam, but with the Jharkhand Mukthi Morcha (JMM) active in those parts, the resistance built up rapidly and the fight against the dam is still continuing. After formation of Jharkhand State, the Government of the day again wanted to take up construction of the dams, this again led to protests.

In February 2001 Adivasis protested against the Koel Karo dam, at the police outpost at Tapkura, Jharkhand. A large contingent of police opened fire from rifles and sten guns on about 5000 people gathered, which resulted in 9 people being killed and 22 injured. The Adivasis were protesting against the construction of the dam, as it would submerge the forest area on which they were dependant. Interestingly, though the adivasis form about 8% of the country's population they form 47% of the people displaced due to large projects.

Irrespective of the political party in power, large dams and multipurpose projects occupy prominent mind space and the struggle of the affected goes on. It can be observed that large scale displacement has been and continues to take place affecting millions of people adversely, particularly the poor, the downtrodden and the tribals. The government's and the bureaucrat's attitude towards this continues to be callous. There have been protest movements against this, but with the exception of very few they cannot be termed successful. The State's use of draconian laws like the Official Secret's Act (1923), the Criminal Procedure Code, TADA, POTA and also some Irrigation Acts has been the reason for suppressing the protest movements.

4.7 Impact of development induced displacement

Displacement caused through involuntary actions creates the scenario where people are rendered without land, shattered homes and with no job to rely upon. Dislocation breaks up living patterns and social continuity. It dismantles existing modes of production, disrupts social networks, causes deprivation along with impoverishment of many of those uprooted, threatens their cultural identity, and increases the risks of epidemics and health problems. Women, children and elderly people are the most impacted ones by the displacement. The projects also affect the environment of the entire area by depleting its natural resources and polluting them.

Projects like mining, industries etc., affects the health and living conditions of the people in surrounding areas. All DPs and PAPs not only lose their livelihood and employment, but their human rights are also violated. Eight potential risks that are intrinsic to forced displacement are enlisted as follows.

• *Landlessness*: It disrupts the basics of displaced people by affecting their system of production, earnings and commercial activities.

• *Joblessness*: Involuntary shift threatens the wage employment of affected people working in industries, service sector or agro-industries located at rural or urban areas.

•*Homelessness*: Displacement at times deprives the displaced of their shelter. Temporary homelessness is common feature in such cases and some faces this problem for longer periods.

•*Marginalization*: Reduced social, psychological and economic statuses are the visible impacts of marginalization. Feeling of injustice and inequality lowers the self-confidence of affected masses in society and themselves.

• *Food insecurity*: At times forced uprooting may result into temporary or chronic under-nourishment. It can obstruct normal growth and work.

• *Increased morbidity and mortality*: Involuntary shift imposes social stress and psychological trauma which at times are accompanied by outbreak of vector borne diseases such as malaria etc., supply of unsafe water, filthy drainage system. All these negatively affect the health of the family members and most vulnerable children and elderly.

• *Loss of access to common property*: Many traditional activities are dependent on common property resources of particular locality. With the loss of it, income and livelihood sources also deteriorate. Upon that usually displaced are not compensated for these losses by Government.

• *Social disarticulation*: Fragmentation of families, scattering of kinship network, uprooting of communities and dismantling of social and interpersonal ties are some of the major social changes associated with the involuntary displacement and relocation. It disperses informal life supporting social network.

Apart from these, the DPs and PAPs also get affected in various other ways due to displacement:

• *Loss of access to community services*: The community services like schools, hospitals were easily access to people before displacement. Loss of income after displacement makes it difficult for people to avail them. Even under rehabilitation programme, community services are not given much importance.

• *Impact on women*: In Indian patriarchal society, women have not been given their due rights in the form of compensation on the resettlement package. Nowhere land is registered on their name and as such they are totally neglected. Even women household heads and widows do not receive any compensation after being displaced. Indian women usually participate in agriculture on their lands. Due to deprivation of their land, they are forced to remain as homemakers. So, after displacement joblessness is higher among women than men. Women also fall prey to domestic violence. Basically, the women are attached with the family and community bonds. But, due to displacement, the well-knit social fabric completely shatters resulting in serious disruption of family bonds. This emotionally marginalizes the women. Other than that, women face serious crime against them like rape, polygamy, destitution by husbands, increased dowry system etc.

•*Impact on children*: Children lose access to their schools after displacement. The deprivation of income pushes the children to take up either household jobs or become child labour, to supplement the income to the family.

• *Violation of Human Rights*: In addition to violating economic and social rights, forced displacement can also lead to violations of civil and political rights, including: arbitrary arrest, degrading treatment or punishment, temporary or permanent disenfranchisement and the loss of one's political voice.

• *Environment degradation*: All the developmental activities disrupt the environment by pollution the air, water and the surrounding lands. This in turn affects the climate and the health of the people living in the nearby areas. Children, women and elderly people are the most vulnerable to these detrimental impacts on the environment. The environmental pollution also affects the animals living in the area and the death of domestic animals in turn also affects the income of people.

4.8 Measures for improved rehabilitation and resettlement (R&R)

The developmental projects must be promoted but, the government must ensure that destructive effects upon people who are displaced are minimized. The government must adopt measures to ensure that adequate compensation is provided for all the affected people. There should be proper economic estimation of all the assets which are being confiscated or destroyed by the government or private companies for the projects. The government should also make proper environment and social Impact Assessment (EIA and SIA respectively). It must take required measures to reduce the impact of the developmental projects on environment and pay for the emotional and psychological pain suffered by

the people. Every displaced person should be provided with proper rehabilitation and resettlement with all the facilities like basic shelter, essential food, potable water and sanitation, mandatory medical and healthcare services, livelihood sources, education facilities for children, protection of human rights and also some entertainment and amusement facilities. Institutions like civil society organisations, political parties, bureaucrats and local government bodies can also play a big role by working for the betterment of the people.

The R&R Plans should formulated be as part of Environmental Management Plan (EMP) should be based on the detailed Socio-Economic Survey or Social Impact Assessment of the affected families / villages in coordination with the concerned Departments of the State Government, District Administration and representatives from affected families and other stakeholders in the area. During the formulation of R&R Plan, major emphasis should be laid on provision of basic amenities to Project Affected Families (PAFs) leading to improvement in quality of their life, alleviation of poverty by generating work opportunities through secondary sources and imparting vocational trainings. These plans should be evaluated and approved by the Expert Appraisal Committee (EAC) of Ministry of Environment, Forests & Climate Change (MoEF&CC) in accordance with Environmental Clearance of projects. These initiatives have been evident in the broad R&R package being implemented by NHPC (erstwhile National Hydroelectric Power Corporation) at its various projects as specified in Box 4.

With the enactment of "The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCTLARR) 2013", a detailed Social Impact Assessment (SIA) Study is to be conducted by the concerned State Govt. through an independent SIA Agency and Social Impact Management Plan / R&R Plans are formulated with complete involvement of the project affected families. The R&R Plans, so formulated, are approved by the State Govt. before taking up for implementation by the developer. As a matter of fact, community engagement is now integral and the most important part of all green clearances such as Environment Clearance, Forest Clearance, SIA as per RFCTLARR 2013 etc. and their implementation.

Box 4: A broad R&R package being implemented by NHPC at its various Projects comprises the following:

- Compensation for land, houses, shops and other properties etc.
- Homestead land.
- Transportation charges for household items, cattle etc.
- Construction of house.
- Solatium charges.
- Financial assistance for construction of cattle shed or poultry farm.
- Agricultural land depending on availability or landless grant.
- Subsidy for seeds /fertilizers/ land development.
- Development of public health centre, school, community centre etc.
- Provision of basic amenities like road, drinking water, electricity, medical etc.
- Vocational training to develop entrepreneurial skills.
- Preference in allotment of shops in NHPC's shopping complex.
- Special measure for Scheduled Tribes.
- Renovation/ relocation of religious structures or structures of archaeological importance.

Various provisions for infrastructure facilities to be developed in the resettlement colony include: Piped water supply, Community toilets, Sewage treatment facilities & sewerage system, Electrification, Shopping complex, Primary Health Centre (PHC) / Hospital, Community centre, Vocational activity centre, School complex including playground, Children park, Avenue plantation & block plantation, approach road up to resettlement colony, internal roads in resettlement colony & Irrigation facilities etc.

Elements of R&R entitlements as per RFCTLARR Act, 2013 for all the affected families (both land owners and the families whose livelihood is primarily dependent on land acquired) in addition to compensation package in respect of land acquired are as under:

- Provision of housing units in case of displacement;
- Choice for Annuity or Employment;
- Subsistence grant for displaced families for one year. Additional displaced SC/ST grant.;
- Transportation cost for displaced families;
- Cattle shed/Petty shops cost;
- One time grant to artisans, small traders and certain others;
- Fishing rights;
- One-time resettlement allowance;
- Stamp duty and registration fee;

• Infrastructure facilities in Resettlement Area: Infrastructural facilities and basic minimum amenities to ensure that the resettled population in new village or colony can secure for themselves a reasonable standard of community life and can attempt to minimise the trauma involved in displacement, are provided in the Resettlement Area.

4.9 Forced displacement and Sustainable Development Goals (SDGs)

The 2030 Agenda for Sustainable Development appeared tailored to advance the rights and wellbeing of some of the planet's most vulnerable and marginalized people. Indeed, the Agenda contains a pledge that no one would be left behind, and includes specific reference to refugees and other displaced people. It may then come as a surprise to learn that in the original indicator framework, designed to measure progress towards meeting the SDGs, there was not a single indicator mentioning refugees or displacement. This is of critical importance. An unintended consequence of using an indicator framework as the measurement tool is that what is outside of the framework is not measured or reported on and therefore often interpreted as not relevant/compulsory to the achievement of the overarching goals.

However, forced displacement is related to SDGs in the following ways.

• Forced Displacement and SDG 1 (No poverty): Threats to the achievement of SGD 1 are multiple and for displaced persons, they are often compounded threats to their personal security.

• Forced Displacement and SDG 3 (Good health and well-being): For sustainable growth, good health, and well-being, aimed at maintaining safe lives and promoting well-being for everyone at all ages, are important. Threats to good health and wellbeing include global infectious diseases, poverty-related threats and conflict, and natural disasters. The health of refugees, including mental health, is compounded by the challenges faced by displaced citizens. This is exacerbated by the fact that the displaced people have already experienced trauma in their countries of origin and their mental health problems increase during flight.

• Forced Displacement and SDG 8 (Decent Work and Economic Growth): Only when societies take steps to build conditions that allow people to have quality jobs that boost the economy while not damaging the environment can sustainable economic growth occur. For the entire working-age population, job opportunities and decent working conditions are also needed. Economic challenges often force refugee women into negative coping mechanisms including survival sex work to meet their families' needs. Refugee women often took on the roles of breadwinners for their families, roles they did not have to undertake in their countries of origin. Lack of documentation, language barrier, lack of adequate and requisite skills needed to get jobs are some of the challenges that refugee women face while in asylum. This coupled with lack of support forces them into survival sex work. As a result, these women often must grapple with unwanted pregnancies, sexually transmitted infections, HIV/AIDS, sexual exploitation, gender-based violence, and unsafe abortions.

The recent inclusion of an indicator on refugees in the indicator framework for the Sustainable Development Goals (SDGs) is being considered as a huge achievement. This has been incorporated as **Target 10.7: Facilitate orderly, safe, regular and responsible migration and mobility of people,**

including through the implementation of planned and well-managed migration policies under Goal 10. Reduce inequality within and among countries in 2019. The specific inclusion of an indicator relating to refugees allows those advocating for refugee protection to be included in the discourse on sustainable development. For the work on improving data and statistics on refugees, this is a game-changer; for other displaced groups, this progress will also open doors. Preventing situations which generate forced displacement and finding durable solutions for those already displaced is now part of meeting the SDGs. It also highlights the humanitarian-development nexus, ensuring that it is front and centre in sustainable development.

4.10 Conclusion

One of the greatest costs of development is the forced displacement of millions of people. It is evident that development induced displacement is inevitable. But, economic development without human development is meaningless. Development cannot be real until its benefits reach those who pay price for it. In India, people are becoming rich at the cost poor and vulnerable people. The government has to be responsive and mitigate the negative impacts of the developmental projects on people. There should be proper compensation and rehabilitation mechanism adopted for DPs and PAPs. Development should be a holistic concept that encompasses the progressive improvement in the quality of human life in terms of food, clothing and shelter and conditions for healthy living with increasing longevity of life and happiness.

4.11 Self-Assessment Questions

a) Differentiate between economic growth and economic development. Write a brief note on different indicators of economic development.

b) Write short notes on Human Development Index and Global Positioning Index.

c) Briefly discuss the factors affecting economic development.

d) Discuss the different approaches to development. How is development related to the environment? Describe the core values of development.

e) Explain antidevelopment and maldevelopment with examples. Briefly discuss different types of maldevelopment.

f) What is meant by development induced displacement? Who are the DPs and PAPs? Write a brief note on the global scenario of development induced displacement.

g) What are the categories of development induced displacement? Write a brief note on the Indian scenario of development induced displacement post-independence.

h) What are the objectives of the LARR Act 2013? How are the affected people compensated under this Act? What are the shortcomings of this Act?

i) What are Special Economic Zones? What are its chief objectives? Discuss the challenges faced by these zones.

j) Discuss any two case studies on resistance demonstrated against development induced displacement in India.

k) Write a brief note on the impact of development induced displacement.

1) Briefly discuss the measures for improving rehabilitation and resettlement packages offered to displaced people with a suitable example.

m)Enlist the elements of R&R entitlements offered to affected families as per the RFCTLARR Act, 2013. Discuss the relation of forced displacement with SDGs.

n) What is the basic concept underlying the new paradigms of development? Briefly discuss the basic concept of each paradigm.

4.12 Suggested Readings

1. Aboda, C., Mugagga, F., Byakagaba, P., & Nabanoga, G. (2019). Development induced displacement: A review of risks faced by communities in developing countries. *Sociology and Anthropology*, 7(2), 100-110.

2. Kumar, S. (2022). Accessed from https://prepp.in/news/e-492-economic-growth-vs-economic-development-indian-economy-notes on 15.09.2022.

3. Kumar, S., and Mishra, A. J. (2018). Development-induced displacement in India: An indigenous perspective. *Journal of Management and Public Policy*, *10*(1), 25-36.

4. Maiti, P. (2008). Development ethics. Concept Publishing Company.

5. Raavalee, A. (2021). Development induced displacement in India. *International Journal of Multidisciplinary Educational Research*, 10(7), 10-13.

6. Rao, U. J. (2013). Displacement and protest movements: The Indian experience. *International Journal of Modern Engineering Research*, 3(3), 1554-1560.

7. Reddy, I. U. B. (1993). Displacement and rehabilitation. Mittal Publications.

8. SCERT (2019). Accessed from https://www.brainkart.com/article/Economic-and-Non-Economic-Factors_37157/ on 16.09.2022.

9. Singh, A. K. (2020). Development induced displacement: Issues and Indian experiences. *Journal of the Anthropological Survey of India*, 69(2), 276-289.

10. UNHCR (2019). Accessed from https://www.unhcr.org/blogs/including-forced-displacement-in-the-sdgs-a-new-refugee-indicator/ on 20.09.2022.

O.E.C: 4.2

Unit-5

Political Ecology: Concepts and Issues

Contents

- 5.1 Objectives
- **5.2 Introduction**
- 5.3 Political Ecology In lieu of definitions
- 5.4 Why is understanding Political Ecology Important?
- 5.5 Political Ecology and other important issues
 - 5.5.1 Political Ecology and International Relations
 - 5.5.2 Ecofeminism and Feminist Political Ecology
 - 5.5.3 Political Ecology and Policy Making
 - 5.5.4 Political Ecology and the North-South divide
- 5.6 Political Ecology and the Indian Scenario
- 5.7 Conclusion: The problem of Building a Consensus
- 5.8 Self-Assessment Questions
- **5.9 Suggested Readings**

5.1 Objectives

The objectives of this unit include are as follows:

- Understanding the definition and significance of political ecology
- Learning how is political ecology linked with International Relations
- Understanding what role does political ecology play in policy making
- Exploring political ecology in the context of the debate between developed and developing countries
- Exploring the nature of political ecology in India

5.2 Introduction

To put it simply, political ecology lies at the intersection of the political, environmental and ecological

phenomena and differs from 'apolitical' ecology as the former involves politicising various environmental issues and phenomena. It offers wide-ranging issues, interweaving ecology, social sciences with political economy. Though the term was first used by Frank Thone in an article published in 1935 titled, 'Nature Rambling: We Fight for Grass', later Bertrand de Jouvenel used the term 'Écologie politique' in his writings since 1957. Maurice Duverger in his work, 'The birth of a political ecology' (1992), referred to Bertrand de Jouvenel, as some sort of pioneer of political ecology, though his popularity remained limited mostly to France. Earlier, the term has been used in human geography and human ecology but with no proper definition. Then anthropologist Eric R. Wolf, used the term in an article titled 'Ownership and Political Ecology', elaborating as to how local rules of ownership and inheritance 'mediate between the pressures emanating from the larger society and the exigencies of the local ecosystem'.

5.3 Political Ecology - In lieu of definitions

Before any attempts were made to define the concept of political ecology, Karl Marx had attempted to understand ecology with reference to the idea of metabolism. He had used it to define the labour process between man and nature. He observed, that Man, through his own actions, mediates, regulates and controls the metabolism, between him and nature. However, an irreparable rift had emerged in this metabolism as a result of capitalist relation of production and the antagonistic separation of town and country. Marx had argued that it is an obligation of human beings to preserve the ecological preconditions of human life for future generations. He stated that humans are owners but possessors of various natural resources which needs to be handed out to the succeeding generations, an idea which got echoed in the call for sustainable development.

However, many critics of the idea of sustainable development would argue that the very discourse of sustainable development, may contribute positively to environmental and social welfare but it is a top-down reform project, that aims at correcting the environmental and social externalities resulting from economic growth. They further argue that governments upholding it, abide by the logic of capital. On the contrary, the emerging (yet still marginal) alternative, multi-disciplinary, degrowth academic paradigm, has evolved from an activist movement since the first decade of this century, and retains close contacts and open communication with social movements that support a degrowth transition in economy and society. This transition directly challenges the established orthodox growth narrative and the mechanisms of capital accumulation.

Piers Blaikie and Harold Brookfield (1987) opined that the phrase 'political ecology' combines the concerns of ecology and a broadly defined political economy. Together this encompasses the constantly shifting dialectic between society and land-based resources, and also within classes and groups within society itself. According to Arturo Escobar, political ecology can be defined as the study of the manifold articulations of history and biology and the cultural mediations through which such articulations are necessarily established. German Palacio viewed it as a field of inter- and transdisciplinary discussion that reflects and debates power relations revolving around nature, in terms of their social fabrication, appropriation, and control of her or part of her, by distinct socio-political agents.

James B. Greenberg and Thomas K. Park (1994), in their opening article to the first volume of the *Journal of Political Ecological* (based in Arizona), tried categorising the early works in the field

of political ecology. According to them, the earlier studies comprised a marriage between a broad category of political economy, cultural ecology (or ecological anthropology), and the natural science of ecology. They believed that the roots of political ecology in dependency theories, peasant studies, and world system theories, all of which emerged in the 1960s and 70s. Similarly, Bryant and Bailey were also of the opinion that the earlier studies used structural and class analysis while explaining ecological degradation.

When the Brundtland Report of 1987 talked of 'sustainable development,' which later found place in the agenda of the 1992 Earth Summit in Río de Janeiro, the mainstreaming of the discourse was severely criticised. Indian ecofeminist, Vandana Shiva multiple times have categorically exposed the imperialist nature of the Global Environmental Program structured by the World Bank and the United Nations Environmental Program and also called out the patriarchal overtones in the mainstream sustainable-development discourse. On similar lines, Wolfgang Sachs, brought together a collection of works to critically analyse the environmental narratives that are popularised by international development agencies and conferences, in order to serve the interests of powerful corporate interests and their imperialist agendas with their gender biases, and racist assumptions that form the base on which mainstream sustainable development programs for global environmental management are built. Since the 90s, there has been a post-structural shift in addressing ecological issues, wherein emphasis was given to traditional ecological knowledge and call was given to act locally and strengthen local institutions in mitigating crises. Further, the Latin American School of political ecology (of which Arturo Escobar is a part) comprising scholars like Enrique Leff, Héctor Alimonda and others, questions the hegemonic world view of Western science and meta-narratives, and seeks to understand the society-nature nexus from the perspectives of the peripheries of the European colonial system.

Raymond L. Bryant and Sinead Bailey developed three fundamental assumptions while talking of political ecology. First, costs and benefits associated with environmental change are distributed unequally. Changes in the environment do not affect society in a uniform manner. Socio-political and economic inequalities lead to this uneven distribution od costs and benefits. The second one seems to flow out of the first and asserts that the above unequal distribution reinforces or reduces existing social and economic inequalities. Any change in environmental conditions must affect the economic and political status quo. Third, they point out that the first two leads to altered power relationships and political ecology provides critiques and alternatives in the interplay of the environment with political, economic and social factors. Bryant and Bailey talk of a 'politicized environment' that is shaped by political interests and actions of the actors who take part in various politico-ecological conflicts.

5.4 Why is understanding Political Ecology Important?

In reality, various political, economic, social, and cultural forces affect, and are affected by, ecological and environmental factors, as everyday life is characterised by some sort of interaction between the human world and the natural world., and nature (changed and unchanged by human activity) affects human life and institutions, this complex and dynamic relationship. Varying issues like the unequal impacts of global warming on different societies, the impacts of environmental toxics in food, air and water on general health and health of the marginal, poor, vulnerable people, various irregularities on the part of big corporations or their crimes against the environment like deforestation, ruining the

environment for mining and other purposes, land grabbing, and other various forms of environmental crimes committed in urban spaces, all are concerns for studies in political ecology. For instance, resource conflict may be rooted in local history and social relations, but at the same time it is connected to wider economic and power relations which can be best analysed by adopting a multi-disciplinary approach, that is adopted by political ecology. Also, as an approach it is bottom-up approach, where marginal issues also get addressed, hence, political ecologists emphasize the need to have locally based responses in mitigating problems stemming from resource conflict. They focus on, 'local-level decision-making by grassroots actors', (Bryant and Bailey, 1997: 5).

Issues of ecology and sustainability are almost coterminous. Conservation of nature is crucial for tackling climate change, achieving sustainable development, guaranteeing secure livelihoods for the poor and building an environmentally sustainable economy. The study of political ecology is important because the environment today is increasingly becoming a contested terrain. A rise in population has led to the shrinking of natural resources, which has given rise to disputes and conflicts over natural resources, in many parts of the world. For instance, water as a resource is essential to all daily human activities and thus it has become in the neoliberal age, one of the most important commodities. The scarcity of water has triggered despair in several parts of the world that already have little access to water, even states within India, fight over the distribution of river water. The Cauvery/Kaveri water sharing dispute between Karnataka and Tamil Nadu is an example of such contest.

The truth is that the people who are heavily dependent on natural resources like forests, rivers or lakes, for their livelihood (be it fishing, agriculture etc.) are people residing in the lowest rung of the society. Almost a quarter of the world's land area is owned, managed, used or occupied by indigenous peoples and local communities. While nature in these areas is degrading less quickly than in others, the impact of overall climate change and changes in the ecosystem have a direct impact on their lives and livelihoods. For instance, in case of extractive projects like mining, indigenous people have always faced negative impacts, such as contamination, land dispossession or water shortage, which in turn can lead to contestation, conflicts and violence. Again, various projects like making national parks to protect tigers, further displace the people who have been attached to the land for many generations. This had happened with the setting up of Rajiv Gandhi National Park in Nagarhole, which displaced indigenous people from Kuruba tribe. They could no longer collect honey which was a major source of income, which forced them to take loans from private money lenders.

5.5 Political Ecology and other important issues

5.5.1 Political Ecology and International Relations

Political ecology has allowed both an ecological perspective to inform political thought and a political understanding of our environmental circumstances. Generally speaking, most traditional theoretical approaches to international relations fail to acknowledge the important role played by ecological or political-ecological factors in understanding or explaining inter-state behaviour while analysing global issues or crises. The need to focus beyond humanity and shift the focus to 'humanity in nature', was realized to be necessary, which asked pertinent questions like where the boundaries of political

communities are or while dealing with environmental issues faced across borders, it was asked, at what level of political community we should seek a solution. The introduction of environmental issues into IR though impacted the discipline, 'but their theoretical significance and practical policy implications may be viewed either as compatible or as irreconcilable with traditional assumptions and current practices' (Hugh Dyer 2018). On using the traditional lens, environmental issues can simply be added to the list of issues which are already dealt with by existing means, for existing ends. When viewed alternatively, these issues may lead to theoretical and practical transformations, that is to say that when environmental issues challenge existing practices within a discipline, they end up raising new questions. However, the continued prevalence of competitive state relations is not conducive to environmental cooperation or encouraging to green thought.

Similar words have been echoed in the work of Dennis Pirages (1997). He wrote, 'the three socalled "contending schools" of international relations thought-the realist, liberal, and radical-have dubious credentials as scientific theories, wield little predictive power, and now offer little policy guidance in dealing with the issues of twenty-first-century globalism'. The traditional theoretical approaches, thus we see focus primarily on men, their motives, actions all of which get manifested in the actions of a state. Such approaches do not take into account the numerous ecological and politicoecological events that transcend borders and make such events global in nature. Realist theory with its emphasis on state power and sovereignty, liberal theory's emphasis on individual rights and cooperation through international regimes, fail to address concerns of political ecology. Critics argue that the emphasis over rights takes away emphasis from responsibilities which leads to unequal burden sharing in addressing ecological concerns. Pirages is not so much hopeful about the Marxist critical approach either, as it lacks any explanatory or predictive power in dealing with emerging global challenges, though it makes an improvement in understanding the role of dominance and dependence among states and how it affects nature. Hence, he suggests, taking an ecological approach in understanding International Relations better and to identify aspects of these globalization processes that are increasing global ecological insecurity.

5.5.2 Ecofeminism and Feminist Political Ecology

In simple words, ecofeminism tries to link feminism and environmentalism and states that the domination of women and the degradation of the environment are due to capitalism and patriarchy. Ecofeminism highlights the role of care and cooperation over behaviours of aggression and domination, that human society adopts with regard to environment. That women are closer to nature, though celebrated in early ecofeminist writings, by, for example, Carolyn Merchant in the United States and Val Plumwood in Australia, was being criticised as "essentialist" in nature, later. The above perspective viewed that the feminine essence was an antidote to environmental destruction and linked women to mother earth and their role of nurturing or caring to nurturing mother nature. In addition to the above criticism of being "essentialist", ecofeminism was also accused of elitism, due to its origin in western, white- middle-class, setting.

However, the works by Vandana Shiva and Kenyan scientist, feminist and ecological and political activist, Wangari Maathai, who also won Nobel Peace Prize in 2004 stand in contrast to the above trend. Siva highlights the domination of the 'other' including nature, women, indigenous peoples, and subordinate classes, to be spreading across the history of patriarchal, hierarchical

civilizations and opines that development is a transformation of colonialism. While classical colonialism was carried out by the dominant western powers through military conquest and occupation, bureaucratic administration, and ruthless industrial exploitation, post-colonial development does the same through national elites and more powerful and advanced technologies (J. P. Clark 2012). Ecofeminists from Africa, also point out that women's socially inscribed identities in Africa take very different forms from women's socially inscribed identities in the west. Therefore, ecofeminism from an African point is also viewed as a resistance to western imperialism highlighting the rich tradition of African culture.

Feminist political ecology, on the other hand, tries to look into women's relation to the environment in the 'material, historical, sociocultural, and political realities of specific places in the tradition of political ecology' (C. Radel 2009). Fundamentally, feminist political ecology perceives that women and men differ in their experience of and in their relationship to environments, and that this difference is determined by the social construction of gender difference. Feminist political ecology gives priority to the need to focus on gender relations as opposed to focussing on women's roles (gender roles assigned by the society) and to see these relations as both affecting and being affected by environmental changes. This also poses a question to the universalized claims of women's right over resources and their increasing responsibilities in resource use and management, especially in the events of men's migration.

5.5.3 Political Ecology and Policy Making

Public policy can be defined as 'a course of actions adopted and pursued by a government to solve a problem' (Ham and Hill 1997:6). What becomes important in this regard is understanding the multiple realities that surround the problem. However, it needs mentioning that a policy is rarely faced with a single problem, but deals with complex, intertwined issues. Furthermore, policy often operates across scales, for example, linking the international to the regional and local levels. Ecologists and political ecologists believe that a reorganization of the political, social and economic system is very much required, hence more emphasis is given to agency, mobilization, political restructuring through various actions including policy formulations and implementation, in order to achieve change in relation to the environment. Various studies indicate that policies at various levels ---from global to local focuses more on restoration like restoration through reforestation for carbon sequestration or restoring wetlands for flood protection etc.

Peter A Walker, an American Geographer narrated an incident that took place in 2000, at the Annual Conference of the Association of American Geographers. An eminent political ecologist responded to criticism that the subfield lacks engagement with practical problem-solving by saying that he was under no compulsion 'to be useful'. Walker states that even professional policy makers have not tried to link political ecology and decision making, thereby making policies incomplete from the very beginning. He argues that when it comes to political ecology there is skepticism and distrust among bureaucrats and policy makers. However, there are also instances where the chasm could be bridged to some extent. For instance, Piers Blaikie's book *Political Economy of Soil Erosion, in Developing Countries*, used neo-Marxian approach to critique development and was aimed at helping international aid agencies, development organizations and other such bodies, understand the question

why policies fail under various circumstances. The book had tried to engage with policy makers in a language that was known to the latter category.

Political ecology has not successfully moved beyond academic debates, as a result of which it has had virtually no engagement with some of the world's most important international research programs dealing with environmental change and human-environmental relations, such as the Intergovernmental Panel on Climate Change, the International Geosphere-Biosphere Programme, the International Human Dimensions Programme on Global Environmental Change, the Millennial Ecosystems Assessment etc. However, it is pertinent to mention that more and more policy makers are realizing the role of traditional community- based environment management systems operating locally, to be important means through which sustainable resource management can be achieved. Environment researcher Gilbert F. White opined that, natural disasters that resulted in deaths and loss of property could be prevented if policy makers were doing a better job. Their inability to learn from researches done, prevents them from forming informed policies.

5.5.4 Political Ecology and the North-South divide

While addressing various issues, concerns in the international domain, we often resort to the use of binaries like north-south, rich-poor, developed-developing, low-high income, Annex I and Non-Annex I countries. The last binary specifically, can be seen reflected in United Nations Framework Convention on Climate Change, wherein Annex I Parties include the industrialized countries that were members of the OECD (Organisation for Economic Co-operation and Development) in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States. Annex II Parties consist of the OECD members of Annex I, but not the EIT countries. They are required to provide financial resources to enable developing countries to undertake emissions reduction activities under the Convention and to help them adapt to adverse effects of climate change. A north-south binary in particular has been used in multiple ways in political economy while referring to trade, in debates on globalization, colonization, assessments of interconnectedness and much on the climate debate.

It is interesting to note that the above terminologies that are widely used to designate the "under- developed" or "developing" societies is impregnated with a teleology, which equates words like "modernization" and "development" with "westernization", or simply West with modern. After this equation is well-accepted, it is not hard to identify parts of Europe and North America as *developed* and the rest of the world without any "modern" history and now trying to re/create a new history of development prompted by the West. This entire categorization of the world into "developed", "developing" and "under-developed" countries is ethnocentrically biased: it is seen from the perspective of the developed/West. In most of the cases, Third World was defined in a negative light in relation to the modern/ developed countries. The procedure followed in this regard has been to define the modern first and then the traditional was what was left over.

The debate between the developed and the developing countries focuses on the need to identify, limit and minimise the ever-increasing threat of global climate change and is often known as the North-South debate in global environmental politics. The countries of the global south argue that the poor developing South has made little contribution to the environmental degradation when compared to the developed, highly industrialised global North. Peter Dauvergne suggests that, "the distinction is not

only about the different environmental priorities of the North and the South; it is about the different ultimate goals that each seeks from the global environmental politics". The northern view is that the defining goal of the enterprise is to improve the state of the global environment. The southern view defines the central problem as the uneven, unfair and inappropriate state of the global system and particularly of North-South relations. These two competing views reflect the different "northern" and "southern" perspectives on global environmental politics that Dauvergne considered as the North-South debate.

For many the framing of Sustainable Development Goals can be seen as a last attempt to bridge the chasm existing between global north and south and to correct the imbalance that exist in the world with regard to political ecology. Yet, Latin American post-development scholars like Eduardo Gudynas, has called western model of development as a 'zombie category', which is not really alive anymore, but not quite dead either and Gustavo Esteva has referred to it as an unburied corpse. They argue that 'alternative development' models suggested by West is not the answer, but the need of the hour is to create alternatives to 'development', which is Western in character, universal in ambition, affecting the economy, politics and knowledge. The solution for them is reclaiming the commons, often falling back on indigenous or traditional concepts and practices. The need of the hour is 'degrowth', or reduction, which is a call to re-politicise debates related to desired socio-environmental futures. Thus, Esteva gives the example of Zapatistas in Chiapas/Mexico as an example of such an attempt at building an alternative. Ubuntu in South Africa and Hind Swaraj in India can also be cited as examples. But the problem remains that everyone experiences environmental degradation and climate change to varying degrees. Though both the rich and poor countries suffer from climate change, the poorer South is most vulnerable to this entire environmental phenomenon. Therefore, the global south wants global north to take bulk of the responsibility for dealing with environmental crises and climate change. For many living in the global south, political ecology intrinsically gets linked with right to life and right to survival.

5.6 Political Ecology and the Indian Scenario

After getting independence, the countries of the Third World were posed with the problem of a crippling economy. Self -sustenance was the need of the hour and therefore they plunged in the mode to develop their respective countries, so that they will no longer be dependent on their erstwhile colonisers or the new prospective colonisers. This encouraged building of modern irrigation projects, increased use of pesticides, synthetic nitrogen fertilizer, modified varieties of seeds in order to improve crop yield. All these were done through the conventional, science-based methods available at the time. According to Jayanta Bandyopadhyay Vandana Shiva, development activity in India has proceeded on a resource-intensive path. It has seriously disrupted ecological stability of life support systems which has been maintained through centuries. Though politics and activism, with regard to environment in India is not a new thing, but more and more shift from moral, ethical to materialist concerns can be witnessed and it is here that political ecology gains relevance. Ethical perspective can be seen in works of Sunderlal Bahuguna, where he wanted to marry environmental concerns with his pro-poor concern. It is also pertinent to mention here that he was influenced by Gandhian ideals.

The ecological and at times ethnic subordination can be noticed throughout India in various forms, specially, in areas that are resource rich but otherwise treated as peripheral. Frontier spaces can

be actively 'peripheralised' and simultaneously get integrated into a globalised economy, as is happening with India's North East. It can also be stated that in a globalized world, capital seeks new areas for resources, thereby creating new peripheries of resources, which though being peripheral are treated as crucial elements required for national security or nation building. Various 'development' projects undertaken by the government threaten the biodiversity of the region and has faced (still facing) lot of protests from the people living there.

During colonial times, the Chhota Nagpur Raja was reduced to a landlord, and was asked to pay to the British treasury, which led to exploitation of the people and the land. At the same time, landlords from the plains migrated into the region along with moneylenders, traders (Parajuli, 1996: 4) who exacerbated the process of extraction of Jharkhand's natural resources. Further, they restricted rights of indigenous people over their land and forest that had traditionally been owned as common property, in order to reclaim forest land for cultivation, which led to strong protests. Much later, the Chhotanagpur Tenancy Agreement of 1908 made an effort to recognise the right of the indigenous population over their lands, forests and other resources vis a vis the State, landlords and the "outsiders". However, these measures did not stop migrants from purchasing or stealing tribal land and discontent among adivasis. After independence, a series of amendments have successively curbed the rights of the Adivasis. In 1996, the phrase "public purpose" was redefined in Section 49, to allow transfer of lands for "any industrial purpose" or for mining and for subsidiary purpose as decided by the state government, with the consent of the deputy commissioner, providing "adequate compensation" (Basu Ray Chaudhury and Dey 2011). As a result of which the movement for a separate state of Jharkhand was based on the *adivasis* (indigenous people) raising demands for their rights over *jal* (water), *jangal* (forest) and *jamin* (land). The struggle for their right over these key natural resources is an ongoing one, even after the establishment of a separate state of Jharkhand. Pramod Parajuli makes an observation with regard to ethnic movements in middle India and states that the reason is ecological subordination and ethnicity is the form in which it is being expressed (Parajuli 2010).

5.7 Conclusion: The problem of Building a Consensus

The north and south divide, the divide between academics and policy makers, the predominance of western model of development and the subsequent marginalization of alternative models, prevents the building up of a consensus, which has already been highlighted earlier. While talking of ecology and political ecology in particular, what needs to be kept in mind is that changes in the environment or nature, does not only require dealing with the bio-physical world, but tackling the social and political dimensions have to be kept in mind as they are equally important. For instance, while dealing with river bank erosion, one should focus not only on the natural act of river erosion, but its socio-politico-economic impacts as well. The UN Decade on Ecosystem Restoration (2021–2030), is a current drive to restore destroyed ecosystems, and urges international organisations, States and national organisations to accelerate or "scale up" commitments for 'the restoration of degraded and destroyed ecosystems as a proven measure to fight the climate crisis and enhance food security, water supply and biodiversity' (UNEP 2019). However, people are divided as to how one should realise these goals. As already indicated in our discussion earlier, traditional, indigenous knowledge is mostly relegated to the margins and whatever the western countries know, believe in, are hailed as the right kind of knowledge, or is considered to be modern. So, in this dichotomous relationship between traditional

/local knowledge and modern/western knowledge, what becomes clear is the unequal power relations between sovereign states and also within states, within communities and households.

If we ask, who sets restoration agenda and for whom or why? Or if we ask, what other political and economic interests influence these agenda, we notice the overwhelming presence of corporate like organisations where plural, marginal voices are not given priority over specialists, policy makers and others operating in the field. Similarly, political ecologists argue that when it comes to the issue of climate change, a clear understanding, necessitates, taking into account global social changes, however, global regimes have institutionalised practices that link science and policy makers as the main actors dealing with climate change, excluding all other factors, thus preventing consensus building. Further, it is worth mentioning that ideas of social and economic justice are crucial elements in dealing with issues of sustainability and ecology both. But the former focuses more on biophysical processes, while the latter urges attention to be given towards the economic, political, and social aspects of life and society. Political ecologists opine that environmental changes and challenges, are not mere by-products of biophysical changes to the ecosystem but more than that.

For instance, building multiple dams on the river Teesta in eastern and north-eastern part of India, has not only affected the health of the river, but has severely affected people whose livelihood depended on the river. Once, known for its abundant supply of fresh water fishes, there is a considerable decline since, damming has rendered the river shallow and has also prevented the free flow of shoal of fish. This has in effect affected fishermen who depended on the river. Then again, decades after River Water Interlinking Project was conceptualised, the Cabinet, chaired by Prime Minister Narendra Modi, has given approval to the Ken-Betwa interlinking project, whereby water would be transferred from Ken (in Panna Madhyapradesh) river to Betwa (in Orcha Madhya Pradesh) river through the construction of a dam and a 221km canal linking the two rivers. This project aims at solving the water crisis in the Bundelkhand region. The project as envisioned by politicians and policy makers, treats rivers or nature as a commodity and such commodification further impacts the political ecology of the region, which they are not longsighted to acknowledge. This project not only threatens to displace people but also threatens to submerge 2 million trees in Panna Tiger reserve, to displace tiger and other species of animals living in 58.03sq. km. of critical tiger habitat.

While the abovementioned large projects threaten to cause large scale damage, that one needs to take into account before starting to do something, that cannot be undone, political ecologists highlight the role of rigorous water conservatism efforts in the dry regions which can overcome the water crisis. They suggest construction of farm ponds, restoration of water bodies, collection and utilization of greywater, intensive plantation to improve the water crisis. However, the drastic step of linking river water of Ken and Betwa, reveal that there is an absence of understanding as to what is ecologically viable. Consensus building is the need of the hour and not doing so will bring about irreparable damage for the present and future generations to come.

5.8 Self-Assessment Questions

- a) Focussing on several debates, how would you like to conceptualise Political Ecology?
- b) Write a detailed note on the relevance of political ecology.
- c) Discuss in details ecofeminism and political ecology.

78

- d) Using the lens of political ecology, how do you think India is fairing?
- e) What are the key issues that need to be simultaneously dealt with, while addressing political ecological concerns?
- f) Why is consensus building still not possible in Political Ecology?

5.9 Suggested Readings

- a) Bryant, Raymond and Sinead Bailey. 1997. *Third World Political Ecology*. London and New York: Routledge.
- b) Dauvergne, Peter (edited). 2005. *Handbook of Global Environmental Politics*. Cheltenham: Edward Elgar.
- c) Elias, Marlene, Deepa Joshi, and Ruth Meinzen-Dick. 2021. 'Restoration for Whom, by Whom? A Feminist Political Ecology of Restoration'. Ecological Restoration, Volume 39, Numbers 1&2, March/June 2021, pp. 3-15.
- d) Gorz, Andre`. 1980. *Ecology as Politics*. Montreal: Black Rose.
- e) Minch, Michael. (2011). 'Political Ecology', in D.K. Chatterjee (edited), *Encyclopedia of Global Justice*. Dordrecht: Springer.
- f) Perreault, Tom, Gavin Bridge, James McCarthy (edited). 2015. The Routledge Handbook of Political Ecology. Oxon and New York: Routledge.
- g) Pirages, Dennis. 1997. 'Ecological Theory and International Relations', in *Indiana Journal of Global Legal Studies*, 5(1), pp 53-63.
- h) Robbins, Paul.2012 (Second Edition). *Political Ecology: A Critical Introduction*. Malden: Wiley-Blackwell.
- i) Walker, Peter.1998. 'Politics of Nature: An Overview of Political Ecology', in *Capitalism Nature Socialism*, 9(1), pp 131-144.
- j) Basu, Madhurilata, Rajat Roy, Ranabir Samaddar (edited). 2018. Political Ecology of Survival: Life and Labour in the River Lands of East and North-East India. Hyderabad: Orient BlackSwan.

O.E.C: 4.2

Unit-6

Conservation, Sustainable Development and Environmental Governance

Contents

- 6.1 Objectives
- **6.2 Introduction**
- 6.3 Conservation of nature and natural resources
 - 6.3.1 Need for conservation of natural resources
 - 6.3.1 Inclusive conservation
- 6.4 Political perspective of nature conservation
 - 6.4.1 Modern conservation thought: from moral awakening to systematic knowledge claims
- 6.5 Concept of sustainable development
 - 6.5.1 Objectives of sustainable development
 - 6.5.2 Sustainable Development Goals (SDGs)
 - 6.5.3 SDG indicators
 - 6.5.4 Challenges and opportunities of SDG
- 6.6 Environmental governance
 - 6.6.1 Main features of environmental governance
 - 6.6.2 Environmental governance as a normative strategy
- 6.7 Conclusion
- 6.8 Self-Assessment Questions
- 6.9 Suggested Readings

6.1 Objectives

The objectives of this unit are as follows:

- Understanding the need for conservation of natural resources
- Learning about modern conservation strategies
- Learning about the concept of sustainable development

- Understanding the sustainable development goals, their challenges and opportunities
- Exploring the future of environmental governance

6.2 Introduction

Habitat is the totality of the environment in which plants or animals live in optimum conditions or as near optimum as can be reached for each species. If we accept the statement that a natural habitat represents the maximum conversion rate or energy flow within a given climatic and physiographic situation, its conservation and the study of the interactions of its components parts-physiography, geology, climate, and the unconscious cooperation between all the animals and plants within that habitat—is a fundamental first principle in maintaining populations of animals and plants, upon which in turn human populations depend. We are only beginning to apprehend rather than comprehend the intricacy and delicacy of the poise of the world of nature. Each distinctive natural biological community represents an optimum system of conversion of matter, of circulation of energy, in which through evolution by natural selection and consequent differentiation, there is avoidance of competition. No two species fill exactly the same niche or perform exactly the same function, and each species is helping to conserve the habitat. Man is the most adaptable of all animals. There are few natural habitats he cannot occupy either temporarily or permanently, adapting clothes and shelters to buffer the habitat in some measure. But if, in his lack of wisdom, man cuts down the number of species of animals in a habitat, he renders it harder to maintain, and it will support him less adequately. In this viewpoint, arguments for nature conservation must include utilitarian values so as to avoid the perception that nature conservation is at odds with human progress and that conservationists value nature above human needs. The contrasting ideologies can be characterized as 'nature for itself' versus 'nature for people'. Too often these different perspectives are regarded as conflicting, yet they need not be. Conservation is now moving toward a more nuanced framing that recognizes the complexity of the relationship between humans and biodiversity, and incorporates different ways of valuing nature. This 'people and nature' ideology is in line with recent calls for a more inclusive approach to conservation and an end to infighting that risks harming efforts to protect nature. However, conceptualizing this complex relationship between people and nature is difficult. We need to meld different viewpoints and understand when different arguments and management practices are most appropriate for supporting conservation.

6.3 Conservation of nature and natural resources

Conservation of habitat are consequently the very basis for conservation— and this includes conservation of wild animals. In the light of demographic expansion, it is usually impossible to avoid some interference in any given locality, whether or not such area is natural, nearly natural or transformed, since any biological community is a dynamic and changing association. The aim in conservation of natural resources is therefore to achieve the maximum wise use of land with the least possible damage to, or reduction of, the elements that maintain the habitat. Consumption of natural resources is increasing with growing population. With the increasing industrialisation and

urbanisation, we need to conserve natural resources for their destruction will also upset the ecological balance. Conservation is the proper management of a natural resource to prevent its exploitation, destruction or degradation. Conservation is the sum total of activities, which can derive benefits from natural resources but at the same time prevent excessive use leading to destruction or degradation. Conservation is most commonly thought of at the species level: endangered species conservation is central to the missions of environmental organizations such as WWF and is the basis for the IUCN Red List of Threatened Species; icons of conservation are often at the species level – pandas, tigers, whales; and the threat of a sixth species-level mass extinction is widely associated with the current biodiversity crisis. Reasons that species are so highly valued include their aesthetic qualities (especially large, colourful, and intelligent species) and a perceived moral obligation to preserve the existence of different life forms. The upshot is that we tend to assign higher value to an individual or population of an endangered species than to those of a common species.

6.3.1 Need for conservation of natural resources

We know that nature provides us with all our basic needs but we tend to over exploit. If we go on exploiting nature, there will be no more resources available in future. Hence there is an urgent need to conserve nature for the following reasons. Some of the needs are :

- > to maintain ecological balance for supporting life.
- to preserve different kinds of species (biodiversity).
- > to make the resources available for present and future generations.
- ➢ to ensure survival of human race.

6.3.1 Inclusive conservation

Ultimately, conservation is about both people and nature. This is not some sort of New Conservation – all societies throughout human history have tackled the dual goals of conserving nature because of the services provided for their benefit (for instance, hunter–gatherer societies are directly reliant on local nature) and because of intrinsic values (often manifesting as 'spiritual' or 'divine' reasons for conservation, as reflected in the world's major religions). But for the first time in human history we are faced with a human population size and consumption rate that fundamentally challenge the wellbeing of both people and nature at a planetary scale. To turn this around, we need to urgently, cleverly, and on a large scale apply all the arguments and management tools we have – including both intrinsic and utilitarian reasons for conservation, and both regulation and monetary valuation – in a less divided and more inclusive approach to conservation.

6.4 Political perspective of nature conservation

The 20th century added into conservation thinking increasing consciousness about human biospheric dependence; efforts to identify appropriate conservation targets; and most recently concern over the loss of biodiversity. The politics of nature conservation has taken shape within the framework of politics of nature, that is, choices vis-á-vis nature that have been made either as deliberate decisions on resource use or as side-effects of subsistence practices of various types. Because of tensions and conflicts with alternative ways of using nature, formulating realistic conservation policies has been a

complicated task. Politics of nature cuts both ways: humans modifying nature mould themselves, by their very actions. Various elements and processes of nature are active participants in this interplay. Awareness of such interdependence is ancient and has formed one of the springboards of modern nature conservation. Understanding of 'what nature is' has, of course, been modified over the centuries, but politics of nature is primarily about concrete decisions on resource use, modification of the surroundings, and so on, in increasingly complicated economic, social and political contexts. Modern nature conservation is one alternative among many others in making decisions concerning nature.

Improving knowledge of the human dependence on the rest of nature has certainly had a critical role in the stabilization of conservation thought. However, there is a need for more groundwork on identifying the bits of knowledge that have been accepted as relevant, the framing of such bits of knowledge, and the normative implications. The transformation of knowledge into evidence at any point in time in the past as well as in the present is a key term in this riddle. It is clear, nevertheless, that increasing knowledge about human place in the world has been a critical factor in the history of nature conservation. Science is a specialized form of knowledge that connects together specific factual claims and interpretative frames. Science has succeeded in this by developing its own specializations, both conceptual and practical, and giving rise to new specialist-professionals. Science have been essential in this development.

6.4.1 Modern conservation thought: from moral awakening to systematic knowledge claims

i. Human-caused extinction

The whole scene is thoroughly permeated by uncertainties, doubts and vested interests. Human culpability in species extinction was finally accepted in the late-19th century, by and large. Decisive evidence seems to have grown from the practical experience of the "community" of big game hunters in European colonies. There is no doubt that the driving force for wildlife conservation at the start of the 20th century in both Africa and India were the European hunters. As luminous members of high societies of the affluent world, colonial hunters were in the position to launch international meetings and organizations supporting the cause of nature conservation.

ii. Romantic sensibility

Perhaps the most important legacy of romanticists is their view that nature has a special role in the spiritual improvement of humanity. Major literary figures supported the romantic vision and gave voice to adoration of nature with a distinctly modern tone. William Wordsworth was an important inspiration in England; his *Guide to the Lakes* (1810) includes one of the earliest suggestions on the need to protect natural areas as "a sort of national property, in which every man has a right and an interest who has an eye to perceive and a heart to enjoy". Geographer and explorer Alexander von Humboldt had a similar inspirational role in German speaking continental Europe around the same time. Also Humboldt used the attribute 'national' in his vocabulary.

iii. Utilitarian conservation

Human-initiated modifications of nature brought into the open a new type of ambivalence: Where does

the human ability to improve nature come from, and what are its limits? Although dreams of industrial progress reigned supreme in the 19th century, overt optimism was accompanied by doubt and criticism. Malthus, of course, is a well-known critic of optimism about human progress in the early decades of the 19th century; somewhat anachronistically, he might be regarded as a utilitarian conservationist. Conservation ideology adopted in the US in the era of Progressivism at the turn to the 20th century was an outgrowth of utilitarian conservation. The approach implied a search for correct rules for human use of nature's resources. Practical traditions in agriculture, range management, forestry and fisheries have produced background knowledge for modern ecology.

iv. "Nature is our friend"

The mixing together of utilitarian and romantic views of nature found positive resonance in public opinion in the course of the 19th century. Public protests grew against excessive hunting and cruelty toward animals among the public at large, marking the birth of new attitudes and subjectivities vis-à-vis nature. There is lots of literature on this process. The high social respect enjoyed by naturalism in Victorian Britain is well known.

v. Human biospheric dependence

In current thinking, the need to protect nature cannot be disentangled from a perception that the existence of human societies depends on the 'life-support system' of the Earth, to use Eugen P. Odum's (1989) phrase. This convergence is relatively recent, however. The idea of human biospheric dependence grew out of 19th century science, specifically the view of the Earth as a unified energetic and biogeochemical system. Although the biospheric perspective originated in the late 19th century at a considerable distance from contemporaneous conservation issues such as concern over species extinctions and protests against excessive hunting, it brought eventually new and important arguments into the support of the conservation cause.

6.5 Concept of sustainable development

The purpose of development is to meet the basic needs of humanity, improve the quality of life for all, and ensure a secure future. All humanity has the duty to integrate environmental conservation with development activity at all stages and levels so as to achieve sustainable development, keeping human resource use and related activity within the limits of the carrying capacity of supporting ecosystems. Sustainable development promotes the well-being of both people and ecosystems.

Sustainable development literature is the popularization and the definition of the concept made by the World Commission on Environment and Development published in 1987 in the report *Our Common Future* also called the *Brundtland Report: Sustainable development is development that meets the needs of current generations without compromising the ability of future generations to meet their needs. It contains within it two key concepts: the concept of needs, in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs (WCED, 1987:43.* In 1992 the United Nations Conference on Environment and Development, held in Rio, established Sustainable development as a common goal of human development for the roughly 160 countries that attended the meeting, which then became manifest in the action program Agenda 21. Since 1992 Sustainable development has become a widely used concept and goal in international, national, regional, and local politics. The roots of the sustainable development concept can be found in the emerging environmental consciousness of the 1960s and in the identification of the link between economic development and environmental degradation and pollution. This development was closely related to the replacement of the optimism about the creation of a modern technological utopia with a new understanding of the forces contributing to the world's problems. It would provide the basis for, and be subsequently expanded into, a Convention, setting out the sovereign rights and reciprocal responsibilities of all states on environmental protection and sustainable development. The charter should prescribe new norms for state and interstate behaviour needed to maintain livelihoods and life on our shared planet, including basic norms for prior notification, consultation, and assessment of activities likely to have an impact on neighbouring states or global commons. The essence of the concept of sustainable development implies the balance between three pillars of sustainability – environmental sustainability focused on maintaining the quality of the environment which is necessary for conducting the economic activities and quality of life of people, social sustainability which strives to ensure human rights and equality, preservation of cultural identity, respect for cultural diversity, race and religion, and economic sustainability necessary to maintain the natural, social and human capital required for income and living standards. Complete sustainable development is achieved through a balance between all these pillars, however, the required condition is not easy to achieve, because in the process of achieving its goals each pillar of sustainability must respect the interests of other pillars not to bring them into imbalance. So, while a certain pillar of sustainable development becomes sustainable, others can become unsustainable, especially when it comes to ecological sustainability, on which the overall capacity of development depends.

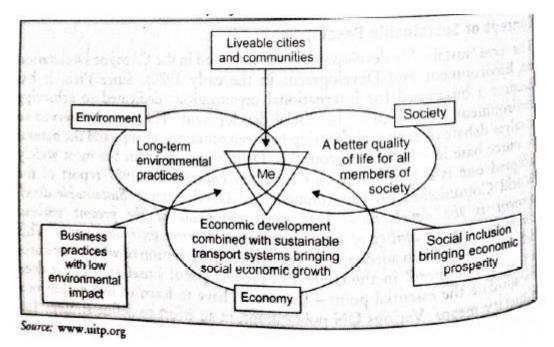


Figure 1: The concept of sustainable development

6.5.1 Objectives of sustainable development

Sustainable development has some forward looking and broad-based objectives, which transcend class, caste, language and regional barriers. These objectives are a charter for liberating one's economy from the clutches of exploitative mindset, which has deprived nations and defied their biomass wealth. These objectives are:

• To maintain the standards of living of the largest number of people with equity and justice. The consideration of Trans-boundary and cumulative impacts in decision-making has to be realized.

• To conserve and protect earth's natural resources from misuse and wasteful consumption. This demands respect for the land and its diversity as the foundation for healthy communities.

• To innovate new technology and scientific techniques, which work in unison with laws of nature and are not opposed to it. There needs to be a consideration of sharing the risks and benefits from developmental policies undertaken by different nations.

• To respect diversity and involve local and indigenous communities for a more grassroots oriented and relevant developmental policies. This would involve consideration of economic viability, culture and environmental values, as policies and programme are developed.

• To decentralize governance institutions and make them more resilient, transparent and accountable to people. They should have an open, inclusive and participative decision-making.

• To plan international institutions, which recognize the requirements of poor nations and support them to achieve their growth targets without destroying their natural wealth and environment.

• To seek peaceful coexistence of all nations of the world because only peace can allow them space to innovate for the larger interests of humanity. This may demand honouring of treaties and fiduciary obligations and international agreements.

Sustainable development is a value-based concept, which appeals to the universal themes of mutual coexistence and respect for others. It is a continually evolving process bringing together cultural, social, economic, environmental and political concerns. It is a desired direction of change and provides a framework to decide developmental actions by nations, communities and individuals.

6.5.2 Sustainable Development Goals (SDGs)

Another way to define sustainable development is in what it specifically seeks to achieve. To illustrate, it is helpful to examine three sets of goals that use different time-horizons: the short-term (2015) goals of the Millennium Declaration of the United Nations; the two-generation goals (2050) of the Sustainability Transition of the Board on Sustainable Development; and the long-term (beyond 2050) goals of the Great Transition of the Global Scenario Group.

UN Millennium Declaration

To mark the millennium, heads of state gathered in New York at the United Nations in September 2000. There, the UN General Assembly adopted some 60 goals regarding peace; development; environment; human rights; the vulnerable, hungry, and poor; Africa; and the United Nations. Many of these contained specific targets, such as cutting poverty in half or insuring universal primary school education by 2015. For eight of the major goals, progress is monitored by international agencies. In 2004, these agencies concluded that at existing rates of progress, many countries will fall short of these goals, particularly in Africa. Yet the goals still seemed attainable by collective action by the world

community and national governments. The adoption of Millennium Development Goals (MDGs) in 2000 represented a major shift in galvanizing global political will for poverty eradication and improvement of health and well-being of populations. The job started with MDGs, therefore, needs to be finished. At the same time, the world has changed radically since the turn of the millennium. New economic powers have emerged, new technologies are shaping our societies, and new patterns of human settlement and activity are heightening the pressures on our planet. A new era demands a new vision and a responsive framework. Sustainable development, enabled by the integration of economic growth, social justice, and environmental stewardship, has become our global guiding principles and operational standards. The deepening ways, in which the lives of people and countries are linked, demand a universal agenda addressing the world's most pressing challenges and seizing the opportunities. In view of these dire and unprecedented challenges, there is a need for change producing global goals.

Transition from MDGs to sustainable development goals (SDGs)

The transition from MDGs to sustainable development goals (SDGs) has undergone massive consultations led by the United Nations since 2012. In a series of global, regional, and national consultations in nearly 100 countries and through a social media platform, more than a million people have shared their views on the post-2015 development agenda. Countries adopted on September 25, 2015, a set of 17 goals and 169 targets to end poverty and hunger, ensure healthy lives, promotion of well-being, inclusive and quality education for all, achievement of gender equality by empowering all women and girls, ensuring access to safe water and sanitation, energy, information and technology, reduce inequality within and among countries, make cities safe and sustainable, ensure sustainable consumption and production patterns, take urgent action to combat climate change, conserve and sustainably use the oceans and seas, manage forests to protect biodiversity, promote just, peaceful and inclusive societies, and revitalize the global partnership for sustainable development. Every country will promote the well-being and capabilities of all their citizens, enabling all citizens to reach their potential irrespective of class, gender, ethnic origin, religion, or race. Every country will monitor the well-being of its citizenry with improved measurements and reporting of life satisfaction. Special attention will be given to early childhood, youth, and elderly people, addressing the vulnerabilities and needs of each age cohort. A particular focus should be on early childhood development, especially girls. In a world, where 12% of the population, and 22% of that of more developed regions, will be older than 65 years by 2030, new targeted programs and social protections will be needed for elderly people in many countries.

6.5.3 SDG indicators

The purpose of SDG indicators is twofold. First, an indicator should be a *management tool*, to help countries develop implementation and monitoring strategies for achieving the SDGs and to monitor progress. Second, an indicator is a *report card*, to measure progress towards achieving a target and ensure the accountability of governments and other stakeholders for achieving the SDGs. Often multiple indicators are used for each target. These are complemented with experiential metrics from household and other forms of surveys, as well as subjective or perception-based indicators based on

expert judgments or people's perceptions.

While there have been great improvements in data gathering, the MDG indicators have not fully fulfilled their dual purpose because the data come with too great a time lag to be useful in management and accountability. Often the MDG indicators arrive with a lag of three or more years, which is not useful for real-time management. Data from national statistical systems and household surveys is often incomplete and of poor quality. Much greater investment in building national statistical capacities, strengthening quality and standards will be required for the SDG indicators to fulfill both key functions.

International agencies rely in part on primary data produced by the statistical system of each country. Involvement and cooperation between international agencies and National Statistics Office (NSOs) was missed by the MDG process and must be strengthened for the SDGs. Similarly, the capacities of NSOs were not strengthened adequately to ensure effective real-time monitoring of the MDGs. All of this will require:

- Investing in NSOs, household surveys, remote sensing and Big Data;
- Identifying areas where statistical standards are currently lacking and asking the statistical community to develop them in the future;
- Identifying the measurement instruments that each country should have in place (e.g. vital statistics, censuses, surveys, national accounts, administrative records, Big Data); and
- Specifying the quality requirements (e.g. frequency of data-collection, timeliness of releases, geographical detail, and a common set of variables available for cross-classification purposes).

The SDGs need the identification of new critical pathways to sustainability. The SDGs will need the unprecedented mobilization of global knowledge operating across many sectors and regions. Governments, international institutions, private business academia, and civil society will need to work together to identify the critical pathways to success. All nations must agree to four building blocks for implementing the SDGs, i.e., far-reaching vision for the future anchored in human rights, a set of concise goals and targets aimed at realizing priorities of the agenda, a global partnership for development to mobilize means of implementation, a participatory monitoring framework for tracking progress and mutual accountability mechanisms for all stakeholders.

6.5.4 Challenges and opportunities of SDG

Although the SDGs have been accepted in principle, they have also been criticized for being too large in number and too wide in their scope. It is a challenge to create and maintain public awareness, mobilization, advocacy, and continuity for 17 goals and 169 targets enshrined in SDGs as compared to only 8 goals and 18 targets of MDGs which were easy to state, simple to understand, and practical for adoption by the governments, business, and civil societies worldwide. Several targets are aspirational and unachievable, for example, target 3.2 to "end preventable deaths of newborns and under-five children" or target 3.3 to end the epidemics of AIDS, TB, and malaria. It is a challenge to end these health crises within just 15 years. Another challenge is that too many of the goals and targets are vague and immeasurable, for example, SDG3 - how will the progress toward "well-being for all" be measured. Similarly, target 3.8 "to achieve UHC" is a challenge unless the package of services and the metric for measuring its coverage are clearly articulated and specified. There is an opportunity to achieve the sustainable development collectively by the committed leadership, conviction and courage, hard work and devotion to the common progress assisted by improved science and technology. It is an opportunity for the health champions to highlight the interdependence of health and the themes of education, growth, population, energy and governance, and present health as a precondition for social sustainability and progress to prosperity. The transformative actions of the post-2015 development agenda provide an opportunity to be supported by multistakeholder partnerships which include not only governments but also private organizations, international organizations, parliaments, civil society, local authorities, trade unions, research and educational institutions. The success of such partnerships depends on assigning specific roles and responsibilities to ensure accountability.

6.6 Environmental governance

The political nature of conservation demands has become more articulate during the process. Modern nature conservation implies conservation governance, built upon competent administrative bodies with sufficient authority. Environmental governance is an essential determinant of sustainable development. At the local, state, and global scale, environmental governance focuses on the management of political, social, and economic activities linked to the use of natural resources and the environment. It relies on adequate decision making processes, effective institutions, policies, laws, standards, and norms. Thus, it is crucial to develop ecological, economic, and social approaches at different spatiotemporal scales in order to promote a sustainable use and conservation of natural resources and the environment as well as increasing the delivery of ecosystem services and maintaining adequate and fair profitability.

East Asia, including both Northeast and Southeast Asia, has undergone great industrialization and urbanization during the last decades. The region has enjoyed rapid growth and is about to become the world's centre of economic growth. The GDP (gross domestic product) share of East Asia has shown an upward trend after a short period of stagnation following the Asian economic crisis of 1997. Rapid economic growth has brought a sharp reduction in poverty. On the other hand, industrialization and urbanization have caused serious environmental degradation. Industrial plants have increased the discharge of untreated air and water pollutants and solid wastes. Increasing energy demands and numbers of automobiles have made air pollution more serious.

In the 1990s nine of the world's 15 cities with the highest levels of particulate air pollution were located in East Asia. Environmental pollution has caused serious physical, health and biological damage, some of which still remains unrevealed. Agricultural expansion, deforestation and dams have intensified conflicts over land and water, causing drought and flood. Increasing numbers of people protest against industrial development and government-sponsored development projects. East Asian states have gradually recognized environmental degradation as a bottleneck of economic growth. Their first response was evident in the establishment of state organizations in charge of the environment, and the promulgation of environmental laws and regulations. Their effectiveness was often limited, however: decision-making authority and resources given to these organizations were quite small, while environmental laws and regulations were often "imported" from Western countries and did not reflect local conditions. State organizations had no choice but to address a limited number of serious environmental problems that were highlighted by fierce local protests. This reactive response might be supportive of technological solutions. However, firms adopt such solutions only when they feel strong pressure and as far as they can afford to pay. In addition, it has intrinsic limitations in that it could not address the root cause of the problem. This implies that states should be more active in preventing environmental degradation, rather than trying to control it and help victims after serious

damage has become apparent. In other words, states should change their course and mode of development towards an approach that goes beyond react-and-cure measures.

6.6.1 Main features of environmental governance

- Although sustainable development became an important feature of government approaches in the 1990s, by the late 2000s the governmentality of problems altered again, as national economic priorities became more pressing than environmental or developmental ones in the wake of the global recession.
- Another feature of environmental governance is the increasing interconnection across hierarchies, markets, actor networks, and communities in developing and implementing policy. As with multilevel governance, this involves the dispersal of powers formerly the preserve of the state in favor of government interaction within a nested hierarchy of multiple institutional levels or scales. For example, the governance of climate change now involves actors at the international level (the United Nations), regional supranational entities (the EU), national governments, subnational and local governments.
- Governance also now features many economic actors, with markets emerging as a significant mechanism for achieving environmental objectives, despite economic pressures often being the root cause of many problems. According to this logic, if markets can be harnessed properly they can provide powerful incentives to producers and consumers to behave in environmentally friendly ways. A well-known example is the establishment of emissions trading systems in the European Union and elsewhere that force industrial polluters to purchase permits to emit carbon dioxide, thus encouraging them to reduce emissions in order to save money.
- One of the features of environmental governance is, therefore, the prevalence of market based instruments. Environmental governance is closely associated with a growth in networks that span horizontal and vertical scales of interaction, and are sometimes composed entirely of nonstate actors. Such networks can operate within nation-state contexts or be transnational in nature, such as an "epistemic community", comprised of scientists and technical experts, bound by common belief systems concerning specific issues and often formed for advocacy and initiating policy change. Within environmental governance, examples could include the Union of Concerned Scientists, the Intergovernmental Panel on Climate Change (IPCC), and the Stockholm Environment Institute As identified already, environmental governance has also involved greater roles for the public in decision-making. Agenda 21 strongly promoted citizen participation in sustainability, as did the UN Aarhus Convention in 1998. Public engagement by governments is thus encouraged via processes such as environmental impact assessment (EIA) in land use planning and strategic environmental assessment (SEA) of policies.
- Collaborative environmental governance is also a growing feature worldwide, particularly within integrated water resources and coastal zone management. Finally (and as noted previously), environmental governance is itself associated with and constituted by the emergence of "new modes of governance," such as taxes, voluntary arrangements, and information provision. Early government intervention in managing environmental problems during the 1970s and 1980s was characterized by so-called "command and control" regulations, typified by US legislative measures such as the federal Clean Air and Clean Water Acts. Such mechanisms impose specific targets or objectives that societal actors must meet, with implementation often achieved through punishing

noncompliance. The European Union has also introduced many regulatory measures as part of its wider environmental policy. These measures can be contrasted with market-based instruments that impose costs on environmentally damaging actions, but which also establish economic incentives for actors to modify their behavior. Examples include environmental taxation, which levies charges on actors for the right to pollute and also subsidies for encouraging environmentally friendly approaches.

- As an alternative to the market, informational instruments provide information to influence environmentally friendly behaviour through extending consumer choice. One well-known example comes from Germany and Austria, where governments have introduced eco-labels for some consumer products that provide details on their environmental performance.
- "New mode" of environmental governance is the increasing use of voluntary agreements between governments and "target" groups such as industry. Agreements can either be self-imposed via declarations of intent by social actors to act in environmentally responsible ways, or they can be negotiated with governments. Such "new modes" could additionally include the creation of individual institutions to achieve specific environmental objectives. For example, the global diffusion of integrated water resources management (IWRM) norms has led to the establishment of task-specific governance institutions at the river basin scale, such as the river basin districts introduced to implement the EU Water Framework Directive.

6.6.2 Environmental governance as a normative strategy

Environmental governance has undeniably also become somewhat of a normative strategy in itself. Although there are many arguments about how governance should be organized, there are five key areas of debate around: (i) global governance; (ii) market liberalism; (iii) the green economy; (iv) the green state; and (v) localized or decentralized models.

(i) Global governance: Some researchers see global governance as an antidote to the failings of stateled environmental government. Since the early 1970s, states have cooperated to form environmental regimes – sets of norms and institutions – aimed at resolving different problems, with varying degrees of success. Evidence from successful environmental regimes, such as the 1987 Montreal Protocol on ozone depletion, would suggest that internationalization can provide solutions to collective-action environmental problems by increasing transparency and trust amongst state actors. Yet this success is rare; more often than not, state self-interest dominates, as demonstrated by the past impasse in the UN Kyoto Protocol process or the inability of the UN Forum on Forests to counter chronic global deforestation. Environmentalists, meanwhile, remain skeptical over whether nonstate actors such as multinational corporations (MNCs) should be included in global environmental governance, seeing them as part of the problem rather than the solution to greater sustainability.

(ii) Market liberalism: From this perspective, sustainable development is best achieved through limited government, less regulation, and greater engagement with economic actors. This view places great faith in markets and economic actors to deliver environmental objectives through their ability to value environmental resources. But the combined record of market liberalism and international capitalism in promoting more sustainable forms of global economic development is hardly

encouraging, primarily because issues such as environmental justice, equity, and resource limits are often side-lined in market-based approaches. Some environmental resources, such as the Amazon rainforest or the global climate, also remain difficult to value in pure monetary terms, meaning that they can be overexploited.

(iii) Green economy: The notion of the green economy builds on earlier work that sought a "greening" of economies to make them more sustainable and promotes the use of economic instruments, valuing natural capital and providing more socially equitable solutions via green employment and poverty reduction. Here, governments act as central facilitators in setting economic policy working in conjunction with nonstate actors such as business and communities to achieve collective objectives. While still very much a normative perspective, green economy, green growth, or green capitalism ideas have nonetheless permeated institutional responses at national and international levels, although progress has to date been globally variable.

(iv) The Green State: Another normative argument is that the state should itself be reformed to promote more ecologically friendly forms of development that involve different actors. This chimes with the idea that state-centered governments are paradoxical in the way that they simultaneously generate environmental problems (through support for economic growth) and seek to solve them (through environmental policies). Governments are important in this respect, as they alone retain sovereignty to act on environmental issues within their territories, despite also allocating some powers to nonstate actors.

(v) Localized governance: Finally, some scholars have gone further still in outlining more localized models of governance, which seek to greatly decentralize existing state powers. Collaborative environmental governance could help reframe government–society interactions through creating new responsibilities for actors, alternative forms of democratic engagement, and innovative mechanisms for managing resources. Green commentators have also called for more consideration of justice in environmental governance by shunning globalization, demanding controls on corporations, and promoting localization. This localization of governance, with its rejection of centralized state-led steering, has in places become a partial empirical reality, with community-based economic activity emerging, such as the Transition Towns movement in different countries. More radical approaches still demand the rejection of environmental governmental government entirely, favoring forms of eco-anarchy based on bioregions, rather than geopolitical borders, and exclusive community control.

6.7 Conclusion

We have multiple management tools available for conserving nature, including direct regulation and laws, international targets, economic incentives, and market forces. Most controversial are approaches that put a monetary value on nature. Monetization is central to the 'nature for people' argument for conservation because many ecosystem services are commonly considered public goods – they are available to everyone for free – yet most decisions that affect the environment are made on the basis of cost–benefit analyses that consider economic arguments. If the services provided by nature for human societies are not assigned a monetary value then biodiversity is prone to be excluded from

decision-making. By contrast, the 'nature for itself' ideology rejects monetization because putting a monetary value on nature implies that it can be destroyed for the right price, and makes the market value of nature subject to market processes and fluctuations. Dividing reasons for conservation along axes of biological level and spatial extent can help inform when different management practices are appropriate. For instance, the existence value of species is most amenable to protection through regulation and laws: if society deems extinction of species to be unacceptable, then actions that harm threatened species can be made illegal. The fact that global trade in wildlife threatens species (for instance, black rhino) is evidence that creating markets for endangered species is not an effective way to save them and that regulation (e.g., through the Convention on International Trade in Endangered Species, CITES) is necessary to avoid extinction. Acting on the common challenges in post-2015 development agenda demands a renewed commitment to international cooperation. Strong national ownership, well-managed policies that foster robust and inclusive growth, decent employment and social protection, allocation of more resources for essential services, supported coherently by partners at all levels can help in achieving the SDGs. Managing our planet's vast and diversified natural resources is becoming an increasingly difficult task. Environmental threats, particularly those that cross political borders, such as air pollution and biodiversity loss, will necessitate new global, regional, national, and local responses involving a diverse range of stakeholders in our globalised world of interconnected nations, economies, and people. Government, industry, and civil society are all involved in governance, which stresses whole-system management. Alternative governance methods, such as watershed-based management, are frequently used in environmental governance to incorporate this varied variety of aspects. Natural resources and the environment are viewed as global public goods, which fall under the category of things that do not depreciate when shared. Everyone benefits from a breathable atmosphere, a steady temperature, and stable biodiversity, for example. The management of the natural environment has probably become one of humanity's most difficult concerns.

6.8 Self-Assessment Questions

- a) Briefly discuss the political perspective of nature conservation.
- b) What do you mean by sustainable development? What are the objectives of sustainable development?
- c) What are the modern ways of systematic strategies of conservation?
- d) What are the challenges and opportunities of Sustainable Development Goals?
- e) What is environmental governance? What are the main features of environmental governance?
- f) Briefly explain the environmental governance as a normative strategy.
- g) Write short note on:
 - i. Sustainable Development Goals
 - ii. Inclusive conservation
 - iii.SDG indicators
 - iv. Environmental Governance

6.9 Suggested Readings

- a) Hill PS, Buse K, Brolan CE, Ooms G. How can health remain central post-2015 in a sustainable development paradigm? Global Health 2014;10:18.
- b) Adger, WN, and Jordan, A, Governing Sustainability, eds. 2009. Cambridge: Cambridge University Press.
- c) Benson, B and Jordan, A, Environmental Governance, eds. 2017. John Wiley & Sons, Ltd.
- d) Kandpal, PC, Environmental Governance in India, eds. 2018. SAGE Publivations India Pvt. Ltd.
- e) Haila, Y, Genealogy of nature conservation: a political perspective, Nature Conservation 2012 1: 27–52.

O.E.C: 4.2

Unit-7

Environmental Movements: Ideologies, Typologies and Issues

Contents

- 7.1 Objectives
- 7.2 Introduction
- 7.3 Environmental issues and ideologies
 - 7.3.1 Environmental issues
 - 7.3.2 Environmental ideologies
 - 7.3.3 Relationship between environmental and political ideologies
- 7.4 Types of environmental activists Climate activists, Conservationists, Environmental defenders, Green parties, Water protectors, Individual and Political Action, Environmental Grassroots Activism, Eco-terrorism
- 7.5 Causes of environmental movements
- 7.6 Major environmental movements in India
 - 7.6.1 Bishnoi Movement
 - 7.6.2 Chipko Movement
 - 7.6.3 Silent Valley Movement
 - 7.6.4 Jungle Bachao Andolan
 - 7.6.5 Appiko Movement
 - 7.6.6 Narmada Bachao Andolan
 - 7.6.7 Tehri Dam Conflict
- 7.7 International environmental movements
 - 7.7.1 Role of United Nations
- 7.8 Role of indigenous people and women in environmental movements
- 7.9 Conclusion
- 7.10 Self-Assessment Questions
- 7.11 Suggested Readings

95

7.1 Objectives

The objectives of the unit are as follows:

- Understanding critical environmental issues and related ideologies
- Learning about the different kinds of environmental activists
- Understanding the causes behind environmental movements
- Learning about the various environmental movements in India
- Learning about major environmental issues and resultant movements in India and abroad;
- Analysing the role of indigenous people, especially women, in the outcomes of major environmental movements.

7.2 Introduction

An environmental movement is a *type of social movement that involves an array of individuals, groups and coalitions that perceive a common interest in environmental protection and act to bring about changes in environmental policies and practices.* Environmental and ecological movements are among the important examples of the collective actions of several social groups.

The terms 'green movement' or 'conservation movement' are alternatively used to denote the same. The environmental movements favour the sustainable management of natural resources. The movements often stress the protection of the environment via changes in public policy. Many movements are centred on ecology, health and human rights. Environmental movements range from the highly organized and formally institutionalized ones to the radically informal activities. The spatial scope of various environmental movements ranges from being local to global.

Movements all over the world that are dedicated to the continuation of life on earth, like the Chipko movement in India, Anti-Militarist movement in Europe and the US, movement against dumping of hazardous wastes in the US, and Green Belt movement in Kenya, are all labelled as "*ecofeminist*" movements. These movements attempt to demonstrate the "*resistance politics*". They work at the micro-levels of power and point out the connections between women and nature. They also claim to contribute to an understanding of the interconnections between the domination of persons and nature by gender, race and class. Different aspects of these environmental movements have been discussed in details in this chapter.

7.3 Environmental issues and ideologies

Environmentalism as a social and political movement mirrors the dualities existing within mankind generally in failing to connect desired aims with daily deeds. This is partly because environmentalism has emerged from two contrasting schools of thought, the one nature-orientated, the other centred on technique and mode of organisation. The concept of environmental ideologies allows the combining

of the three core concepts of environmental politics—environmental issues, environmental ideologies and environmental discourses in the following manner.

Environmental discourse = environmental issue + environmental ideology

A concept of environmental ideologies is often more appropriate to describe the variety of belief systems towards the environment than environmental discourses.

7.3.1 Environmental issues

The past decades have witnessed an increased awareness of pollution, environmental degradation, climate change, biodiversity loss, and overexploitation of natural resources in all countries around the world. These devastating effects of human activity have started to occupy the attention of national governments and the international community. This has resulted in certain public policies intended to mitigate and prevent environmental problems and to regulate the use of natural resources. Although all governments in the world face a great number of social issues, there is no government that pays an equal amount of attention to every existing issue.

Environmental issues, as well as many other social problems, usually do not represent themselves as distinct, well-defined issues. For instance, even though air pollution, global climate change, deforestation, and biodiversity loss can be discussed as separate issues, in their ecological consequences, they are extremely interconnected. This makes their analysis very complicated. Consequently, in a political discussion, these problems are usually simplified in order to make it possible to develop a certain public policy. This simplification leads to sometimes ineffective public policies that target only certain symptoms, not the problem as a whole. An additional challenge exists if several environmental issues express themselves simultaneously, and, therefore, the policy-maker should decide which one is more urgent.

Many issues are viewed as not appropriate for a government to step in. For instance, although water vapor is the most abundant greenhouse gas and the major player in global climate change, it is hard to imagine a public policy that would aim at decreasing its level. On the contrary, an atmospheric concentration of carbon dioxide and other anthropogenic greenhouses gasses is manageable, and, therefore, a subject of public policies. Additionally, the consequences of global climate change are obviously a subject of public policy because the government can definitely do something to mitigate them.

A focus of public attention and governmental policy regarding the environment is also constantly shifting from some certain issues to others. The history of environmental protection is characterized by periods of increasing interest in environmental issues and, as a consequence, an increasing number of environmental legal acts and regulations, and by periods of relatively low public interest and, similarly, low activity of the legislative and executive branches of government. At different periods in the United States, the focus of environmental protection has shifted between wilderness, forests, natural resources, water and air pollution, energy use, and global climate change. Similarly, the approaches to solving environmental problems have also been a subject of change. Administrative

mechanisms, such as bans and fines, are more often replaced by market-based solutions, such as emission trading.

The major question is how certain issues, which always exist in society, turn into policy problems that require governmental redress or relief. Before the government steps in, issues need to be officially defined as policy problems. Environmental issues such as air pollution, global climate change, and biodiversity loss can only become public environmental problems when they are recognized as unacceptable and, therefore, needing to be addressed. In other words, environmental issues are only acknowledged when they are defined, articulated and brought to the public attention as such. Thus, environmental issues that hurt people do not necessarily become public environmental problems. If nobody persuades the public that a certain environmental issue is harmful, then the government will not seek to act because the problem is not perceived as such.

An additional difficulty is that different people disagree over whether or not certain environmental issues should be viewed as policy problems. This question is crucial because the way in which people interpret environmental issues finally determines governmental environmental policies. In contrast to the actual existence of issues (or, at least, of most of them), policy problems are almost never objective but are socially constructed and so can vary in different times and places, and in different social groups. This subjectivity is due to the fact that any debate about environmental issues involves a debate not only on 'hard' evidence such as physical concentration or temperature, but also on its consequences, especially social, political, and economic. Therefore, environmental debates are not usually the conflicts over the content of environmental issues but struggles over the definition of these issues as environmental problems (or otherwise). The interpretation of an environmental issue is always just that of a certain group in a given time and place. Thus, the perception of an environmental issue, that is, the way in which actors define it, depends on the actors' subjective belief systems towards the environment.

7.3.2 Environmental ideologies

Socially shared beliefs have been always associated with the term *ideology*. The term ideology is usually not applied to the personal beliefs of individuals. Although it is possible to talk about individual belief systems, ideologies are rarely personal but usually represent the group, institutional, social and political structures. Every ideology is a complex structure, which is unified by a certain issue and must be analysed only as a whole. Deep beliefs, descriptions of reality, goals, and therefore, a program for actions are always complex and, most importantly, are in constant conflict with one other. The notion of ideology as a coherent and organized set of beliefs does not imply that ideologies are consistent systems. In fact, they may include elements that contradict each other because ideologies are socio-psychological systems rather than logical ones.

As political ideologies explain what our society is, what society should be, and what we should do about it, environmental ideologies answer the questions of what the relationships between humans and society are and what these relationships should be. Environmental ideologies take a form of a coherent system of patterns. Finally, they advocate for actions and change. Analogous to the political ideologies, environmental ideology does not bear the false consciousness but only major belief systems towards

the environment. Analogously to political ideologies which answer questions regarding political power, such as: '*Who rules, why and how?*', environmental ideologies answer the questions, '*What should we do about the environment and environmental issues, and why?*' Similar to those of all political ideologies, the objectives and programs of environmental ideologies derive from deep, core beliefs towards the environment, the analysis of a current environmental situation, and consequently, an agenda for action. Thus, a structure of any environmental ideology includes the following interconnected parts:

• *Core environmental beliefs*. A concept of human nature is central to any political ideology. Similarly, relationships between human nature and nature and are the cornerstone of environmental ideology.

• *Analysis of a current environmental situation*. This involves the identifying the main environmental problems and prioritizing them.

• *Plan for a change to achieve the desired situation, identifying limitations and possibilities*. For instance, who must take a lead in this change—the state or civil society? What kinds of actions are allowed? This lack of agreement among social actors over the reality and priority of environmental issues has clearly contributed to environmental policies that do not appear to be tackling the scope of the problems that environmental policy is supposed to address. Although it is more important to know what people do rather than what they think or say about the environment, an analysis of environmental ideologies can reveal a lot about what people do or will do about environmental problems.

Environmental ideologies and environmental discourses are both interconnected with environmental issues. The core of the environmental discourse is an environmental issue. It can be the issue of air pollution, nuclear waste, or global climate change. However, how exactly this issue is interpreted depends on the environmental ideology of the interpreter. Thus, when people think, speak, and write about the environment, they interpret it through their lens of their belief system or ideology that results in a certain environmental discourse—whether or not this issue is defined as an environmental (policy) problem and how it should be solved.

Therefore, the differences in interpretation of a given environmental issue by interpreters can be explained by differences in environmental ideologies of the interpreters. For instance, an issue of global climate change has a broad range of meaning that stretches from '*myth and therefore not a problem*' to '*an urgent and growing threat*' because of the differences in environmental ideologies among people who discuss that issue. In each case, in addition to these polar views, there is an infinite number of intermediate opinions. Similarly, proposed policy solutions range from '*do nothing*' to '*use all available resources*.' This makes any environmental issue a contested term that invariably produces a range of conflicting meanings and, therefore, policy outcomes. Because of the complexity and interrelation of environmental issues, and because of the different environmental problems and their severity in different societies, to create a universal classification of environmental issues is not always an easy task. Moreover, every discourse is issue specific. For instance, a discourse about different environmental issues will be different, even if it is based on the same environmental ideology.

7.3.3 Relationship between environmental and political ideologies

The main conceptual problem lies in the relationship between political and environmental ideologies.

It is hard to dispute the opinion that any conception of human-nature relations implies a conception of the political, social and economic structures of society. If the interpretation of an environmental issue depends on its social, political, and economic consequences, the interpretation of the issue, and more generally, the perception of the environment itself, depend mainly on the interpreter's belief systems regarding the social, political, and economic structures of the society, which are political ideologies. However, reducing belief systems towards the environment to fit into existing political ideologies is problematic.

Environmentalism in political ideologies

The term 'environmentalism' defines concern for the natural world and its protection from excessive human depredation. It constitutes no clear political or ideological agenda. The term is derived from the Ancient Greek words oikos ('household', 'habitat') and logos ('science', 'argument'). Such concerns and actions are not new and the roots of what we now understand to be environmentalism can be traced back to ancient civilizations. Contemporary environmentalism is associated with a range of social and political movements that have emerged to promote particular environmental philosophies and practices. There have been numerous attempts to classify these activities with most adopting a dualistic strategy contrasting those who are concerned to protect the environment for its own sake (ecocentrism) and those who are concerned with the environment because of its role in human development (anthropocentrism). However, it is becoming increasingly difficult to group the range of environmental concerns, organizations, and actions in this way, not least because the 21st Century has seen environmental concerns increasingly addressed through various forms of public policy. Nonetheless, systemic environmental challenges remain, and emergent varieties of environmentalism with novel qualifiers-including "new," corporate, authoritarian, and even post-environmentalismare being identified and debated across disciplinary boundaries and between academics and activists as well as policy makers and shapers. The concept of environmentalism maybe of the following types.

• *Conservative environmentalism* – An important element in conservatism is 'conservation' and slow, incremental change in society. Conservatives stress the importance of the generational links between those who have gone before, those who are alive today, and those yet to be born. Conservatism is often linked to anti-industrialisation, anti-urbanism and pro-hunting, the countryside and hunting being vital elements in environmental protection. Environmentalism is very much a countryside and small town or 'historic' city concern. Care about the urban environment tends to centre on the preservation of ancient buildings and townscapes. Somehow, Bath seems more worthy of preservation than Manchester, even though both are Roman towns and both are of considerable 'historica' importance.

• *Socialist environmentalism* – Socialists argue that capitalism exploits both humans and the natural world. Environmental objectives will be met only by a move towards a post-capitalist society. Many Marxists look on environmentalism as a diversion from the class struggle, while some socialists see it as even more important than the class struggle. Environmental socialists think that class struggle unjustifiably postpones the need to reform society along environmental lines. Planning, tax, regulations

and other reforms are needed now to encourage a green lifestyle, including recycling, greater use of public transport and energy efficiency.

• *Liberal environmentalism* – Liberals argue that the 'market' can help solve most environmental problems. The key issue is that 'public goods', such as fresh air, fish and water, an aesthetically pleasing environment and wild animal species, are 'free'. There is an incentive for people to use up a declining free resource before it is gone. If, however, one places a price on everything in the natural world then the market will ensure that valued goods, such as animals, plants, air and water, will survive. The failure of the market adequately to protect the environment derives from interference by government regulations – which distort markets – and from the lack of value placed on the environment by people and businesses. Indeed, the latter exploit the environment with the polluting and damaging side effects of their activities (known as externalities) and leave society to clean up, thus keeping their own costs down. Create a properly functioning market, where people carry the full costs of their activities, and you produce a better way of protecting the environment.

• *Feminist environmentalism* – This term applies to the belief that a link exists between the male oppression of women and male oppression of Mother Earth as a consequence of male power and male ideologies of domination of the human and natural world. Women have a special role in green politics because of their crucial role as mothers and carers.

• *Fascist environmentalism* – Environmental concerns are seen as important elements in fascist movements. Earth, forests and mountains are of special significance to the 'soul' of a nation or race. Both Italian Fascism and German Nazism invoked rural and peasant values as the backbone of their movements, even though their militarism involved an expansion of industrialisation to provide the materiel for war. In recent years the French National Front and the British National Party have also sought to stress their green credentials as another way of garnering support from elements of the electorate who are disillusioned at the failures of mainstream parties to treat green issues with great urgency.

• *Anarchist environmentalism* – Nature left to its own devices exhibits a degree of self-government, harmony, balance and diversity – 'anarchy' – attractive to anarchists, who believe the world's problems spring mainly from formal structures of government. Small communities and self-sufficiency are the goals of this element in the environmental movement.

Political ideologies linked to environmental movements

Liberalism (in the American sense of a moderate social democracy) is the guiding ideological orientation of much of contemporary environmental thinking. Liberal environmentalism rejects the idea that unrestrained market activity can solve ecological problems, and it contends that significant governmental regulatory activity is necessary to prevent environmental damage while respecting human rights and maintaining justice. Liberalism (in the American sense of a moderate social democracy) is the guiding ideological orientation of much of contemporary environmental thinking.

Typology of environmental ideologies

Being a new concept, environmental ideologies do not have a developed classification. However, the approaches to environmental politics discussed above do provide several classifications that could serve as a ground for the classification of environmental ideologies. The most convenient, but also most limited classification of the environmental ideologies is based on the typology of existing political ideologies such as eco-Marxism (including orthodox eco-Marxism and humanist eco-Marxism), Frankfurt School, eco-socialism, and eco-anarchism. Although orthodox Marxism, Liberalism, and Conservatism are not defined as green ideologies, they can be considered as environmental ideologies.

One-dimensional typologies, similar to the 'right-left' classification of political ideologies, propose ranking from anthropocentrism to ecocentrism, or, from shallow to deep ecology (explained in Box 1).

Box 1. Deep and shallow ecology

ep ecology says the living environment as a whole has the same right as humans do to flourish. In contrast, *"shallow ecology"* fixes on short-term technological answers to environmental concerns. Deep and shallow ecology have been compared in table 1.

The Eight-Tenets of shallow Ecology
1. All creatures on Earth have value only for their usefulness to humans.
2. Complex creatures (ie humans) are more important than simpler ones.
3. Humans should always use all resources for their material and economic advantage.
4. The human population can increase without restraint.
5. Technological progress will solve all problems.
6. Materialism and consumerism should govern human society.
7. The standard of living should keep rising.
8. Leave environmental problems for the experts to solve.

ble 1: Deep ecology vs. shallow ecology [Source: Saraf, 2022]

Locus of solutions	Locus of values		
	Individual	Community	
		Anthropocentric	Biocentric
Centralized	Hobbesian and Structural	Guardians	Reform Ecologists
	Reformers		
Decentralized	Free-Market	Social Ecologists	Deep Ecologists
	Conservatives		

Table 2: A taxonomy of environmental worldviews [Source: Novikau, 2016]

Anthropocentric values have been classified as individual and community values. Moreover, a policyoriented approach includes an additional dimension—locus of solutions, dividing these values into centralized and decentralized categories. The combination of these two dimensions produces a sixcelled typology of environmental worldviews or ideologies (shown in table 2).

In another study, environmental ideologies (referred to as environmental discourses) have been classified as prosaic and imaginative. A second dimension is based on a type of solution—from reformist to radical. The combination of these two dimensions produces a four-celled typology of environmental ideologies (or discourses) as shown in table 3.

Table 3: A taxonomy of environmental discourses [Source: Novikau, 2016]

Views	Reformist	Radical
Prosaic	Problem Solving	Survivalism
Imaginative	Sustainability	Green Radicalism

Few significant taxonomies related to environmental ideologies are enlisted as follows.

• **Prometheanism** – A term popularized by the political theorist John Dryzek to describe an environmental orientation which perceives the Earth as a resource whose utility is determined primarily by human needs and interests and whose environmental problems are overcome through human innovation.

• *Administrative rationalism* – This emphasizes the role of the expert rather than the citizen or producer/consumer in social problem solving, and which stresses social relationships of hierarchy rather than equality or competition.

• *Liberal democracy* – These democrats value the natural environment within the context of a prosperous society that provides equal protection under the law and is based on respect for individual freedom, personal responsibility, small government and the defence of private property.

• *Sustainable development* - Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

• *Ecological modernization* – It is a school of thought in the social sciences that argues that the economy benefits from moves towards environmentalism. It has gained increasing attention among scholars and policymakers in the last several decades internationally.

• *Deep ecology* – It is an environmental philosophy and social movement based in the belief that humans must radically change their relationship to nature from one that values nature solely for its usefulness to human beings to one that recognizes that nature has an inherent value.

• *Bioregionalism* – It is the advocacy of the belief that human activity should be largely constrained by ecological or geographical boundaries rather than political ones.

• *Ecocentrism* – A philosophy or perspective that places intrinsic value on all living organisms and their natural environment, regardless of their perceived usefulness or importance to human beings.

• *Social ecology* – It is the study of how individuals interact with and respond to the environment around them, and how these interactions affect society and the environment as a whole.

• *Environmental justice* – It is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

• *Ecofeminism* - Also called ecological feminism, it is the branch of feminism that examines the connections between women and nature Ecofeminists examine the effect of gender categories in order to demonstrate the ways in which social norms exert unjust dominance over women and nature.

7.4 Types of environmental activists

Environmental movements contain many subcommunities that have developed with different approaches and philosophies in other parts of the world. Environmentalists can be described as one of the following.

Climate activists

The public recognition of the climate crisis and the emergence of the climate movement at the beginning of the 21st century led to a distinct group of activists known as *Climate Activists*. Activations like the School Strike for Climate and Fridays for Future have led to a new generation of youth activists like Greta Thunberg, Jamie Margolin, and Vanessa Nakate. They have created a global youth climate movement. Along with Greta is a host of young activists worldwide, fighting for the planet and demanding that people in positions of power stop chasing money and combat the burning issue.

Conservationists

One notable strain of environmentalism comes from the philosophy of the conservation movement. Conservationists are concerned with leaving the environment in a better state than the condition they found distinct from human interaction. The conservation movement is associated with the early parts of the environmental movement of the 19th and 20th centuries. A conservationist manages natural habitats, including parks, forests, and rangelands. This job may also be called a conservation scientist or soil and water conservationist.

Environmental defenders

Environmental or environmental human rights defenders are individuals or collectives who protect the environment from harm resulting from resource extraction, hazardous waste disposal, infrastructure

projects, land appropriation, or other dangers. In 2019, the UN Human Rights Council unanimously recognized their importance to environmental protection. The term *environmental defender* is broadly applied to a diverse range of environmental groups and leaders from different cultures that all employ different tactics and hold different agendas. Use of the term is contested, as it homogenizes such a wide range of groups and campaigns, many of whom do not self-identify with the term and may not have explicit aims to protect the environment (being motivated primarily by social justice concerns). Environmental defenders involved in environmental conflicts face many threats from governments, local elites, and other powers that benefit from projects that defenders oppose. Global Witness reported 1,922 murders of environmental defenders in 57 countries between 2002 and 2019, with indigenous people accounting for approximately one-third of this total. Documentation of this violence is also incomplete. The UN Special Rapporteur on human rights reported that as many as one hundred environmental defenders are intimidated, arrested, or otherwise harassed for every one killed. For example, amid ongoing deadly conflicts in the Middle East, organizations such as PAX, Bellingcat, and the Conflict and Environment Observatory are leveraging satellite imagery to monitor data on the environmental impacts of these armed conflicts, including the targeting of infrastructure.

Green parties

The adoption of environmentalism into a distinct political ideology led to development of "green parties," typically with a leftist political approach to overlapping environmental and social well-being issues. A green party is a formally organized political party based on the principles of green politics, such as social justice, environmentalism, and nonviolence. Greens believe that these issues are inherently related to one another as a foundation for world peace. Green party platforms typically embrace social-democratic economic policies and form coalitions with other left-wing parties.

Green parties exist in nearly 90 countries worldwide; many are members of Global Greens. Green political parties reflect a broader social movement seeking to reorient civilization in what supporters say are more sustainable and humane directions. According to the Global Greens network, their environmental concerns began with opposition to nuclear power but have expanded to include climate change, pollution, and industrial agriculture, with close to eighty full-fledged green parties.

They also usually encompass broader—but interrelated—social and economic issues. Most green parties have committed themselves to *four* pillars:

- ecological sustainability;
- grassroots democracy;
- social justice; and,
- nonviolence.

Green platforms generally include opposition to war and weapons industries, especially nuclear weapons; scepticism about global trade arrangements and consumerist industrial society; a preference for decentralized decision-making and localism; a commitment to social justice, racial and economic equality, and women's rights empowerment.

As British green party activist Derek Wall argues in his book on green politics, the movement has essential differences from both the left and right. Most greens see themselves on the economic and social left, but their focus on decentralization and local solutions separate them from many traditional socialist parties. There are also strains of "green conservatism," which see environmentalism through

a patriotic lens and press for market-oriented solutions.

Water protectors

Water protectors are activists, organizers, and cultural workers focused on defending the world's water and water systems. The water protector name, analysis, and style of activism arose from Indigenous communities in North America during the Dakota Access Pipeline protest at the Standing Rock Indian Reservation, which began with an encampment on LaDonna Brave Bull Allard's land in April 2016.

Water protectors are similar to land defenders but are distinguished from other environmental activists by this philosophy and approach rooted in an indigenous cultural perspective that sees water and the land as sacred. This relationship with water moves beyond simply having access to clean drinking water and comes from the belief that water is necessary for life and that water is a relative. Therefore, it must be treated with respect.

As such, the reasons for water protection are older, more holistic, and integrated into a larger cultural and spiritual whole than in most modern forms of environmental activism, which may be more based on seeing water and other extractive resources as commodities. Historically, water protectors have been led by or composed of women because as water provides life, so do women.

Individual and Political Action

This type of activism aims to reduce greenhouse gases (GHG) concentration. The main goal is to reduce the effects of climate change. The activists also look at the ethical aspects of climate justice regarding climate change adaptation.

Individual activists' political action and stance will lead to a change in laws and regulations directly related to climate change. The individual or group championing this change comes up with solutions to reduce GHG emissions.

The solutions put forward are the carbon tax or carbon pricing. Activist groups in the U.S, such as the Bipartisan Legislative Climate Solutions Caucus, have supported the proposed solutions to the GHG emissions problem.

Other groups are the Citizens Climate Lobby. In addition, 50 NGOs formed a coalition in 2005 called the Stop Climate Chaos. It was launched in Britain, and its main objectives were to tackle the issue of climate change.

Environmental Grassroots Activism

Formed by a group of people who use basic rights such as freedom of speech and freedom of expression to advocate for change, the group has no political affiliations or motives and acts independently in their campaigns. NGOs, social enterprises/organizations, and communities can lead these movements, for example, Earth5R. The activists who exercise this kind of activism believe strongly that a change can occur only through people taking action. For instance, Greenpeace organized campaigns to oppose the nuclear weapon tests that were being done in France.

The surge in awareness of environmental issues can largely be attributed to the influence of grassroots movements. Grassroots activism starts locally and unites people virtually anywhere to create change on a regional, national, or global scale. What distinguishes grassroots activism from other

forms of activism—and what makes grassroots movements effective—is the emphasis on collective action to address an acute problem, often at the local level. People from different backgrounds who may not formally work on the issues they seek to address come together to rally around a common cause, putting public pressure on elected officials, government bodies, and corporations to make a change.

There are many examples of grassroots environmental campaigns, but three movements led by Goldman Prize winners have been particularly influential and instructive. In the 1980s, lifelong environmental activist and inaugural Goldman Prize winner Lois Gibbs (the United States, 1990) organized her community to speak out against the chemical waste buried in her neighborhood in Niagara Falls, New York. She formed the Love Canal Homeowners Association and repeatedly pushed local, state, and federal governments until her community was evacuated and cleanup began. Thanks to her efforts, the EPA created the Superfund Program, which works to identify and clean the nation's most toxic waste sites. Meanwhile, the late Professor Wangari Maathai (Kenya, 1991) spearheaded Kenya's Greenbelt Movement, a grassroots tree-planting campaign dedicated to fighting against the effects of deforestation and desertification. She eventually also won the Nobel Peace Prize, in 2004, in recognition of her important work. The movement has since grown to include international work on environmental conservation, democracy-building, and community empowerment, inspiring communities and activists worldwide.

Gwich'in tribal leaders Sarah James, Norma Kassi, and Jonathon Solomon (the United States, 2002) used grassroots campaigns to protect the Arctic National Wildlife Refuge in Alaska—and its native caribou—from oil drilling. They educated Congress about the Arctic's importance, organized local assemblies, and helped native communities develop their sustainable energy sources. Their early and continued advocacy helped pave the way for managing Indigenous communities in Alaska and elsewhere. In June 2021, the US government suspended oil and gas leases in the Arctic Refuge, a testament to the enduring effect of Gwich'in grassroots activism.

Eco-terrorism

Eco-terrorism is an act of violence committed in support of environmental causes against people or property. The United States Federal Bureau of Investigation (FBI) defines eco-terrorism as "...the use or threatened use of violence of a criminal nature against the people guilty of destroying the environment or their property by an environmentally-oriented, subnational group for environmental-political reasons, or aimed at an audience beyond the target, often of a symbolic nature." The FBI credited eco-terrorists with US\$200 million in property damage between 2003 and 2008. A majority of states in the US have introduced laws to penalize eco-terrorism.

Eco-terrorism is a form of radical environmentalism that arose from the same school of thought that brought about deep ecology, ecofeminism, social ecology, and bioregionalism. Organizations that have been accused of eco-terrorism in the United States include the Animal Liberation Front (ALF), the Earth Liberation Front (ELF), the Sea Shepherd Conservation Society, Earth First!, The Coalition to Save the Preserves, and the Hardesty Avengers In 2010, the FBI was criticized in U.S. Justice Department reports for unjustified surveillance (and placement on the Terrorism Watchlist) between 2001 and 2006 of members of animal-rights groups such as Greenpeace and PETA. Activists sometimes commit crimes or cause violence that harms persons, destroys property, or even the environment. In early 2000, for instance, the Federal Bureau of Investigation associated eco-terrorism with the destruction of property worth \$200 million.

7.5 Causes of environmental movements

The increasing confrontation with nature in the form of industrial growth, degradation of natural resources, and occurrence of natural calamities, has resulted in imbalances in the bio-spheric system. Major reasons for the emergence of environmental movements in India are as follows:

- Control over natural resources
- False developmental policies of the government
- Right of access to forest resources
- Non-commercial use of natural resources
- Social justice/human rights
- Socioeconomic reasons
- Environmental degradation/destruction and
- Spread of environmental awareness and media

7.6 Major environmental movements in India

The environment movement in India has a very long history that goes well into India's past. In the first two decades after independence, environmental conflicts were muted. Many environmental movements have emerged in India, especially after the 1970s. These movements have grown out of a series of independent responses to local issues in different places at different times. In the past two to three decades, however, there has been a sharpening of conflicts. They cut across caste, class and gender and pit the haves against the have-nots, the poor against the poor, as well as the rich against the rich. India has witnessed a number of popular movements to protect community rights over natural resources that began with the famous Chipko movement in the Garhwal Himalayas in the 1970s and got global publicity with the Narmada Bachao Andolan (Save the Narmada Movement). Some of the major environmental movements in India have been briefly described below.

7.6.1 Bishnoi Movement

This movement was led by Amrita Devi, in which around 363 people sacrificed their lives for the protection of their forests. This movement was the first of its kind to have developed the strategy of hugging or embracing the trees for their protection spontaneously. Important facts regarding this movement are enlisted in Box 2.

Box 2: Quick facts about the Bishnoi Movement Year of the Movement: 1700s Place: Rajasthan Leaders: Amrita Devi Bishnoi Reason/Aim of the Movement: To stop the destruction of the village's sacred trees for building a new palace for the king.

7.6.2 Chipko Movement

Chipko Movement started on April 24, 1973, at Mandal of Chamoli district of Gharwal division of Uttarakhand. The Chipko is one of the world-known environmental movements in India. The movement was raised out of ecological destabilisation in the hills. The fall in the productivity of the forest produces forced the hill dwellers to depend on the market, which became a central concern for the inhabitants. Forest resource exploitation was considered the reason behind natural calamities like floods, and landslides. On March 27 the decision was taken to 'Chipko" that is 'to hug' the trees that were threatened by the axe and thus the Chipko Andolan (movement) was born. This form of protest was instrumental in driving away the private companies from felling the ash trees. Important facts regarding this movement are enlisted in Box 3.

Box 3: Quick facts about the Chipko Movement Year of the Movement: 1973 Place: Uttarakhand Leaders: Chandi Prasad Bhatt, Sunderlal Bhauguna and others Reason/Aim of the Movement: To protect the Himalayan forests from destruction.

7.6.3 Silent Valley Movement

The silent valley is located in the Palghat district of Kerala. It is surrounded by different hills of the State. The idea of a dam on the river Kunthipuzha in this hill system was conceived by the British in 1929. The technical feasibility survey was carried out in 1958 and the project was sanctioned by the Planning Commission of the Government of India in 1973. In 1978, the movement against the project from all corners was raised from all sections of the population. The movement was first initiated by the local people and was subsequently taken over by the Kerala Sastra Sahitya Parishad (KSSP). Many environmental groups like the Narmada Bachao Andolan (NBA), Bombay Natural History Society (BNHS) and Silent Valley Action Forum participated in the campaign. Important facts regarding this movement are enlisted in Box 4.

Box 4: Quick facts about the Silent Valley MovementYear of the Movement: 1978Place: KeralaLeaders: Kerala Sastra Sahitya Parishad (KSSP) and local peopleReason/Aim of the Movement: To save the silent valley and its rich biodiversity from thehydroelectric dam project that had been proposed.

7.6.4 Jungle Bachao Andolan

Jungle Bachao Andolan began in the 1980s in the Singhbhum district of Bihar (presently in Jharkhand). It was a movement against the government's decision to grow commercial teak by replacing the natural Sal forests. The tribal community is the most affected by this decision as it disturbs the rights and livelihood of Adivasis of that region. This movement was widely spread in states like Bihar, Jharkhand and Odisha in various other forms. Important facts regarding this movement are enlisted in Box 5.

Box 5: Quick facts about the Jungle Bachao Andolan Year of the Movement: 1982 Place: Singhbhum district of Bihar (now Jharkhand) Leaders: Tribals of Singhbhum Reason/Aim of the Movement: To oppose the government's decision to replace natural Sal Forest with commercial teak plantations.

7.6.5 Appiko Movement

Box 6: Quick facts about the Appiko Movement Year of the Movement: 1983 Place: Karnataka Leaders: Panduranga Hegde, Villagers of Western Ghats; Women and youth from Saklani and surrounding villages Reason/Aim of the Movement: To stop cutting trees by the fellers and the contractors of the forest department. The people demanded a ban on the felling of green trees.

It is a movement inspired by the Chipko movement by the villagers of Western Ghats. In the Uttar Kannada region of Karnataka, the villagers of Western Ghats started the Appiko Chalewali movement during the month of September – November 1983. Here, the destruction of forest was caused due to commercial felling of trees for timber extraction. Natural forests of the region were felled by the contractors, which resulted in soil erosion and drying up of perennial water resources. In the Saklani village in Sirsi, the forest dwellers were prevented from collecting usufructs like twigs and dried branches and non-timber forest products for the purposes of fuelwood, fodder, honey etc. They were denied their customary rights to these products. In September 1983, women and youth of the region decided to launch a movement similar to Chipko, in South India. The agitation continued for 38 days, and this forced the state government to finally concede to their demands and withdraw the order for the felling of trees. Important facts regarding this movement are enlisted in Box 6.

7.6.6 Narmada Bachao Andolan

Narmada is one of the major rivers of the Indian Peninsula. The scope of the Sardar Sarovar project, a terminal reservoir on Narmada in Gujurat in fact is the main issue in the Narmada Water dispute. Important facts regarding this movement are enlisted in Box 7.

Box 7: Quick facts about the Narmada Bachao Andolan Year of the Movement: 1985 Place: Gujarat, Madhya Pradesh and Maharashtra Leaders: Medha Patkar and other activists Reason/Aim of the Movement: To question the rationale behind the developmental projects, especially dam construction across the river.

7.6.7 Tehri Dam Conflict

Tehri dam attracted national attention in the 1980s and the 1990s. The major objections include, seismic sensitivity of the region, submergence of forest areas along with Tehri town etc. Despite the support from other prominent leaders like Sunderlal Bahuguna, the movement has failed to gather enough popular support at national as well as international levels. Important facts regarding this movement are enlisted in Box 8.

Box 8: Quick facts about the Tehri Dam Conflict

Year of the Movement: 1980s

Place: New Tehri, Tehri Garhwal district, Uttarakhand

Leaders: Sunderlal Bahuguna and other activists

Reason/Aim of the Movement: The main opposition to the dam was on account of it being built in a highly seismic zone. Another factor against it was the geological fragility of the young Himalayan range.

7.7 International environmental movements

The world's first private environmental group, the Commons, and the Open Spaces, The Footpaths, and the Preservation Society founded during 1865, campaigned successfully for the preservation of land for amenity, particularly the urban commons in England. With the increase in ecological crisis, there has been a corresponding increase in the awareness and concern about it all over the world. This has, in turn, led to widespread protest movements by aggrieved communities and concerned citizens.

Bhopal gas tragedy in 1984, nuclear disaster at Chernobyl (Russia) in 1986, Alaskan oil spill from Exxon Valdez tanker in 1989, and the Gulf War in the early 1990s are some examples of hazardous and undesirable happenings that led to ecological crisis in the human history. In the West, environmental movements focused on consumption, productive use of natural resources and conservation or protection of natural resources.

7.7.1 Role of United Nations

The first conference on human environment initiated by UNO was held at Stockholm in 1972. It paved the way for the studies on the condition of the environment and its effects on human beings. It

expressed serious concern to protect and improve the environment for present and the future generations. As a result of these conferences environmental movements under different names such as 'Green Polities', 'Ecogreens' or 'Green Movement' (Germany and North America) developed in the 1980s. First scientific warning of serious depletion of protective ozone layer in upper atmosphere by CFCs was raised during the Stockholm Conference (1972).

The 1989 European elections (1989) put green issues firmly on political agenda as Green parties across Europe gave top priority to this in their election campaign. In 1992, the United Nations Earth Summit was held in Rio de Janeiro to discuss the issues of environmental crisis faced by almost all developed and developing nations. In this conference, about 1,000 NGOs and about 50,000 individuals participated from all over the world. The issues of climate change and loss of biodiversity dominated the conference. A list of 27 principles was framed to preserve and improve the environment. The various programmes of UNO, especially the UNEP, have emphasized the need for sustainable development. It is agreed upon that environment and development are for the people and not people for environment and development. A parallel informal group assembled at Flamingo Park and formed a global forum on environment under the president ship of Morris Strong in 1972.

The United Nations General Assembly had declared 2011 as International Year of Forests to raise awareness about conservation and sustainable development of all types of forests. Every year March 21 is celebrated as World Forest Day. The logo and the theme of the International Year of Forests is "forests for people", emphasizing the need to give the central role for people in protection of world forests.

7.8 Role of indigenous people and women in environmental movements

Indigenous people, also known as *First peoples*, *Aboriginal peoples* or *Native Peoples*, are ethnic groups who are the original settlers of a given region, in contrast to groups that settled, occupied or colonized the area more recently. Indigenous peoples are inheritors and practitioners of unique culture and ways of relating to people and the environment. They have retained social, cultural, economic and political characteristics that are distinct from those of the dominant societies in which they live. Despite their cultural differences, indigenous people from around the world share common problems related to the protection of their rights as distinct people. Indigenous peoples have had short recognition of their identities, way of life, as well as and right to traditional lands, territories and natural resources for years. Throughout history, their rights have always been violated.

Indigenous people are holding more than 50% of the world's community land. They live in some of the most remote and resource-rich areas in the world including forests, mountains, deserts and the arctic. They survive on the agricultural practices but unfortunately hold only a fraction of legal rights to the territories they occupy. Their lands and their lives have been vulnerable to the exploitation of extractive industries. Many communities have been forced out of their homes for "development" and "conservation" schemes. Even climate change initiatives such as wind farms or geothermal energy threaten indigenous people as they continue to face the loss of their lands, livelihoods, sacred sites and self-governance in the name of these projects. Indigenous people today, are arguably among the

disadvantaged and vulnerable groups of people in the world. Women are the main sufferers and direct victims of all sufferings. They are deprived for living a qualitative life in their whole lifespan. The process of marginalization of women can be analyzed at various levels i.e., in family, society, workplace and all spheres of life. The process of exclusion, discrimination and marginalisation takes place both in individual and collective plane. Moreover, the degree of exclusion and discrimination has different dimensions in different societies. They adopt and change themselves according to the changing social reality.

The women in these communities have historically been recognised as the main cultivators, workers and protectors of lands. They are also cultural practitioners, healers, teachers and knowledge holders who have a central role in the transmission of language and culture to younger generations. For these reasons indigenous women are most likely to experience the first and worst effects of climate change globally. Thus, they are often found on the frontlines of resistance campaigns, defending their lands, their rights and the health of the environment.

Protecting the rights of these women allows them to provide security for their community, by having legal ownership of their lands, they can preserve their resources, knowledge and history for future generations. Indigenous women have routinely challenged the threats to their existence over centuries. As a result, their lives are constantly at risk, not just from the deterioration of the environment, but from the violence. Typically, when it comes to environmental justice, the contributions and significant roles women have played in its development are often left out of academic and social narratives.

Feminism, (specifically the activism of indigenous women and women of colour,) and environmental justice have gone hand in hand for centuries. Not only have indigenous people been historically and systematically placed at the wrong end of the power spectrum, the women have also been the main victims of violence and authoritarianism.

The plight of these communities is the of constant construction and reconstruction of their communities. However, they have retained their cultural values of collectivity, solidarity with nature, and reciprocity even amidst the life-threatening challenges they face. Indigenous women are continuously in a fight against the triple threat of oppression: patriarchy, racism and colonialism. When indigenous rights are safeguarded and legally implemented, they are allowed to flourish as guardians of the world's forests and biodiversity. Securing land rights for Indigenous Peoples is a proven climate change solution. Denying indigenous land rights and self-determination is a threat to the world's remaining forests and biodiversity. Despite the terrifying statistics, these women are not deterred and continue to fight against the governments, corporations and powerful elites at the expense of their lives to protect the environment so that their communities can live on. By acknowledging their contributions to environmental justice, governments and global institutions will be able to formulate effective gender-sensitive and culturally appropriate measures to protect them. Civil society and government must continue to advocate for their rights, their existence, and their message by giving them the protection and the platforms necessary to trigger real change and sustainable solutions.

7.9 Conclusion

Environmental movements ranging from local to global strengths have been gaining momentum over the last few decades. All these movements have been driven by existing political ideologies. Different national and international movements have been discussed in this chapter. Different ideologies, typologies and issues guiding such movements have also been discussed in details for a holistic understanding of the nature of the same.

7.10 Self-Assessment Questions

a) What is an environmental movement? Explain why "environmental issues that hurt people do not necessarily become public environmental problems".

b) What is meant by environmentalism? Briefly discuss different types of environmentalism.

c) Write a short note on the components of an environmental ideology. How is environmental ideology related to political ideology?

d) Environmental movements are guided by which political ideology? Briefly discuss different typologies relevant to environmental ideology.

e) Compare the concepts of deep and shallow ecology. Explain the following taxonomy (*any* three): Prometheanism, Liberal democrats, Ecological modernization, Bioregionalism, Environmental justice.

f) Briefly discuss different types of environmental activists.

g) What are the causes of environmental movements? Briefly discuss any two major environmental movement of India.

h) Briefly discuss different movements carried out against deforestation in India. What were the main reasons behind the Tehri Dam conflict?

i) What are the main issues of international environmental movements? Explain the role of United Nations in these movements. Name any two environmental movements carried out in India and their respective leaders.

j) What is ecofeminism? Briefly discuss the role of indigenous people and women in environmental movements.

7.11 Suggested Readings

a) Buttel, F. M., & Flinn, W. L. (1978). The politics of environmental concern: The impacts of party identification and political ideology on environmental attitudes. *Environment and Behavior*, *10*(1), 17-36.

b) Clark, J. (2012). Political ecology. Environmental Philosophy: From Animal Rights to Radical Ecology. Upper Saddle River, NJ: Prentice Hall.

c) Earth5R (2022). Accessed from https://earth5r.org/8-types-of-environmental-movements/ on 06.10.2022.

d) Novikau, A. (2016). The evolution of the concept of environmental discourses: is environmental ideologies a useful concept? In *Western Political Science Association 2016 Annual Meeting Paper*.
e) O'Riordan, T. (1977). Environmental ideologies. *Environment and Planning A*, 9(1), 3-14.
f) Saraf, A. (2022). Accessed from https://web.toppersnotes.com/current-affairs/blog/shallow-and-deep-ecologism-gldy on 06.10.2022.

O.E.C: 4.2

Unit-8

Climate Change: Global Initiatives, Impacts and Resistance from Below

Contents

- 8.1 Objectives
- 8.2 Introduction
- 8.3 Impacts of climate change on population
 - 8.3.1 Climate change and poverty
 - 8.3.2 Climate change and conflicts
 - 8.3.3 Climate change and hunger
 - 8.3.4 Climate refugees
- 8.4 Approaches to climate resilient development
 - 8.4.1 Building climate-resilient livelihoods and food sources
 - 8.4.2. Helping communities prepare for worsening disasters
 - 8.4.3 Addressing conflict caused by climate change
- **8.5 Climate politics**
- 8.6 Global initiatives
- 8.7 Resistance from below
- 8.8 Conclusion
- 8.9 Self-Assessment Questions
- 8.10 Suggested Readings

8.1 Objectives

The objectives of this unit are as follows:

- Learning about climate change and its impact on the society
- Exploring the concept of climate refugees
- Learning about the global initiatives to combat climate change
- Learning about the grassroot level movements in raising awareness regarding climate change.

8.2 Introduction

The greatest challenge which the environment has faced in recent years is climate change. Climate change is recognised as the most serious environmental threat influence in occurrences of drought and flood, Rise in the sea level affecting the coastal zone And would also effect agriculture and its allied sector productivity. The climate change referred to may be due to natural causes, for instance, changes in the sun's output or due to human activities. United Nations (1992) defined "climate change" as *change of climate which attributed or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over compatible time periods*. The adaptation resilience and coping up with the climate change are vital to meeting the challenges of environment and development. The climate change will impact agriculture and food production around the world due to the effects of elevated carbon dioxide in the atmosphere, higher temperature, altered precipitation and transpiration regimes, increased frequency of extreme events and paste and pathogen pressure. The developed as well as developing countries have to take into consideration the effect of climate change on environment and development.

What is climate change?

Climate change includes both global warming driven by human-induced emissions of greenhouse gases and the resulting large-scale shifts in weather patterns. Though there have been previous periods of climatic change, since the mid-20th century humans have had an unprecedented impact on Earth's climate system and caused change on a global scale

- Climate Change is a periodic modification of Earth's climate brought about due to the changes in the atmosphere as well as the interactions between the atmosphere and various other geological, chemical, biological and geographical factors within the Earth's system.
- Climate change can make weather patterns less predictable. These unforeseen weather patterns can make it difficult to maintain and grow crops, making agriculture-dependent countries like India vulnerable.
- It is also causing damaging weather events like more frequent and intense hurricanes, floods, cyclones, flooding etc.
- Due to the rising temperature caused by climate change, the ice in the polar regions is melting at an accelerated rate, causing sea levels to rise. This is damaging the coastlines due to the increased flooding and erosion.
- The cause of the current rapid climate change is due to human activities and threatening the very survival of humankind.
- The largest driver of warming is the emission of gases that create a greenhouse effect, of which more than 90% are carbon dioxide (CO₂) and methane.

- Fossil fuel burning (coal, oil, and natural gas) for energy consumption is the main source of these emissions, with additional contributions from agriculture, deforestation, and manufacturing.
- Temperature rise is accelerated or tempered by climate feedbacks, such as loss of sunlightreflecting snow and ice cover, increased water vapour (a greenhouse gas itself), and changes to land and ocean carbon sinks.
- Temperature rise on land is about twice the global average increase, leading to desert expansion and more common heat waves and wildfires.
- Temperature rise is also amplified in the Arctic, where it has contributed to melting permafrost, glacial retreat and sea ice loss.
- Warmer temperatures are increasing rates of evaporation, causing more intense storms and weather extremes.
- Impacts on ecosystems include the relocation or extinction of many species as their environment changes, most immediately in coral reefs, mountains, and the Arctic.
- Climate change threatens people with food insecurity, water scarcity, flooding, infectious diseases, extreme heat, economic losses, and displacement.
- These human impacts have led the World Health Organization to call climate change the greatest threat to global health in the 21st century.
- Even if efforts to minimise future warming are successful, some effects will continue for centuries, including rising sea levels, rising ocean temperatures, and ocean acidification.

The Intergovernmental Panel on Climate Change (IPCC) has issued a series of reports that project significant increases in these impacts as warming continues to 1.5°C (2.7°F) and beyond. Additional warming also increases the risk of triggering critical thresholds called tipping points.

Under the 2015 Paris Agreement, nations collectively agreed to keep warming "well under 2.0 °C (3.6 °F)" through mitigation efforts. However, with pledges made under the Agreement, global warming would still reach about 2.8 °C (5.0 °F) by the end of the century.

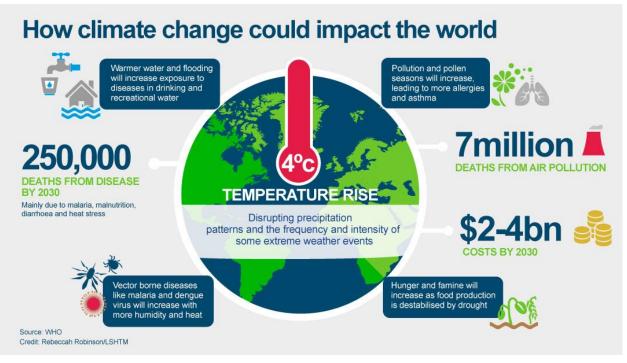


Figure 8.1: Impacts of climate change

8.3 Impacts of climate change on population

Around the world, people are experiencing both the subtle and stark effects of climate change. Gradually shifting weather patterns, rising sea levels and more extreme weather events are devastating evidence of both a rapidly changing climate and an urgent need for solutions. While the impacts of climate change affect every country on every continent, they don't do it equally. People already burdened by poverty and oppression often suffer the harshest consequences, while having the least ability to cope. Their struggle to earn a living, feed their families and create stable homes is made more difficult every day the climate crisis continues. The increased frequency and intensity of extreme weather events like hurricanes, wildfires and droughts threaten lives in these front-line communities, driving people from their homes and jeopardizing food sources and livelihoods. All these effects increase the likelihood of more conflict, hunger and poverty. Still, the people most at risk are persisting despite it, fighting to grow food, maximize dwindling resources and withstand recurring disasters. The actions people in hard-hit regions are taking every day to overcome the burdens of the climate crisis are just as vital as widespread solutions. And the steps we take now as a global community, including supporting those on the front lines who are braving the challenge, will determine our resilience for the future.

8.3.1 Climate change and poverty

Climate change places compounded stress on our environment, as well as the economic, social and political systems people depend on for food, safety and income. Whether it comes in the form of

unbearable heat waves, harsh winters or extreme weather events like the recent hurricanes in Puerto Rico and The Bahamas, climate change puts people's lives at risk by undermining development and creating shortages of basic necessities, like food and water. Climate change threatens the cleanliness of our air, depletes our water sources and limits food supply. It disrupts livelihoods, forces families from their homes and pushes people into poverty. And every year more trees and soil are lost. More than 1.3 billion people live on weakening agricultural land, putting them at risk of depleted harvests that can cause hunger, poverty and displacement. Soil, which is essential for healthy crops and ecosystems, is being lost between 10 and 100 times faster than it is forming, though recent research suggests conservation measures can help substantially.

Meanwhile, natural disasters have become more frequent and destructive. In 2019, 396 events — more than the annual average over the previous decade — affected 95 million people globally and caused \$103 billion in economic losses. These damages can be nearly impossible for families living in poverty to overcome. As climate events worsen, people are also threatened by more gradual changes, such as climbing temperatures and declining rainfall. Droughts alone impact around 55 million people every year, and the damage hits the agriculture industry — the primary source of food and income for many people in developing countries — particularly hard. Between 2008 and 2018, more than 80% of drought damage was absorbed by agriculture in low- and lower-middle-income countries, and the crop and livestock losses caused by all natural disasters in these countries during the same timeframe equated to enough calories to feed 7 million people per year. As these situations grow more desperate, food shortages can force families to leave their homes and migrate to other countries. Climate change is also one of many root causes of conflict around the world: it leads to food shortages, threatens people's livelihoods and displaces entire populations. Where institutions and governments are unable to manage the stress or absorb the shocks of a changing climate, instability will remain an ongoing threat. While everyone around the world feels the effects of climate change, the most vulnerable are people living in the world's poorest countries, like Haiti and Timor-Leste, who have limited financial resources to cope with disasters, as well as the world's 2.5 billion smallholder farmers, herders and fisheries who depend on the climate and natural resources for food and income. Increasingly unpredictable weather patterns, shifting seasons and natural disasters disproportionately threaten these populations, endangering their livelihoods and increasing their risk of poverty and hunger.

8.3.2 Climate change and conflicts

Conflict is the primary cause of poverty and suffering in the world today. And it's exacerbated by climate change. By amplifying existing environmental, social, political and economic challenges, climate change increases the likelihood of competition and conflict over resources. It can also intensify existing conflicts and tensions. In the Democratic Republic of Congo, shifts in the timing and magnitude of rainfall undermine food production and increase competition for remaining arable land, contributing to ethnic tensions and conflict. And in places like central Nigeria and Karamoja, Uganda, where resource scarcity has been a long-standing challenge, climate change has further reduced pasture and water sources and resulted in increased competition and violence. But while climate change can lead to conflict, it can also provide an opportunity for collaboration. These challenges present a unique opportunity for collective action and partnership in order to mitigate the impacts, and the security of

front-line communities will depend on cooperation over conflict.

8.3.3 Climate change and hunger

Climate change threatens the world's food supply. Floods and droughts brought on by climate change make it harder to produce food. As a result, the price of food increases, and access becomes more and more limited, putting many at higher risk of hunger. Malnutrition is the largest health impact of climate change in the 21st century. The number of undernourished people in the world has been increasing since 2014, reaching nearly 690 million — almost 9% of the global population — in 2019. The vast majority lives in low- and middle-income countries — research shows hunger to be most prevalent in Africa and rising fastest in Latin America and the Caribbean. The number of undernourished people in the Latin America and Caribbean region increased by 9 million between 2015 and 2019. Much of the increase is linked to progressively extreme weather and the growing number of conflicts, which can be driven or exacerbated by climate-related stresses. The 2020 Global Report on Food Crises recently reported its highest number of acutely food insecure people on record, some 135 million people across 55 countries and territories, in part due to climate shocks and natural disasters such as flooding, erratic rain, climate-induced displacement and the devastating locust invasion in East Africa.

8.3.4 Climate refugees

Rising sea levels, extreme weather events and prolonged drought force millions of people to lose or move away from their homes every year in search of food, water, shelter or jobs. Nearly 70% of all new displacements in the first six months of last year were the result of weather-related disasters, with a total of 9.8 million people around the world driven from their homes by shocks like drought, hurricanes and landslides — around 50,000 people every day. Meanwhile, gradual changes brought on by deforestation, overgrazing and decreased rainfall slowly transform pastures to dust, destroy crops and kill livestock, effectively challenging the livelihoods of millions of farmers. Many of these families are forced to leave their homes behind in search of basic necessities and new work. And if sea levels continue to rise without intervention, many of those living near the ocean — about 40 percent of the world's population — will be at risk of losing their homes. Almost all of these displacements are occurring in low- and middle-income countries, where people have fewer options to cope with progressive shifts or sudden disasters.

8.4 Approaches to climate resilient development

The negative impacts of climate change continue to worsen and multiply at dramatic rates, and more ambitious global efforts are necessary to cut emissions and limit the effect of climate change on the planet. A crisis of this scale demands a united, immediate response of an even greater magnitude: one in which we work together to help communities worldwide confront the challenges of today while developing solutions for a safer, more stable future. The solution aims to remove barriers so communities can adapt, innovate and thrive amidst the impacts of climate change, particularly in three areas: disappearing livelihoods and rising hunger, increasing disaster and escalating violence.

8.4.1 Building climate-resilient livelihoods and food sources

Farmers and communities to better manage unpredictable weather patterns and maximize the resources they do have by connecting them with information, tools and services for growing hardier yields and raising livestock. This includes helping farmers diversify their crops and redesign their farmland to improve their productivity and protect the soil, so they are better equipped to continue growing food and earning income in the face of drought. We also train herders on how to keep their animals healthy in drier conditions. Banking services, such as loans and savings, as well as insurance products help the farmers and herders protect their work and build a financial safety net. Mobile technologies can help to connect them to critical information — weather updates, crop prices, e-learning — they can leverage to make informed choices on when to plant and sell and how to treat their crops and animals.

8.4.2. Helping communities prepare for worsening disasters

Strengthening communities to be more resilient for the future disasters to decrease the risk of damage while equipping themselves to respond in the event of another disaster. In Puerto Rico, where hurricanes are an annual threat, existing community centers to create resilience hubs supplied with solar power, water and emergency essentials, so community members won't be dependent on external aid to survive in the event of a future disaster. Risk management and disaster preparedness are the best possible ways to be resilient community for emergencies. Equal responsibilities to be followed by local and national governments to strengthen their communities' resilience to weather-related risks, including improving the way water and land is managed, building disaster response plans and developing policies that reduce vulnerability to climate change.

8.4.3 Addressing conflict caused by climate change

To resolve climate-related tension and stop violence before it starts, communities and their governments should build an environment in which people work together to protect and share natural resources. Opportunities for people to overcome their differences and collectively manage resources, like training community leaders to build conflict management skills and helping people identify shared concerns and solutions. Just as the fight against climate change is a collective effort, its local impacts as an opportunity for cooperation and collaboration can reduce the risk of conflict and foster a better future.

8.5 Climate politics

Industrialised countries never easily accepted responsibility for global warming. From the very start of the international negotiations on climate change, they attempted to get the developing countries to share responsibility, despite their minimal contribution to the problem. Industrialized countries owe

their current prosperity to years of historical emissions, which had accumulated in the atmosphere since the start of the industrial revolution and also to a high level of current emissions. Developing countries meanwhile, had only recently set out on the path of industrialisation and their emissions were still comparatively low. The GHG emissions of 1 US citizen, for instance, are equal to 4 Indians or 10 Ethiopians. Under the circumstances, any limit on carbon emissions amount it to a limit on economic growth, turning climate change mitigation into an intensely political issue. International negotiations under the UN Framework convention on Climate Change (UNFCC) aimed at limiting GHG emissions into the atmosphere turned into a tug of war with reach countries unwilling to "compromise their lifestyles" and poor countries unwilling to accept a premature cap on their right to basic development.

In 1992, when the world met to discuss and agreement on climate change at Rio Brazil (also known as the Earth summit, held in June 1992), equity was a simple concept: sharing the Global Commons- the atmosphere in this case- equally among all. It did not provoke much and it for there were no real clements. However, this did not mean the concept was really accepted. A small group of industrialised countries- the Global North- had burnt fossil fuels for 100 years and built up enormous wealth. This club had to decide what to do to cut emissions and it claimed all countries where equivalent responsible for the problem.

As atmospheric science started making headlines in the mid-1980s, scientists began to drive the political process. A series of meetings where sponsored by the World Meteorological Organization (WMO), the United Nations Environment Program (UNEP) and the International Council of Scientific Union (ICSU). These meetings to place against the backdrop of the discovery of the ozone hole and the development of the Montreal Protocol on substances that deplete the ozone layer, signed in 1987. In November 1987, the World Commission on Environment and Development (WCED), also known as the Brundtland Commission, called on UNEP and WMO to take for the action. Following recommendations of the Brundtland Commission, a confidence the on "changing atmosphere: implications for global security" was organized in Toronto in 1988. attended by more than 340 people from 46 countries, including the prime ministers of Canada and Norway, Brian Mulroney and Gro Harlem Brundtland, and more than hundred officials, scientists, industry representatives and environmentalists, it marked the beginning of a high level political debate on climate change. Participants recognised that no single international organization, country, industry or individual could tackle the problem, and an international framework convention backed by national legislation was needed to protect the global atmosphere. It suggested a world atmosphere fund, at least partly founded by a levy on fossil fuel consumption in the industrialised world. Scientists recommended or 20% reduction of CO₂ emissions over 1990 levels by 2005- known as the Toronto targets. The 1990 baseline was chosen arbitrarily as a year in the period when the issue was being discussed. The meeting called for the revision of the targets of the Montreal protocol, 1987 by 2000 for the complete elimination of chlorofluorocarbons (CFCs), already recognised as a GHG since the 1985 Vienna Convention on the protection of the ozone layer.

The UNFCCC was an outcome of negotiations that started in the United Nations general assembly in December 1990 and Intergovernmental Negotiating Committee (INC) was set up to write the framework which was prepared in 15 months. The convention text was presented for shining at the Earth summit. The objective of the UNFCCC was to achieve stabilization of greenhouse gas concentrations in the atmosphere at the level that would prevent dangerous and anthropogenic interference with the climate system in a time frame that would allow ecosystems to naturally adapt to climate change. Crucially, the convention asserts developed countries should lead in taking action for mitigation, recognising climate change as a global problem and that all Nations have a responsibility towards its mitigation. The convention set up two bodies, are Subsidiary Body for Scientific and Technology Advice (SBSTA) and a Subsidiary Body for Implementation (SBI), to access the progress of efforts and provide advice on methodologies for projects take up under the convention. It also set up financial mechanisms for projects under it by suggesting them be financed by the Global Environmental Fund (GEF), the International Bank for Reconstruction and Development (IBRD or the World Bank) and the UNDP. The member countries meet annually to assess progress and negotiate further rules and protocols to meet the objectives set by the convention. These meetings are called the "Conference of the Parties" or COPs. COP is the main decision-making body of the UNFCCC. It includes representatives of all the countries that are signatories (or 'Parties') to the UNFCCC. COP assesses the effects of measures introduced by the Parties to limit climate change against the overall goal of the UNFCCC. Main objectives are:

- To review the national communications and emission inventories submitted by Parties.
- To assess the effects of the measures taken by Parties and the progress made in achieving the objective of the Convention.

The COP meets every year, unless the Parties decide otherwise. The first conference (COP1) was held in 1995 in Berlin. The COP meets in Bonn, the seat of the secretariat, unless a Party offers to host the session.

8.6 Global initiatives

Addressing climate change requires a unified global effort, and these initiatives serve as crucial frameworks for collaboration, knowledge-sharing, and action. The Paris Agreement, UNFCCC, IPCC, renewable energy initiatives, carbon pricing mechanisms, and global climate funds are just a few examples of the initiatives driving progress in combating climate change. However, the urgency of the climate crisis necessitates ongoing commitment and increased ambition from all stakeholders. By working together, we can mitigate greenhouse gas emissions, build climate resilience, and secure a sustainable future for generations to come. Some of the key global initiatives that are paving the way towards a sustainable future are:

- i. United Nations Framework Convention on Climate Change (UNFCCC): The UNFCCC, established in 1992, serves as the foundation for international cooperation on climate change. It provides a platform for countries to come together and negotiate climate-related issues, policies, and agreements. The annual Conference of the Parties (COP) serves as a key gathering where countries discuss progress, share experiences, and forge new paths for global climate action. Through the UNFCCC, countries collaborate on mitigation efforts, adaptation strategies, and technology transfer to accelerate the transition to a low-carbon economy.
- Sustainable Development Goals (SDGs): The Sustainable Development Goals (SDGs) are a set of 17 global goals established by the United Nations in 2015 as part of the 2030 Agenda for Sustainable Development. These goals provide a comprehensive framework for addressing social, economic, and environmental challenges to achieve a sustainable future for all. The

SDGs build upon the earlier Millennium Development Goals (MDGs) but are more comprehensive and ambitious in their scope. They address a wide range of interconnected issues, including poverty eradication, education, health, gender equality, clean energy, environmental protection, and sustainable economic growth. The SDGs provide a holistic framework for governments, businesses, civil society organizations, and individuals to work together towards a more equitable, inclusive, and sustainable world. Achieving these goals requires collective action, innovative approaches, and strong partnerships across all sectors of society. All these 17 goals are interconnected, and progress in one goal often relies on progress in others. The SDGs recognize the integrated nature of sustainable development and call for collaborative and holistic approaches to achieve a more equitable, inclusive and sustainable world for present and future generations. **Goal 13 (Climate Action)** focuses on urgent action to combat climate change and its impacts. It calls for reducing greenhouse gas emissions, increasing resilience to climate-related disasters, and promoting climate adaptation measures. Achieving this goal is vital for the long-term environmental sustainability of the planet.

- iii. Paris Agreement: A landmark agreement for climate action at the heart of global climate efforts is the Paris Agreement, a groundbreaking treaty adopted in 2015. The Paris Agreement was adopted by 196 countries at the UNFCCC Conference of the Parties (COP 21) in Paris, on 12 December 2015 and entered into force on 4 November 2016. The agreement intends to reduce and mitigate greenhouse gas emissions. Before COP 21 in Paris, countries were asked to submit Nationally Determined Contributions (NDC's). There was a marked shift in the commitments from various countries. India was clubbed in the group of emerging economies and India lived up to its billing as a responsible nation in tackling climate change. The agreement aims to limit global warming to well below 2 degrees celsius above pre-industrial levels and strives to pursue efforts to limit the temperature increase to 1.5 degrees celsius. It sets targets for countries to reduce greenhouse gas emissions, enhance adaptation measures, and provide financial support to developing nations. The Paris Agreement serves as a framework for collaboration, encouraging countries to regularly review and strengthen their climate commitments. In 2017, the US President announced his intention to withdraw from the agreement. The withdrawal became official on 4 November 2020. Later, after the change in Presidency, the US again joined the Paris Agreement in 2021.
- iv. *Intergovernmental Panel on Climate Change (IPCC):* The IPCC plays a crucial role in assessing and communicating the science of climate change. As a scientific body, it provides policymakers with up-to-date information on the causes, impacts, and potential solutions to climate change. Through comprehensive reports and assessments, the IPCC guides global decision-making processes, ensuring that climate policies are rooted in sound scientific knowledge. The reports highlight the urgency of action, emphasizing the need for immediate and ambitious measures to mitigate greenhouse gas emissions and adapt to climate impacts.
- v. *Renewable Energy Initiatives:* Promoting renewable energy sources is central to combating climate change. Several global initiatives focus on accelerating the deployment of renewable energy technologies. The International Renewable Energy Agency (IRENA) supports countries in their efforts to transition to renewable energy through policy advice, capacity-building, and knowledge-sharing. Additionally, initiatives like the Global Geothermal Alliance, Solar

Alliance, and Offshore Wind Energy Coalition bring together stakeholders to promote specific renewable energy sectors.

- vi. *Carbon Pricing Mechanisms:* Putting a price on carbon emissions is an effective economic tool to incentivize emissions reductions. Many countries and regions have implemented carbon pricing mechanisms such as carbon taxes and cap-and-trade systems. These initiatives assign a monetary value to carbon emissions, encouraging businesses and industries to adopt cleaner practices and invest in low-carbon technologies. The revenue generated from carbon pricing can be reinvested in further climate action, fostering a self-reinforcing cycle of emissions reduction.
- vii. *Global Climate Funds*: Financial resources are crucial to support climate action, particularly in developing countries. Global climate funds like the Green Climate Fund (GCF) provide financial assistance for climate-related projects and programs. These funds help developing nations build resilience, adapt to climate impacts, and transition to low-carbon development pathways. They play a vital role in mobilizing climate finance and supporting sustainable initiatives worldwide.
- viii. *Mission Innovation:* Mission Innovation is a global initiative that brings together countries committed to accelerating clean energy innovation. It aims to double public investments in clean energy research, development, and demonstration within five years, fostering collaboration and knowledge-sharing among its member countries.
 - ix. *Global Green Growth Institute (GGGI):* The GGGI is an intergovernmental organization that works with countries to promote sustainable, low-carbon, and resilient development. It assists governments in formulating green growth strategies, implementing projects, and mobilizing financing for climate action.
 - x. *REDD+:* Reducing Emissions from Deforestation and Forest Degradation (REDD+) is a mechanism developed by Parties to the UNFCCC. It creates monetary value for the carbon stored in forests, providing incentives for developing countries to reduce emissions from forestlands and invest in low-carbon pathways. Developing countries receive results-based payments for their results-based actions. REDD+ goes beyond simple deforestation and forest degradation by embracing its role in nature conservation, sustainable forest management, and enhancing forest carbon stocks. Financial flows to reduce greenhouse gas emissions through REDD+ are estimated to reach up to \$30 billion annually. This improved north-south financial flow will ensure significant reductions in carbon emissions and the promotion of inclusive development. It can also improve biodiversity conservation and ensure important ecosystem services. As forests are important carbon sinks, it is important to make them more resilient to climate change.

8.7 Resistance from below

Resistance and grassroots movements play a significant role in raising awareness about climate change and demanding action. Some forms of resistance from below include:

- i. *Youth-led movements:* Young activists, such as the global Fridays for Future movement inspired by Greta Thunberg, have mobilized millions of young people worldwide to demand immediate and ambitious climate action.
- ii. *Indigenous communities:* Indigenous peoples, who often have deep connections to the environment, have been at the forefront of resistance against destructive practices and advocating for sustainable land management and traditional knowledge preservation.
- iii. *Local activism:* Communities affected by the impacts of climate change, such as coastal communities facing rising sea levels, have organized grassroots initiatives to protect their homes, adapt to changing conditions, and promote sustainable practices.
- iv. *Divestment campaigns:* Activists have targeted financial institutions and companies with divestment campaigns, urging them to stop funding or supporting industries contributing to climate change, such as fossil fuels.

These resistance movements and initiatives put pressure on governments, corporations, and international bodies to take meaningful action to address climate change and transition to a sustainable future.

Jurisdiction and accountability

The second major impediment to political action stems from problems of jurisdiction and accountability. From the beginning, modern government has relied upon the concept of jurisdiction– "territory within which a court or government agency may properly exercise its power." And implicit in the concept of jurisdiction is geography. But two of the stickiest problems of the 21st century– climate change and cyber security–are challenging because it is so difficult to nail down jurisdiction. When we are able to establish jurisdiction we are able to establish rules, laws, and accountability for adherence to the law–the three bedrock principles of modern democratic governance. In the absence of jurisdiction, everyone is accountable and therefore no one is accountable.

Currently individual countries under the United Nations Framework Convention on Climate Change attribute greenhouse gases to their sources within the United States via the Environmental Protections Agency's Greenhouse Gas Reporting Program. But attribution without enforcement mechanisms is only half the battle–if that. Nationally and internationally, there is no legal architecture that allows us to reward and/or punish those who decrease or increase their greenhouse gas emissions. Even the Paris Agreement which President Trump pulled the U.S. out of is only a set of pledges from individual countries. Measurement is a first step toward accountability, and measurement needs constant improvement. But measurement in the absence of accountability is meaningless, especially in situations where many people are skeptical of cause and effect.

8.8 Conclusion

Complexity is the death knell of many modern public policy problems and solutions. And complexity is inherent in climate change. The causes of global warming are varied, including carbon dioxide, methane, and nitrous oxide. As the climate warms, it affects glaciers, sea levels, water supply, rainfall,

evaporation, wind, and a host of other natural phenomenon that affect weather patterns. Unlike an earlier generation of environmental problems, it is hard to see the connections between coal plants in one part of the world and hurricanes in another. In contrast, when the water in your river smells and turns a disgusting color and dead fish float on top of it, no sophisticated scientific training is required to understand the link between what's happening in the river and the chemical plant dumping things into it. The first generation of the environmental movement had an easier time making the connection between cause and effect.

The impacts of climate change can be mitigated by reducing greenhouse gas emissions and improving the sinks that remove greenhouse gases from the atmosphere. To keep the global temperature below 1.5° C with a high probability requires net zero global greenhouse gas emissions by 2050, or 2°C by 2070. This will require far-reaching and systemic changes of unprecedented scale in energy, land, cities, transport, buildings, and industry. The United Nations Environment Program estimates that over the next decade, countries will need to triple the reductions they pledged in the current Paris Agreement to limit warming to 2°C.

Further significant reductions are needed to reach the 1.5° C target. Although there is no single way to limit global warming to 1.5 or 2.0 °C (2.7 or 3.6 °F). Most scenarios and strategies combine increased energy efficiency measures to produce the required greenhouses and a significant increase in the use of renewable energy and GHG reduction. Reducing pressure on ecosystems and improving their ability to store carbon also requires changes in agriculture and forestry, including the restoration of natural ecosystems through reforestation. Other approaches to mitigating climate change carry higher risks. Scenarios that limit global warming to 1.5° C generally project large-scale deployment of carbon removal methods during the 21^{st} century.

8.9 Self-Assessment Questions

- a) What is climate change? What are the impacts of climate change on population?
- b) Establish a relationship between climate change and poverty.
- c) What do you mean by climate refugees?
- d) Briefly discuss the global initiatives adopted to mitigate climate changes.
- e) How grassroots movements play a significant role in raising awareness about climate changes?
- f) Write a short note on:
 - i. Climate politics
 - ii. UNFCCC
 - iii. Conference of the Parties (COP)
 - iv. Paris agreement
 - v. REDD+
 - vi. Sustainable Development Goals (SDGs)
 - vii. Carbon Pricing Mechanisms

8.10 Suggested Readings

- f) Benson, B and Jordan, A, Environmental Governance, eds. 2017. John Wiley & Sons, Ltd.
- g) Kandpal, PC, Environmental Governance in India, eds. 2018. SAGE Publivations India Pvt. Ltd.
- h) https://www.unep.org/explore-topics/climate-change/about-climate-change/climate-changeinitiatives-and-partnerships.
- i) https://www.un.org/en/climatechange.
- j) https://unfccc.int.