
UNIT 10 DEVELOPMENT AND ENVIRONMENTAL CONCERNS IN POST-COLONIAL SOCIETIES

Structure

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10.0 OBJECTIVES

After reading this Unit you will be able to understand:

how development affects environment and how to perceive, analyse and examine development versus environment crossfire in context of post-colonial countries and societies known and referred to as “Third World” or “developing nations”;

shift from colonial policies to legislations in independent India towards ecological issues, disputes, conservation, restoration etc. and consequences of that shift;

how development brought about technological innovations such as Green Revolution that transformed and boosted agricultural reforms and environment in the long-run;

backdrop and impact of participatory and inclusive movements by locals such as Chipko, Narmada Bachao etc. against anti-environmental aptitude and approach of, and intrusion and invasion by the state; and

pressing and urgent need for development and environment to go hand in hand and march in step. Development at the cost of environment is going to lead us nowhere.

10.1 INTRODUCTION

There can be no denying that ecological concerns are as worthy as developmental needs. We all want development in pursuit of better life and future. But, does the decision to build a mine, dam, or road need not to be weighted by its ecological detriment? Environment versus development debate is not new or unheard of. The dichotomy between developmental goals and ecological hazards and grievances is a challenge for countries across the globe. For example, mining and coal blocks in a forested area impacts not only its flora and fauna but also the forest-dwellers whose very survival and livelihood depends on that forest and its resources and who are often not a party to the development we are talking about. In such a situation do we continue exploiting its resource-base for the sake and in the name of developmental goals and strategies or is there an “ethical aspect and responsibility of development” too? Should “sustainable development” not be our mission and motto?

10.2 PROMISE AND EXPECTATIONS OF NEW NATIONS

Development and environment are shaped by specific historical trajectories of societies. 1940s was a period when a number of new nations were born after mass independence movements that liberated them from colonial rule. Successful anti-colonial struggles gained their mass popularity by linking freedom with equality and prosperity. Independence raised expectations of positive social change and new democratic nations were eager to develop. For post-colonial societies this marked the beginning of an era of development and they faced particular challenges in balancing needs of development with emerging environmental concerns.

Independence from colonial rule came with promise of development, specifically economic prosperity and modernization for its citizens. Apathy of colonial rulers towards their colonized subjects was to be replaced by democratic states that were committed to welfare of their citizens. Natural resources that were exploited for colonial interests were now to be dedicated to service of the nation. This also meant that development was biggest challenge for post-colonial nation-states. Primary role of the state and its legitimacy was based on its ability to meet the promise of development. Modernization was the dominant development theory at

that time. Developed by Rostow, the understanding was that all nations would pass through similar stages in their unilinear economic growth:

- 1) traditional society,
- 2) preconditions to take-off,
- 3) take-off,
- 4) drive to maturity, and
- 5) age of high mass consumption.

Traditional social structures, technologies and cultures were seen as factors that inhibited development in these “backward” regions. Newly independent nations were placed in stages 1 and 2 with promise of moving to ‘take off’ stage and eventually ‘catching-up’ with developed nations. Developed world was the model to emulate and post-colonial societies were comparatively categorised as ‘under-developed’ and later as ‘developing’ societies. Development policies and projects were directly imported from developed regions and transplanted in post-colonial societies to bring them on path towards modernization.

Development in this period was a synonym for national economic growth and measured in terms of Gross Domestic Product (GDP) that measures overall market value of goods and services produced domestically by a country and Gross National Product (GNP) that is a measure of market value of goods and services produced by all citizens of a country. Nation- state was the agent of development and modernization, working with guidance and support of developed nation-states, to bring modernization to their societies.

Development achievements were also a marker of national pride in their distinction from colonial poverty. Simultaneously, they also strove to distinguish themselves from “backward” indigenous culture that was seen to have a causal role in their societies’ underdevelopment and also inhibiting integration of new nations. Development was, thus, expected to mark a radical break from both colonialism and indigenous culture. New capital cities such as Chandigarh and Brasilia emerged as emblems of this modernity, designing prosperous and egalitarian societies. Grand projects with latest ideas and technologies available in advanced societies, such as large dams and new urban centres, were emblems of national progress, significant for their symbolic value as much as their economic contributions. Techno-social packages were imported from developed nations to be implanted in local conditions and global political economy in post-war period was conducive to this. For India independence was additionally marked by trauma of partition and new development projects were symbolic of hopeful national future. The new planned city of Chandigarh was emblematic of national identity. The first Prime Minister of India, Jawaharlal Nehru is reported to have said of Chandigarh:

“Let this be a new town, symbolic of freedom of India, unfettered by traditions of the past, an expression of nation’s faith in the future”.

Tackling hunger and food self-sufficiency was also a matter of national pride. Population and poverty were identified as major challenges for developing nations and were considered causally related. While dominant Western discourse considered over-population to be the cause of poverty, independent nations recognized causality as flowing in the opposite direction i.e. poverty was causing over-population. Colonial pillage, apathy and mismanagement were identified as reasons for widespread hunger and distress and national pride was linked to building food self-sufficient nations. Increasing agricultural productivity to feed growing populations was, therefore, a primary development objective.

Some development scholars, particularly post-structural and post-development scholars, trace the birth of development to this period that originates in Cold War politics after World War II. Development emerged as a means for expansion of global influence for powerful nations in newly formed post-colonial societies. This idea was explicitly enunciated as Cold War foreign policy of United States of America at that time by its President Harry Truman. Known as Truman Doctrine, it described explicit use of economic aid to contain Soviet geopolitical expansion. US actively provided financial aid for development of countries that were identified as susceptible to Soviet influence. Truman declaration marked the creation of post-colonial societies as “Third World” and US as “First World” was actively involved in promoting a capitalist model of development, particularly in regions that were considered susceptible to communist influence. Green Revolution (GR) is an example of such a techno-social package that came with US funding, influence and technology and transformed agricultural technology and agrarian relations in post-colonial societies.

GR package included new, high-yielding varieties of rice and wheat developed in Mexico with US financial and technological support, requiring intensive monocropping on fertile irrigated land, mechanization of agrarian activities, development of market, storage and transport networks. It provided an immediate solution to the problem of increasing food production but also ensured financialization of agrarian relations in most productive agrarian regions. GR package favoured larger and advanced farmers and irrigated farming regions by design and entrenched market linkages in agriculture, as farmers were made dependent on market and state for seeds, fertilizers, pesticides, information and knowledge of new imported agrarian practices and for procurement after harvest. The impact of GR on social and ecological relations is a matter of much discussion even today, often with extreme positions on its positive and negative impact.

Environment was understood in this period as natural resource that was an input to development as well as pristine nature that required state protection. Newly formed nations tread this thin line as well and protection of environment was a national goal. In India protection of natural environment was an element of directive principles of the Constitution:

Article 48 says, “the state shall endeavour to protect and improve environment and safeguard forests and wildlife of the country”;

Article 51-A states, “it shall be duty of every citizen of India to protect and improve natural environment including forests, lakes, rivers and wildlife and have compassion for living creatures.”.

Environment was seen as national heritage with state as its caretaker. Colonial state institutions, such as colonial forest department, were retained with little change as were many colonial legislations. Indian Forest Act of 1927 continues to be primary forest legislation in independent India.

While charismatic fauna and landscapes were protected as national treasures, western post-industrial environmental concerns were rejected as hurdles to the primary goal of eradicating poverty. “Poverty is the greatest polluter”: a famous quip by the then Indian Prime Minister, Mrs. Indira Gandhi resonated across post-colonial societies. Parallel to this rejection of Western environmentalism was protection of iconic flagship species and habitats that became symbols of pride for new nations. Habitats and megafauna protected under colonial rule for exclusive use of rulers were now converted into National Parks and protected for the new nation. Protected areas restricted local citizens from use and management of these livelihood resources and were often met with local resistance. Productive forests, on the other hand, were managed by Forest Departments, following from the legacy of colonial forestry. Local populations who used these forests often resented continuation and strengthening of colonial practices of control over forests and other natural resources. Within two decades of independence across the developing world local people disenchanted with centralized control, extraction and protection of natural resources organized themselves into social movements. Chipko – one such illustrious protectionist movement in India – is an example that we discuss in a subsequent section.

10.3 DEVELOPMENT THEORIES

During this period radical development theories developed in Latin America transformed our understanding of development. Dependency theory rejected the basic premise of modernization theory that development could be understood within a nations’ boundaries. It rejected the idea that nations were all on same development path, with developing nations on path set to catch up with advanced countries. Instead, they argued that colonialism created fundamental and interrelated structural distortions in economy of the colonies, linking them in an international division of labour. Industrialized countries formed the centre that exploited and drained resources from the periphery formed by rest of world (other than the socialist countries) through colonial and imperial relations. Exploitation and domination of periphery by the centre is then perpetuated through market relations and powerful transnational classes and class structures that sustain global economy. World systems theory was another theory that highlighted integration of whole world into a single capitalist economy through relations between powerful states. Countries were placed in the core, periphery or

semi-periphery, with unequal trade relations between them resulting in development of core and consequent underdevelopment in peripheries.

Apart from such radical understanding of causes of underdevelopment, the meaning of development as economic growth was increasingly being questioned. Given the massive levels of inequalities within nations, GDP or GNP as indicators of development were inadequate and misleading. A number of alternative ideas and indicators emerged that better reflected concerns with improving quality of life of people. Stellar among them was Nobel laureate Indian economist Amartya Sen's "capability approach". He asserts that freedom is both primary and principal means of development, where development is about enhancement of capability of people to live the kind of life they value. Development is about freedom that includes political freedoms, economic facilities, social opportunities, transparency guarantees and protective security. United Nations now annually publishes a Human Development Report (HDR) that ranks nations based on an index of human development that is inspired by this understanding. A number of other indicators have been developed as well that seek to understand development beyond economics: Human Welfare Index, Ecological Footprint, Bhutan Gross National Happiness Index, Happy Planet Index, Sustainability Index, United Nations Sustainable Development Goals, Global Peace Index etc.

10.4 RISE OF CITIZEN VOICES: SOCIAL MOVEMENTS AND PARTICIPATORY DEVELOPMENT

Two decades into paternalistic model of state-led development that supported a particular model of economic growth, multiple critical voices began to emerge. Social and ecological impacts of the model of development of last two decades began to be questioned. Best known among these is Chipko movement in present Uttarakhand state of India where local people objected to commercial exploitation of local Himalayan forests that they used for their livelihoods. The movement became famous for its form of protest: rural women, in absence of men, hugged trees in their local forests to prevent private contractors supported by state forest department from cutting down trees. Scholars have contextualized this action by rural women in long history of peasant struggles in the region demanding and asserting local control over natural livelihood resources. The movement's demand for local control over local natural resources echoed far and wide in practice, even while global discourse on this movement exclusively focussed on environmentalism and gendered nature of protests. Similar movements demanding decentralized control over natural livelihood resources, protesting extractive development that impoverished local communities, were occurring across the world. This is evocatively expressed in a quote by Chico Mendes, a second-generation rubber tapper and radical trade Unionist in Brazil who was assassinated:

“At first, I thought I was fighting to save rubber trees, then I thought I was fighting to save Amazon rainforest. Now I realize I am fighting for humanity”.

While environmental concerns of previous decades were state-led and drew their inspiration from Western industrial nations, these social movements illuminated environmental concerns as integrated with livelihoods and justice for the marginalized. While national parks’ legislation defined environmental protection as excluding local use of pristine nature, movements such as Chipko highlighted connection between capitalist extraction and resource degradation. Such movements reimagined ways of locally using and sustaining nature, integrating development and environmental concerns as one.

Some movements were successful in establishing local control while others sustained struggle for years against powerful state and international pressures. Narmada Bachao Andolan (NBA) in India, for instance, brought together adivasis, farmers, environmentalists and human rights activists in a continuing struggle against juggernaut of large-scale damming of rivers that simultaneously disrupts ecosystems and local lives, livelihoods and cultures. Destructive import of large development projects, unfair distribution of costs and benefits of previous model of development and further marginalization of the already marginalized were clearly illuminated by environmentalist movements such as NBA. These clearly articulated the hubris, injustice and ecological and social unsustainability of earlier development models and proposed several alternatives.

One of world’s worst industrial disasters occurred in 1984 at Union Carbide India Limited (UCIL) pesticide plant in Bhopal, Madhya Pradesh. Over 500,000 people were exposed to Methyl Iso Cyanate (MIC) gas that leaked from the factory located amidst a dense working-class urban habitation resulting in death, disability and intergenerational health impacts. Ignoring warnings from workers unions, corporate negligence, underinvestment, inadequate safety equipment, poor regulation and safety audits were noted in subsequent investigation. Legal proceedings involving UCIL, United States and Indian governments, local Bhopal authorities and disaster victims stretched for decades. While profit extraction was global, responsibility for safety of workers and ordinary citizens was located nowhere. After decades of legal wrangle and compensation disproportionate to scale of the tragedy, affected people continue to struggle for justice with public demonstrations held on anniversary of the accident. Bhopal gas tragedy remains a continuing reminder of integral connection between development and environment and the need to examine both simultaneously in terms of their impact of society.

While initially movements that demanded proper accounting for social and environmental costs of development were castigated as anti-development movements, they have been recognized now as conceptualizing an alternate development and as environmentalism of the poor. Environmentalism of the North was recognized as limited to post-industrial concerns and opposition that is set up between environmental concerns and development was critiqued. Unlike high consumptive societies that consumed global resources, it was recognized

that poor and indigenous groups consumed meagre local resources and their livelihoods and well-being were integrally linked to sustainability of local natural resources. At national level post-colonial states continued to be influenced by dichotomous model opposing development to environmental conservation. However, an alternate perspective of development-environment nexus was gaining ground in sections of civil society.

At global level, United Nations in 1983 set up Brundtland Commission to examine possibilities of economic growth without environmental damage. In its report – “Our Common Future” – the Commission defined “Sustainable Development” as development that meets needs of the present without compromising the ability of future generations to meet their own needs. The concept was general and vague enough to attract widespread acceptance. However, it also mainstreamed environmental concerns and intergenerational equity connecting them to development.

One of major shifts brought about by pressures of environmental movements is the shift to participatory development and community-based natural resource management models. While these emerged under different names with diverse acronyms in this period across the world, the commonality lay in emphasis on local consultation on what should be the nature of development. Some initiatives took an institutional approach attempting to include stakeholder inputs in design and implementation of development projects while others broadened it to a social movement perspective, seeking to mobilize people as active participants in development decision-making. While the discourse was dominant, practice varied in terms of commitment and actual practice.

Community Based Natural Resource Management (CBNRM) emerged as a model, particularly in rural and poor, densely populated areas of post-colonial societies with rich natural resources. It drew from sustainable and participatory development concepts and underlined connection between development and conservation. Another conceptual turn that influenced this was common property resources movement that highlighted the fact that vast resources in poorer countries are held in common and have been historically sustainably managed.

Forests were a major source of revenue for colonial state; they were appropriated by state and controlled and managed through a state techno-bureaucratic institutional structure. Local forest users, particularly communities that collectively used these forests were disenfranchised by modern legal systems that did not recognize non-European forms of rights. As environmental concerns increased, same structures continued with added objectives of conservation. Both commercial forestry and conservation in colonial societies kept out local people from their traditional forests. Post-colonial societies not only inherited this legacy but indigenous post-colonial elites continued and enhanced these institutions and practices, now in name of post-colonial nation. Forest department in post-colonial societies was a major face of oppressive state that controlled local livelihood supporting natural resources. Community-based natural resource

management proposed a radical change that has had diverse impacts across post-colonial world, both successes and failures.

Joint Forest Management in India is an example of systemic shift to recognize and include non-state actors, particularly user communities in natural resource management. It became a policy in 27 states in India and similar efforts can be found throughout the developing world. In some cases, this resulted in substantial positive changes in livelihood, conservation and state-society relations. There were, however, barely any substantial changes in property rights and power hierarchies, limiting its impact.

This model of participatory development was ubiquitous in delivery of development schemes by 1990s. Local communities were organized into multiple groups, sometimes overlapping with traditional village community organizations for a wide variety of development and conservation schemes. In India they were often parallel to elected Gram Sabhas – local elected bodies for decentralized governance – or Panchayati Raj. Contrary to Panchayati Raj which aimed to deepen democratic politics, development and conservation community organizations were imagined as apolitical.

Decade of 1980s also marked gradual shift in most post-colonial societies from ideology of welfare states to neoliberalism. The gap of missing or retreating state was filled, at least partly in many societies, by emergence of Non-Government Organizations (NGOs). While voluntary and philanthropic individuals and organizations were always present in these societies, the 80s marked their professionalization and proliferation. NGOs varied widely in size, structure, scale, philosophy and commitment; they emerged in many instances as development delivery organization that took on deficit of the state as development agency. They often served as intermediaries between state and poorer communities, translating across this boundary. Market-orientated institutional structures such as microfinance, entrepreneurship development and self-help groups flourished. In 2006 a social entrepreneur Muhammad Yunus was awarded Nobel Prize for founding Grameen Bank in Bangladesh and pioneering microcredit and microfinance for rural Bangladeshi women.

These institutional shifts within post-colonial societies mirrors a similar shift in global political economy of development and conservation. While Cold War period discussed earlier involved bilateral agreements between nation-states, this was followed by international financial institutions such as World Bank that mediated development flows. By end of 1980s international and multinational NGOs played a mediating and influential role in development and conservation in post-colonial societies. This paved way for entry of capital and markets to rural and indigenous hinterlands in future decades. In development theory post-development theorists following Michael Foucault's "discourse analysis" provided a scathing critique of development enterprise. They argued that international development was a form of cultural imperialism that was imposed through a development apparatus that included forms of knowledge and institutional frameworks.

The particular negative impact of development on indigenous people is also more recognized now. Most visible of these impacts is perhaps their physical displacement. In countries like India the number of indigenous/Aadivaasi/tribal people displaced by development projects is disproportionately large compared to their proportion in population. However, apart from inability of development to consider their rights to natural resources the incompatibility of development with their cultural systems is also now widely recognized. The UN Permanent Forum on Indigenous Issues set up in 2000 emphasized the need to recognize cultural diversity in development process. In 2003 it also demanded a legal framework to make cultural, environmental and social impact assessment studies mandatory in all development projects.

10.5 GLOBALIZATION, CLIMATE CHANGE AND RE-ENVISIONING DEVELOPMENT

At turn of the century all 191 UN member-states committed to achieve Millennium Development Goals (MDGs) by 2015. MDGs included eight commitments including:

- a) eradication of extreme poverty and hunger,
- b) universal primary education,
- c) promoting gender equality and empowerment of women,
- d) reducing child mortality,
- e) improving maternal health,
- f) fighting against HIV/AIDS, Malaria and other diseases,
- g) ensuring environmental sustainability and developing global partnerships for development.

In the same vein Agenda 2030 signed in 2015 is a sustainable development commitment “for people, planet and prosperity”. UN members agreed to work together and cooperate towards achieving 17 broad and interdependent sustainable development goals.

This comes in the wake of increased knowledge and understanding about relationship between development and planetary-level environmental changes. Energy consumption for long has been an indicator of development; fossil-fuel burning for this energy consumption is major source of release of heat-trapping green-house gases in earth’s atmosphere. Long-term heating of earth’s climate system that has been observed since mid-19th century due to human activities is called Global Warming. This and the resultant changes in global weather-pattern collectively are recognized today as Climate Change: a primary environmental concern for all humanity. While earth has passed through different phases of climatic changes, today we know that humans have had an exceptional impact on

its climatic system. There is overwhelming evidence that humans have influenced earth system processes such as atmospheric, biospheric, geological, hydrological processes. This influence has been so profound that geologists have proposed that this human-influenced geological time-period be called Anthropocene.

These developments have special implications for post-colonial societies which are late entrants to industrialization and economic development. Global and indivisible nature of the problem and its implications require globally coordinated actions. While the very high contribution of early industrializing colonial nations and, therefore, their ethical responsibility to contain the impacts are undeniable, it is the more populous, post-colonial nations that are on aspirational ladder to increase energy consumption. Impacts of Climate Change have also been unequally distributed with poorer regions of the world, with the already more vulnerable sections of humanity facing worst impacts, further increasing their vulnerability.

Post-colonial societies have been an integral part of many international efforts to deal with global environmental concerns and have taken a lead in these initiatives as well. India, for instance, was a signatory to Montreal Protocol in 1987 on substances that deplete Ozone layer (to Vienna Convention for Protection of Ozone layer), UN Framework Convention on Climate Change (UNFCCC) and Convention on Biological Diversity and Agenda 21 of UN Earth Summit in 1992. In addition to signing these commitments India has played an important role in articulating concerns and negotiating on behalf of the developing world at such conferences. An example is when global responsibility for emissions of greenhouse gases were initially calculated using nations as units. This invisibilized the history of heavy emissions of developed countries during their phase of early industrialization and their presently high per-capita resource consumption. India, along with other densely populated, post-colonial nations, highlighted the injustice of this and demanded recognition of history and calculation of per-capita consumption rather than overall numbers.

Many post-colonial societies are also most vulnerable to Climate Change-induced effects such as frequent extreme weather events. Intense excessive rainfall and extreme drought have been seen in many countries, as have glacier melts and shifting of appropriate zones for agriculture. Combined with poor planning, several such events have already resulted in loss of lives and resources. In addition to Climate Change, rapid loss of biodiversity, deforestation and other significant land-use changes, acidification of oceans, loss of fresh water, increase in aerosols in atmosphere, disruption and change in nitrogen and phosphorous cycles, chemical pollution, and ozone depletion are concerns that affect all nations. While these are global concerns that affect earth system, individual nations are already dealing with their many local impacts.

Capitalist transformation of agriculture in post-colonial period has resulted in serious agrarian crisis, combining mutually reinforcing ecological degradation, political and social challenges. Capitalist agriculture relies on mechanized, intensively irrigated, fertilizer and pesticide-dependent monoculture cropping on

large farms catering to fluctuating global market demands to generate profit. Intensive and rapid extraction of resources is in the nature of this process and combined with deep structural inequalities it has had disastrous impacts in many developing societies. While generating quick profits for large farmers in short-term, this capitalist agrarian transformation also resulted in falling water tables, salination, loss of soil fertility and virulent mutated pests that affected both economic and ecological sustainability of agriculture. It also hastened a process of violent de-peasantization in some regions. Aggressive expansion of biofuel crops in developing countries was a response to emergence of biofuels as a sustainable alternative to fossil-fuels in developed global North. Land grabs that crowded out small farmers and adverse impacts on food crops cultivation are some of its recorded collateral damages. In Indian context the highly financialized agrarian transformation inaugurated by Green Revolution resulted in high levels of farmer debt and, in turn, suicides in context of crop and market collapses and long-term ecological damages.

Urbanization is another characteristic pattern of capitalist development. Urban pollution has emerged as a major environmental concern with serious health impacts for residents. Indian and Chinese cities consistently feature among cities with most polluted air in the world, creating health emergencies. Unsustainable planning and infrastructure development, high consumptive capacity of sections of urban population, massive and increasing private transport, wind and weather patterns form a deadly cocktail in these cities, severely affecting health and lives of all urban residents. Water and sanitation are other major concerns in cities that bridge development-environment divide. These concerns have also illuminated interlinkages between health and environment.

Air pollution is pervasive in Indian cities with high health, environmental and economic costs. India's capital city of Delhi is considered to have world's most toxic air because of high concentrations of PM 2.5 (Particulate Matter less than 2.5 micrometres in diameter) that penetrates deeply into lungs. Devastating impact on people's health with high rates of respiratory diseases especially among children, lowered life expectancy, high health costs, negative impacts on ecosystem and economic impacts as well are well known. Constantly increasing numbers of fossil-fuel burning in private vehicles is a major contributor apart from industrial pollution. This is further seasonally compounded by dust storms, forest fires and open post-harvest burning of crop stubble in surrounding region. Over decades several efforts to contain this danger has been made, including shutting down and shifting of hazardous industries that were located within the city, moving entire public transport system and taxi services from diesel to CNG fuel, expanding metro train infrastructure, restricting use of diesel generators, banning the burning of trash and dry leaves, banning post-harvest stubble burning in regions adjacent to the city, seasonal use of an odd-even policy where use of private cars is regulated to alternate days based on their registration number and so on. The problem has generated attention at all levels, from individuals who suffer drastic consequences to policy makers, political leaders, judges and bureaucrats who are personally exposed in the capital city, to international media

who have highlighted visibility of Delhi smog from outer space. An entire market associated with dealing with the problem at individual-private level such as room air purifiers, filtration face masks and nebulizers has emerged. However, integration between the form of development and environmental change and health of human and non-human nature becomes particularly evident in this apparently intractable problem.

Capitalist development inseparable from economic growth and pursuit of profit at all costs has come under much scrutiny, given the severe threats to human and non-human well-being that became particularly visible in developing societies. With environmental fallouts increasing production costs, sustainability concerns have also entered capitalist lexicon with Green Economy and Green Finance becoming popular. Green Economy is defined as environmentally responsible economic growth that supports development as well as incorporates both sustainability and justice concerns. This has been widely criticized as a smokescreen that ignores fundamental causes of unsustainability; the unrelenting pursuit of profit based on expanding growth is intrinsic to capitalism. This logic of capitalism has created a rift in metabolic relation between human and non-human nature and its reparation requires more revolutionary systemic transformations.

In this context, number of scholars have critiqued the very conception of development as material and financial growth driven by consumption, commodification and capitalism. The problem with development is not merely in its implementation which may be reformed but in its way of thinking-termed developmentality or developmentalism. Development is defined as means to achieve desirable change in society and there is much more attention today on what is desirable and the process of achieving this. Degrowth movements with their base in developed societies have called for prioritization of social and ecological well-being that challenges excess consumption and corporate profits for redistribution rather than material growth and for emphasis on care, solidarity, autonomy and environmental justice. Alternatively, several countries in Latin America have embraced indigenous concept of Buen Vivir (living well or good living) that is rooted in community, ecology, culture and a spiritual connection to land. Recognition of indigenous cultures as not only equal but providing an alternative vision of development is a radical shift from a long history of cultural genocide in the context of development. Similarly, rejecting mainstream conservation of a pure nature untouched by humans, conservationists are increasingly understanding, appreciating and accepting messy sustainability of human-non-human life worlds. Environmental concerns are not separate from development concerns and they increasingly integrate ideas of justice, redistribution and democracy in conservation context.

Check Your Progress Exercise

1. Comment on citizen voices and environmental movements in post-independence India against anti-environment capitalist extraction and resource degradation.

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2. Fill in the blanks:

a) _____ was a techno-social package that came with US funding, influence and technology and transformed agricultural technology and agrarian relations in post-colonial India.

b) Article ____ of Indian constitution says that state shall protect and improve environment and safeguard forests and wildlife of the country.

c) _____ continues to be primary forest legislation in independent India.

d) United Nations in 1983 set up _____ to examine possibilities of economic growth without environmental damage.

e) India was a signatory to _____ in 1987 on substances that deplete Ozone layer.

10.6 SUMMARY

You have read in this Unit that development projects can have negative environmental consequences. It is time for a real attempt at balance. We need to plan for long-term preservation of forests and wildlife in developing India while simultaneously improving efficiency of resource-use. Clearances for development projects in India and elsewhere should not be at the cost of compromised environmental assessments or dilution of existing norms of protection and conservation of environment. Relevant environmental laws must be upheld and implemented in fair and transparent manner.

10.7 KEY WORDS

Climate Change: Long-term change in earth's climate, especially a change due to increase in average atmospheric pressure.

Green Economy: Environmentally responsible economic growth that supports socio-economic development as well as incorporates both sustainability and justice concerns.

10.8 ANSWERS TO CHECK YOUR PROGRESS EXERCISE

1. See Section 10.4. Throw light on movements like Chipko and Narmada Bachao.
2. a) Green Revolution, b) 48, c) Indian Forest Act of 1927, d) Brundtland Commission, e) Montreal Protocol

10.9 SUGGESTED READINGS

Arnold, David and Ramachandra Guha (1995) (Eds.), *Nature, Culture, Imperialism: Essays on the Environmental History of South Asia*. New Delhi: Oxford University Press.

Gadgil, Madhav (2001), *Ecological Journeys: The Science and Politics of Conservation in India*. New Delhi: Permanent Black.

Gadgil, Madhav and Ramachandra Guha (1993), *My Fissured Land*. Berkeley University of California Press.

Laine, Nicolas and T. B. Subba (2014), *Nature, Environment and Society Conservation Governance and Transformation in India*. Orient Blackswan.

Mandala, Vijay Ramdas (2015), 'The Raj and the Paradoxes of Wildlife Conservation: British Attitudes and Expediencies'. *The Historical Journal*, Vol. 58, No. 01, pp. 75-110.

Rangarajan, Mahesh (1996). 'Environmental Histories of South Asia: A Review Essay'. *Environment and History*, No. 2, South Asia Special Issue (June 1996), pp. 129-43.

Fisher, M. H. (2018). *An Environmental History of India: From Earliest Times to the Twenty-First Century*. Cambridge University Press.