POLITICAL ECONOMY OF DEVELOPMENT AND ENVIRONMENT IN MODERN INDIA

Velayutham Saravanan

ROUTLEDGE

Political Economy of Development and Environment in Modern India

This book captures the complexities of both development and environment, from the political economy point of view, to offer a broad economic and environmental history of post-independence India. It analyses the various components of constitutional provisions, policies, programmes and ecology protection measures during the post-independence period, that is, 1947–2020. The author also investigates India's land and forest policies of the 21st century: Fair Compensation of Land Acquisition, Rehabilitation and Resettlement Act 2013 and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006, which pose a great threat to ecology and the environment. The volume argues how, on one hand, the development agenda has undermined the environmental components for the first three decades of independence and, on the other hand, how the popular vote bank politics further has aggravated the issues related to environment in India.

This book is an essential interdisciplinary resource for scholars and researchers of history, economic history, environmental studies, environmental history, Indian history and development studies.

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Preface

In the democratic system, political economy has played an important role to ensure both economic development and the protection of the environment and ecology. Invariably, developed countries have managed to accomplish, or rather achieve, these twin objectives, particularly from the late 20th century onwards. In other words, most developed countries have not only improved their living standards, which means economic development, but also managed to sustain ecology and the environment since the late 20th century. For example, in European countries, living standards have improved while ecology and the environment have also been safeguarded from the late 20th and the early 21st centuries onwards. Developed countries have brought more and more areas under the forests, which is one of the factors in the preservation of ecology and the environment. In most of the developed countries, particularly European countries, the area under forest cover has increased during the late 20th and early 21st centuries. It is not only the developed countries that have brought more area under the forest cover and, at the same time, ensured the stability of the population growth. In fact, in most developed countries, the population growth rate has remained either constant, or even negative in some cases. At the same time, the life expectancy of the people has increased remarkably. For instance, the Japanese people's longevity is more than 90 years and is one of the highest in the world.

Of course, these developed countries have extracted and exploited the resources from their colonies since the late 18th century, which has made a significant contribution to their progress of invention and innovation. In other words, the resources mobilised from the other countries have facilitated design and improvement. In addition to these resources, the knowledge base from the colonies has also strengthened further as an added advantage to these countries. For instance, the Grand *Anicut* in the Cauvery River, Kalingarayan *Anicut* in the Bhavani River and Tajewala Barrage diversion in the Yamuna River have given insight and knowledge to the British to build their irrigation projects in the Indian subcontinent. In India, Sir Arthur Thomas Cotton has intensively explored building dams across the rivers in different parts of the country since the early 19th century. Consequently, not only were

such resources being exploited by the colonies of the European nations, but also, the solid experience they have gained from their colonies has resulted in the improvement in the standards of living of their peoples and, also, simultaneously taught them to safeguard ecology and the environment.

Developed countries have extracted different kinds of natural resources from their colonies and have exploited the environment and ecology to their convenience. Unfortunately, they are now alleging developing countries as the reason behind the deterioration of ecology and the environment and even attributed global warming, the melting of the Arctic Ocean and the holes in the ozone layers to them. Given the macro-level picture, it is paramount to see how the impact of India's political economy has affected the development and the environment during the post-independence period, that is, 1947–2020.

The Preamble of the Constitution of India has defined the nation as 'Sovereign Socialist Secular Democratic Republic.' It further envisages the importance of promoting different social groups' interests and privileges for their development. It means that the disparities and discrepancies that have prevailed among different social, religious and caste groups need to be eradicated to establish the socialistic pattern of society through an appropriate policy mechanism. The pertinent question is whether we have achieved these objectives or not and is a point to ponder!

At the time of independence, more than half of the population lived below the poverty line due to its low productivity, lack of irrigation facilities and use of traditional technology in the entire production process. Consequently, the life expectancy of the people was also very low, that is, around 40 to 45 years. In addition to this, the social sector and other infrastructural facilities were also very poor. Social sectors like education and health infrastructural facilities were also very poor and other infrastructural facilities like banking, roads and transport were very limited. Consequently, the need to increase productivity to eradicate poverty through the expansion of areas under cultivation and irrigation facilities, coupled with improvement in the social sector and other infrastructural facilities, has become the prime agenda of post-independence India. While attempting to achieve these objectives, post-independence India's political economy was neither able to eradicate poverty nor reduced inequality due to the popular vote bank politics. Not only has poverty eradication become a distant dream, but there has been considerable environmental damage as well, caused by the process of development, which has also posed further threat to a wider range of environment and ecology-related issues.

This book attempts to capture how the political economy of India has deviated from these agendas and made a negative impact on economic development and the environment due to the popular politics in the post-independence era. In other words, the impact of the political economy on the development and protection of the environment and ecology remains the focus of the argument of the book.

Acknowledgements

The idea of this manuscript emerged after I authored five books, viz. *Colonialism, Environment and Tribals in South India, 1792–1947* (2017)*; Environmental History and Tribals in Modern India* (2018)*; Water and the Environmental History of Modern India* (2020); *Environmental History of Modern India: Land, Population, Technology and Development* (2022); and *Colonialism and Wildlife: An Environmental History of Modern India* (2023). After publishing these works over five years, I have realised the importance of understanding the complexity of economic development and the environment from the political economy point of view. In other words, how the political economy of post-independence India dealt with both economic development and the environment and the factors that have influenced the process over the last seven decades (1947–2020) is the subject matter of this book.

While developing this project, I had several discussions with my friends and fellow academicians, which benefitted me immensely to refine my thoughts. However, my heartfelt thanks to my family members, especially my wife, Ajitha Saravanan; my daughter, Soumya Saravanan; and my sons, Gautham Saravanan and Manish Saravanan. I must say, their immense support during the pandemic situation, in keeping domestic peace and discipline, equally contributed towards my dedication to explore the issues related to environmental history during the contemporary period.

Velayutham Saravanan

Acronyms

DMK	Dravida Munnetra Kazhagam
FAO	Food and Agriculture Organisation
FIR	first information report
GDP	gross domestic product
HDR	Human Development Report
HYV	high-yielding variety
INS	Indian National Congress
ITDP	Integrated Tribal Development Project
KWH	kilowatt hour
LPG	liquefied petroleum gas
Mld	million litres per day
MoEF	Ministry of Environment and Forest
MPs	Members of Parliament
NMML	Nehru Memorial Museum and Library
NSSO	National Sample Survey Organisation
SCs	Scheduled Castes
SIA	social impact assessment
STs	Scheduled Tribes
TPD	tons per day
USA	United States of America

Measurement

1 kilometre (km)	1,000 metres (m), or 0.6214 miles
1 mile	1,760 yards, or 1.609 km
1 acre	0.4047 ha
1 crore	10 million
1 million	10 lakhs
1 lakh	100,000

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1 Introduction

Economic development and environmental protection seldom go together, as both of them are interdependent and interrelated and impact on each other. Hence, sustainable management of these two has become a great challenge in different parts of the world. According to Brundtland:

> Environment and development are not separate challenges; they are inexorably linked. Development cannot subsist upon a deteriorating environmental resource base; the environment cannot be protected when growth leaves out of account the costs of environmental destruction. These problems cannot be treated separately by fragmented institutions and policies. They are linked in a complex system of cause and effect.[1]

This challenge has further grown and intensified due to population explosion and the political economy of the decision-making process both for economic development and environmental protection, invariably in different parts of the world in general and both in the developed, developing and less-developed countries in particular. In fact, since the mid-20th century, the challenge has become a common phenomenon invariably both in developed, developing and less-developed countries. In other words, the challenge—how to sustain the natural resources in general and wildlife and other biodiversity resources in particular, while undertaking the economic development in different parts of the world—has become a subject of contention and debate.

It is a fact that economic development cannot be possible without using natural resources and that will affect the natural resources in general and the environment and biodiversity resources in particular. The complexity of interconnectedness has been further compounded by population explosion and the political economy of the decision-making process in democratic electoral politics, particularly since the mid-20th century, in different parts of the world, both in the developed, the developing and also the less-developed countries. Both economic development and environmental protection are complicated and the need to ensure sustainable development has been

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complicated by factors like population explosion, poverty and provision of various infrastructural facilities without disturbing the given natural resources of a particular geographical region.[2]

Theoretically, the foundation for environmental economics or environment-related issues is the theory of 'market failure,' which will not include the 'externalities' or 'spillover effect,' in the production process of the economic development. However, it is a fact known that the prices are determined at an interaction point of demand and supply in the market. This kind of transaction can be explained with a wide range of examples. For instance, at a labour *chowk* (junction), particularly in the urban areas, labour would demand higher wages in the morning and after that, once time is running out, the same labour would be willing to work at a lower wage, which is a common phenomenon in most of the urban centres. In other words, at 8:00 AM, if the labourer demanded Rs.700, in case he is not able to get the work till 11:00 AM, he will be ready to work for even, say, Rs.500 or Rs.400. If the demand for labour is high, the wage rates will go up and if the demand is not there, the wage rate will come down and *vice versa*. That is how labour market transactions are in operation.

Yet another example which became more important in the history of electoral democracy of India that has challenged several governments during the post-independence era is the onion. Farmers will grow more onions when prices go up and more and more onions come into the market and then the prices will come down. Once the prices decline, farmers will not grow onion until prices go up. Let me give a very simple example that everyone might have experienced in their day-to-day market transactions with vegetable vendors. In the morning, vegetable vendors will demand higher prices and in the late evening, they are prepared to sell off at lower prices. So the market is operating on the basic principle of demand and supply, where prices are fixed at a given point in time. From the environmental point of view, let me give a couple of examples. One is that we are wearing a colourful dress. When we are buying the dresses, we are not paying for the environmental damages that is caused in the process of making a colourful dress and the sellers also do not include the environmental damages done in the entire production process. In other words, neither the buyer nor the seller is concerned about the 'externalities' while fixing the price of the commodities. The damages that occurs towards the environment are becoming a 'social cost' and leaving a scar to causality factors of environmental damages. Likewise, we are wearing shoes, but in the production process, damages are done to the environment, but neither the leather manufacturers nor the buyers meet the cost. Precisely, the process of determining the prices through the principles of the market mechanism has completely undermined the 'externalities' or 'spillover effect' in the production process of the economy. This entire transaction in the production process is known as 'externalities' or 'spillover effect' in environmental economics. In other words, the outcomes that were not taken into the process of determining the

prices of the product are the foundation for environmental economics and other environment-related issues.

1.1 Extraction of Natural Resources for Livelihood until the Late 18th Century

Until the late 18th century or colonial annexation, natural resources, including wildlife, were mainly used for the livelihood of the local people and were never extracted with commercial motives, even if they have extracted that, too, only to a limited extent, from the diplomatic point of view than that of the commercial motives.[3] Since AD 1 and until AD 2000, various estimates of the croplands at the global level show that they have increased remarkably. These estimates further indicate that from AD 1 to AD 1400, 1.9 to 2.3 million square kilometres of land were classified as croplands. In other words, over the 14 centuries, croplands have increased only marginally. Beginning with the 18th–20th centuries, croplands have increased gradually from 2.7 to 4.1 million sq. kms in 1700 to 4.0 to 6.8 million sq. kms in 1800. Since the mid-19th century, the croplands have increased remarkably.[4] The pastoral land also varied until the 14th century and has marginally increased till mid-19th century. Thereafter, it has increased four to fivefold in the subsequent one and a half centuries. Precisely, both croplands and pastoral lands were very negligible until the 14th century and have only marginally increased until the mid-19th century and in the subsequent one and a half centuries, they have increased several-folds.

1.2 Colonialism and Exploitation of Natural Resources

Colonialism has made havoc on the natural resources in different colonies across the world in general and the Indian subcontinent in particular. In human history, hunting and gathering were an integral part of human survival throughout the world, although they have maintained the wildlife to survive. In other words, people hunted the wildlife for their livelihood and certainly, commercialisation was not their intention. Even the commercialisation component was there, but that was only at a limited scale within a region. But Europeans have made hunting an integral part of their project, mainly for commercial ventures. In other words, the Britishers were one of them and the only hunting community in the modern world who destroyed the wildlife from the 9th century onwards in different parts of the world, particularly after mid-18th century in the Indian subcontinent. Hunting was an integral part of the Britishers, who served in the Indian subcontinent from the late 18th century to mid-20th century.[5]

Almost about ten centuries ago, from the 9th century to the 19th century, European expeditions to explore natural resources in different parts of the world were a constant phenomenon. Initially, they have moved towards the northwest, then Africa, America, South America, India and

the rest of the world.[6] Initially, they have started with trade and commerce and later, they have colonised those countries.[7] Not only did they establish the colonies, but they also started extracting the natural resources of the colonies for their commercial interest, which resulted in the accumulation of resources for invention and innovation, which has led to the Industrial Revolution during the late 18th century and continued till mid-19th century.[8] Not only the natural resources in general but also the wildlife in particular were destroyed for their commercial project as well as for their consumption from the mid-18th century to the mid-20th century. To commercialise wildlife products, industries were developed, such as Van Ingen & Van Ingen and a wide range of wildlife products exported to other countries during the same period.[9]

Until the early 18th century, population growth was not at all a problem and livelihood was managed mainly at the subsistence level, invariably in different parts of the world, including the European countries. Until the early 18th century, population growth was also very low and their needs were also very limited due to the lack of technical know-how.[10] Human longevity was also very low. Since the late 18th century, when the Industrial Revolution took place in England, other European countries and the United States of America and until the last quarter of the 20th century, nations were never concerned about the environmental consequences of the production process meant for economic development. Industrially developed countries have extracted natural resources from the colonies and have converted them into commodities through technological applications without considering the environmental consequences.[11] At the same time, they have put restrictions on the native people's access to natural resources.[12] Not only have they restricted access to natural resources, but they have also designed the timely strategies to exclude the local people from accessing the wildlife resources. But they have managed to modify the forest and wildlife laws for their game and commodification interests since the late 18th century in different parts of the Indian subcontinent.[13]

Apparently, the Industrial Revolution that has occurred in developed countries from the late 18th century was the main perpetrator for the environmental damage done across the world that was an ongoing feature for more than two centuries or till the mid-20th century. Since the mid-20th century, most of the colonies got freedom and have started to design the development strategy for their own country. For instance, the broad objective of the economic planning of India is to ensure rapid economic growth, removal of poverty and unemployment, reduction of economic inequalities, self-reliance, balanced regional development and employment generation. Because 'Indian agriculture was traditional and stagnant in every respect. It was characterized by the feudal land relations, primitive technology and resultant low productivity per hectare.'[14] Given the background, the political economy of post-independence India has further deteriorated on a wide

range of issues not only at the macro-level but also at the micro-level, such as environment, society, polity, gender and labour, due to popular vote bank politics.[15]

1.3 Debate on Development and the Environment

The debate on development and the environment can be broadly classified into two categories: pro-growth and anti-growth. The former argues that economic development is important to increase the per capita income in order to protect the environment and the latter one holds the view that unforeseen development of economy has caused a lot of damage to the environment. In other words, the pro-growth proponents argue that economic development and the redistribution of resources are essential for environmental protection. As against this view, the anti-growth proponents claim that the very development itself will damage the environment. Antle and Heidebrink (1995) claim that:

> The environmental transition hypothesis states that economic growth is likely to be accompanied by environmental degradation at low income levels, but as income grows the demand for envilow—income protection also tends to increase, leading to a development path characterized by both economic growth and environmental quality improvement.[16]

However, it is unfortunate to note that both the development economists and environmental economists did not arrive at a constructive viewpoint to manage both the economic development and environment to ensure sustainability since the mid-20th century. Lundberg points out that '[i]n recent history and especially during the twentieth century, man's exploitation of natural resources has assumed new proportions, raising the questions of the survival and future of mankind.'[17] It has led to a wide disparity in terms of consumption patterns. For example:

> An average person in North America consumes almost 20 times as much as a person in India or China and 60–70 times more than a person in Bangladesh. It is plainly impossible for the world as a whole to sustain a Western level of consumption for all.[18]

Antle and Heidebrink (1995) point out that:

> It is surprising that despite the postwar growth of development economics, the genesis of environmental economics and the fusion of ideas from both fields into the theme of sustainable development, economists have not made much progress in describing the impacts of long-term economic growth on environmental quality.[19]

This debate was placed even at the international forum to address the importance of sustainable resources management. According to Antle and Heidebrink (1995):

> Yet a vigorous public debate has arisen between individuals who maintain that environmental degradation is a necessary outcome of economic growth and those who believe that economic growth and environmental quality go hand in hand. This debate was highlighted at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro.[20]

At present, invariably, both developed and developing countries, or low- and high-income countries, are very much concerned about the outcomes of development on the environment from the policy perspective.[21] They further added that the interdisciplinary and integrated approach is needed to deal with the complex issues of both development and environment at the macro-level.[22] Bernstam pointed out that:

> In the 1970s and 1980s, an amazing bifurcation took place in the trends in resource use and pollution within the developed industrial world. This divergence between Western market economies and socialist economies of the Soviet Union and Eastern Europe went virtually unnoticed. Yet, if it is not a medium—term fluke, it may signify the most important reversal in economic and environmental history since the Industrial Revolution.[23]

He further argued that:

> The amounts of throughput of major resources and the ensuing discharges of air, water and soil pollution began to decline rapidly across nations with competitive market economies. This is despite, or rather because of, further economic growth in Western market countries.[24]

Unfortunately, the interdisciplinary and integrated approach has never emerged to deal with the complex problems and we have disintegrated and isolated to address the issues and problems at the macro-level.[25] Regrettably, these issues were confined only at the micro-level and the macro-level aspects failed to address the issues.[26] Myers further suggested that an integrated and interdisciplinary approach is required to address the problems not only at the country level but also at the global level.[27] If the problem is not addressed appropriately, it will create further problems to manage natural resources. He signalled to us that 'one problem interacting with another problem does not produce a double problem but a super problem.'[28]

Myers was also concerned about population growth and its consequences on the environment. '[P]opulation growth is one of the issues