Kanchan Chopra

Development and Environmental Policy in India

The Last Few Decades

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For my grandchildren
Ananaya and Aarit

Preface

Issues relating to the environment seem to be caught in an impasse as of now. When we look around, it seems as though they are attracting more and more attention. Little children in different parts of the world seem to be very aware of the environment, the significance of the web of life, interrelationships of species and human and non-human and so on. Curriculums world-wide stress these aspects.

In international forums, climate change, pollution and biodiversity attract attention and so does talk of the planet Earth, our one and only home. However, governments of nation states pay lip service to these understandings and go on nevertheless with 'business as usual' with primary indices of their economic success being GDP rates of growth. Corporates focus on profit too, to the neglect of all else, with a few honourable exceptions. A great deal on ecosystems and the planet Earth is, of course, talked about within the ivory towers of academia.

At the same time, we are told that academics interact very little with the world at large. They only write papers for journals read by a small number of their peer group. New ideas are thus not communicated as widely as they should. This is indeed cause for concern. However, when I look back at 30 years and more in academics, I think that many of us always focused on the policy implications of our work. The following questions therefore arise: Did our work impact thinking in government, corporate and activist circles? If it did not, why so? Did we, academics, learn from them?

Understanding this journey of interaction between different segments of society is itself a study in the evolution of policy. More so, because issues relating to the environment were new both in research and in policy, with activism being a strong voice linking the two. The motivation for writing this brief is purely one of attempting to document this interaction with respect to different sectors relating to the environment.

I have collected many debts in the course of my academic journey. This brief has evolved out of research over three decades but also equally out of talks and discussions with several friends and colleagues. Parts of it have been read and commented on by Vikram Dayal, Purnamita Dasgupta and Nandan Nawn. I am thankful to them for their lucid comments which were very helpful. Over the years, my erstwhile

colleagues at the Institute of Economic Growth have contributed to my thinking in substantial ways. The IEG provided an environment for academic innovation and new thinking, and I benefitted in no small measure. Simultaneously, my interactions with a peer group spread across many continents were enabled by my associations with the Beijer Institute of Ecological Economics in Stockholm, the International Centre for Theoretical Physics at Trieste and the South Asian Network for Development and Environmental Economics. The meetings of the International Society for Ecological Economics and the 5-year association with the Millennium Ecosystem Assessment further strengthened these interactions. I owe a great deal to a large number of individuals, far too many to list. I will not even try to do it.

The brief would not have been written without the persistent support of Sagarika Ghosh at Springer. I am thankful to her.

My family has been a constant source of support in my academic undertakings. My husband, Om, has withstood many hours of my absence and preoccupation with ungrudging indulgence. So have my children, Piyush and Priyanka, and their spouses.

However, wise use of our planetary resources is all about holding them in trust for the future. And so, this brief volume is for my grandchildren, Ananaya and Aarit, in the hope that their generation does better than ours on this count as well.

Gurgaon, India   Kanchan Chopra
January 27, 2017

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Chapter 1
Development and Environmental Policy

1.1 Introduction

Policy in India, economic, environmental or any other (as indeed in any country), is the outcome of a process consisting of several steps. Firstly, the underlying political principles outlined in the country's Constitution and the broad pattern of thinking of the government of the day define an overarching perspective. This often results in 'policy documents', with focus on specific sectors of the economy. Such documents are also influenced by academic developments on the issues involved, both national and international, but always (in a democracy) with an eye on votes, the common man's perspective and the position taken by dominant stakeholders. The next steps in the process consist of the framing of Acts and Rules including details of economic and legal interventions (such as taxes, subsidies and judicial processes).

Framing these details is essentially an administrative process, though rooted in prevalent knowledge. The dependence on political positioning and administrative processes holds true in even more glaring detail of environmental policy. Often this happens because the knowledge aspects are controversial and evolving. Such undue significance of political positioning is also often due to the remoteness of environmental issues to the common man and the existence of several vested interests in favour of an extractive approach. At this juncture, civil society could play a significant role by launching parallel political pressures, through knowledge dissemination and, sometimes, grassroots protest movements. Learning from the grassroots, documented over time, or international understandings could also influence the process. In this volume, we propose to study the evolution of environmental policy in India in the last three decades in the context of the influences mentioned above. We do this against the backdrop of a continuing focus on development, an overarching metaphor in the political economy of India.

The analysis is motivated by a set of questions asked within the context of the policy framework enunciated from time to time. Did the policy move in the direction of recognition of the different roles played by the environment? Were

corresponding acts and rules passed to enable implementation? Simultaneously, was there a bottom-up learning that permeated the policy process in a lateral manner due to an understanding of grassroots reality or civil society understanding? Was the process impacted by the existence of environmental movements and protests? And finally, did international pressures or influences shape the policy directions?

In this chapter, we begin with a brief foray into the nature of development, an idea that has dominated the public space for at least the last seven decades. The next section examines the nature of policy responses, one particular subset of human responses to an issue. It also looks at the decision-making cycle and its internalisation of stakeholder responses through an iterative process. This analysis is then viewed in the context of linked sociological systems. The latter sections examine the development process in India and the evolution of environmental issues as areas of concern as development proceeded. Turning points in the evolution of environmental policy are examined and possible drivers identified.

1.2 The Context of Development: The World View

Development, seen as a desired national objective, has overshadowed all else for the last 70 years or more, in almost all nations of the world. In the discourse in the South in particular, the concept has pervaded almost all policy discussion. We can think of at least three interpretations of development in this context: (a) a growth in the availability of goods and services to the average citizen, (b) an increase in his/her capability to acquire the same through better entitlements and (c) better livelihoods to ensure better capabilities.

As expected, the meanings attached to the term 'development' and its interpretation changed from time to time. In the earlier phases, the vision implicit in the nonconflict-ridden and somewhat simplistic Rostowian notions of 'stages of growth' of the 1950s promised all a share in the coming abundance. The dependency school, on the other hand, emphasised the responsibility of the industrial heartland in the North for the poverty of the South. Such a viewpoint introduced a degree of confrontation between the North and the South in the pursuit of development. A new dimension was introduced by the notion of 'development as fulfilment of basic needs'. The Human Development Report of 1991[1] took another step forward when it stated 'the basic objective of human development is to enlarge the range of peoples' choices to make development more democratic and participatory'. The notion of letting people decide their own future rather than defining their needs for them had entered the discourse. Simultaneously, in the eighties and nineties, issues relating to the environment were entering the discourse on a much larger scale than ever before, at least at the international level. After the first Rio conference of 1992, 'sustainable development' became the universally lauded goal. Everyone joined in the hope that policies could be found which would make development humane,

[1] See UNDP (1991).

inclusive and environment friendly. Synergies between development, resource conservation and their wise use provided the byword for good policy, be it in the context of international conventions or national policy pronouncements.

However, increasing populations of nations added to demand for resources. Together with this, increasing inequality and its portrayal in the media focussed on the resource-intensive lifestyles of the rich. Markets catered to these lifestyles and 'sustainability' came to be critiqued as a distant goal incapable of achievement, as long as the dominant system supported market led affluence. Parallel to these developments was the renewed focus on growth and the increase in globalisation. Both these trends claimed that poverty could be reduced through top-down proliferation of growth in production of goods and services, in other words, high rates of GDP growth. By the first decade of the twenty-first century, this had become the perceived way to go. And to accommodate environmental issues into such an approach, the notion of 'green growth' has been introduced, mainly in a top-down manner by national governments and international organisations.[2] In opposition to the concept of sustainable development which emerged out civil society engagement, green growth has been introduced in a top-down manner as a vision to be moved towards by technocrats. If at all 'green growth' as a concept has to provide policy direction, it will have to do more than keep environmental issues in the focus of attention. It should assist in moulding environmental policy in directions that assist in resource conservation and pollution abatement. We still do not know enough to comment on whether green growth can take us far.

Whatever be the shade of meaning that we attach to the terms, it is definitely true that the seductive power of 'growth' and 'development' stays with us.[3] No politician or economist can choose to ignore it, in particular when it is portrayed as leading to lower poverty in low- and middle-income countries. Rist argues that 'sixty years after the international community set its sights on extending development to the South, it has not happened'. One can disagree with the above statement on a number of counts. It is not true that in all instances, development has been an agenda foisted on the South by the international community. Democratically elected governments in the South have owned the agenda as their own. So the onus for its success or failure falls squarely on their shoulders as well. Further, it is also true that some progress in the design of improving the lot of the poorer nations has occurred. Extreme poverty and hunger have been alleviated, albeit to a limited extent. One could claim that this has been at a considerable cost, in particular environmental cost. But that is a different matter.

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[2] See the paper by Bleuming and Yun in Dale, Mathai and De Oliveira edited (2016).

[3] For more on this, see Rist (2002). By way of explanation, he says, 'by power to seduce in every sense of the term, to charm, to please, to fascinate, to turn away from the truth, to deceive'.

1.3   Responses and Policy Responses: The Conceptual Underpinnings

Most development plans are accompanied by stated policy objectives. Such policy is understood to mean governmental responses to and plans for development. In general, governmental policy is a subset of a range of human responses to given situations.

Responses are outcomes of human decisions, and they influence and change the key connecting links between elements of development and a range of other systems including ecosystems (otherwise called the environment), the focus of interest in this volume. These responses determine how individuals, communities, nations and international agencies intervene or strategise, ostensibly in their own interests, to use, manage and conserve ecosystems. Depending on the decision-making entity, categorisation of responses could differ. They could be individual, societal, national or international.

Policy responses, one among several kinds of human responses, refer to policy as outlined by an entity with power, legal or social to define the course of action of a social or political entity. The source of authority of the entity could be legal as in the case of national governments or social as in the case of communities with jurisdiction over natural resources. Or it could stem from agreements between national governments on specific issues. Needless to say, policy responses reflect in a sense the aggregation of individual responses.

From a short-term, administrative or political economy perspective, policy-making cycles are said to consist of agenda setting, policy design, implementation and review.[4] Such a view assumes that agenda setting is preceded by taking into account research (and its findings from different stakeholder's perspectives). One would assume also that assessment and monitoring is a part of implementation and review. The Millennium Assessment framework is more comprehensive and treats the dynamic working of each of these, i.e. research, assessment and monitoring are significant components of the decision-making cycle.[5]

Decision-making starts by identifying a problem, followed by collating the research findings in defining and choosing policy options. In setting out the policy options, alternative world views as depicted by the state of knowledge are taken into account. Selection among these policy options is a two-stage process which in the first stage identifies *binding constraints*, which may be political, economic or social, depending on the context. These binding constraints rule out some policy options. As an extreme example, genocide to solve the overpopulation problem would not be an acceptable policy option in most contexts.

From among the feasible options, costs associated with the implementation of different policy options are determined (sometimes intuitively). These determine the *acceptable trade-offs* which determine selection of policies, which are then

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[4] See IPBES (2016). The summary for policymakers refers to this as the policy cycle.
[5] See MEA (2005) Volume 3, Report of the Policy Responses Group.
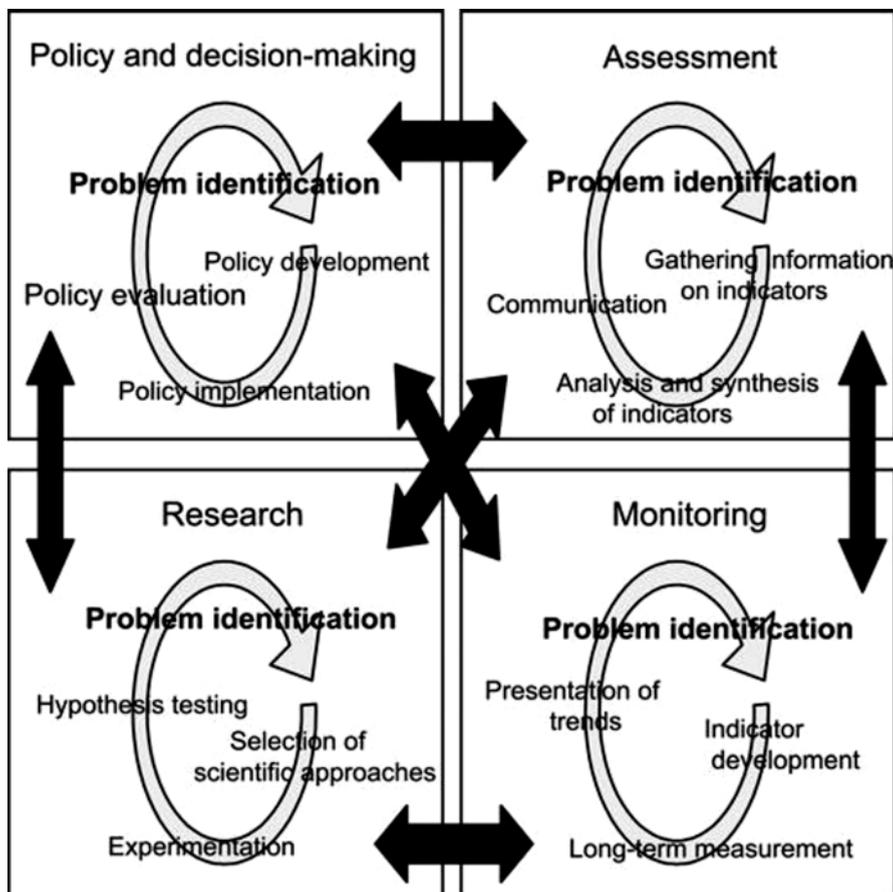
Fig. 1.1 The iterative policy making cycle

implemented (using processes and governance mechanisms available). Finally policies are evaluated for their effectiveness. Monitoring of the successes and failures enables this evaluation and constitutes the feedback mechanism which links one chain of the iterative process of decision-making to the next. It requires feedback from all stakeholders, and if the monitoring is based on partial knowledge or biased feedback, the next component of the iteration may not improve on the earlier one. And the iterative process leads to the identification of another set of problems. These may be targeted at newer issues or older ones so as to improve the effectiveness of earlier policy responses. As shown in Fig. 1.1 (adopted from the MA), research, assessment, monitoring and policy-making are all components of a continuing interactive process to support selection and implementation of responses.

The process is iterative and involves interaction with information providers.

Ideally, the decision-making cycle entails obtaining feedback from all categories of stakeholders. Similar loops exist for the research, monitoring and assessment process.

Each has its characteristic objectives, approaches and dynamics. Under the best circumstances, research insights should yield adequate monitoring networks and indicators of change, to be taken up for assessment towards an informed decision process.

Understandably, the dynamics and timing of each of these cycles do not always evolve in perfect coordination with each other. The dynamic nature of information exchange and feedback to and from these processes and their stakeholders are integral to developing responses. This implies that decision-making processes are liable to change over time to improve effectiveness. A number of mechanisms can facilitate this.

In the above diagram, the multiple ways in which research, policy and implementation are linked are illustrated. Ideally there exist two-way causations and linkages between the four subsquares in the diagram. Each of the four squares, research, policy- and decision-making, monitoring and finally assessment, could function in isolation from each other or in tandem with each other. In the real world, something like a mix between the two extremes occurs.

1.4 Policy-Making and Linked Social-Ecological Systems

The analysis of policy and policy-making processes has gone a long way in social science. Some advances are of particular interest from our point of view. One takes account of the fact that people whose lives policy intends to target through the drawing up of laws and rules are active decision-makers in their own right. As Colander and Kupers put it, 'those very (policy) choices will themselves influence the dynamics of the system, as well as people's tastes and preferences. It won't be the same system once the policies are under way, and that very fact can bring about both opportunities and unforeseen consequences'.[6]

The changed dynamics consequent on policy intervention introduces new institutions of the state as stakeholders, be they the executive, the legislature or the judiciary. There may be different levels of centralisation (or decentralisation) at which these function. Successive changes introduced at different levels result in iterations of interaction and consequences both between these governmental institutions and with other stakeholders, e.g. the resource owners, the consumers and the users of resources. Interrelated economic and social systems make policy drafting and execution a complex affair.

Outside these societal interactions but heavily influenced by the decisions and the events are the ecosystems: the rivers, the lakes, the forests and the fields as well as the urban ecosystems. These bear the impact of the execution of policy and the

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[6] See Collander and Kupers (2014) Chapter 1.

growth or conservation that follows. By the very nature of these natural ecosystems, the impact is of different kinds. At times, the ecosystem state changes slowly, and its functioning left unaffected by the increased extractive use, the additional pollution or at times the additional conservation. At other times, the ecosystem may undergo a sudden regime shift and lose its functional capacity, undermining its capability to produce for further human consumption. Ideally policy needs to be able to tell the difference in these two situations, with some degree of certainty. Close association between policymakers and scientists should make this happen.

In this volume we ask how decision-making cycles of policy responses in the context of environmental policy in India have functioned. Have they constituted iterative cycles with learning from one integrated into the other? Alternatively, have they even learnt from empirical evidence, international agendas and progress in knowledge bases or feedback from civil society?

1.5   The Backdrop in India up to the 1980s: Development, Equity and Poverty Alleviation

Development has been at the core of the government's economic policy in India since the 1950s. From the formulation of the First Five-Year Plan in 1951 to the ongoing current Twelfth Plan (2012–2017), development has been the primary concern. In the economic lexicon, equity and poverty alleviation come next as the metaphor around which economic policy has been framed.

Policies and Acts *in the early years after independence* reflect this focus on equity and development. We look at the Plan documents in the first instance. The First Five-Year Plan says in its introduction: 'The urge to economic and social change under present conditions comes from the fact of poverty and of inequalities in income, wealth and opportunity…….. the two have to be considered together'. Both poverty and inequality need to be eliminated simultaneously. As for natural resources, they appear as an asset, a resource, to be exploited. Note the following, from Chapter 1 of the First Plan: 'An underdeveloped economy is characterized by coexistence in greater or lesser degree of underutilized manpower on the one hand and of unexploited natural resources on the other'.

Interestingly, however, even in the First Plan, the chapters on 'Forests and Soil Conservation' do exhibit an understanding of the many services available from nature. In the case of forests, it is stated, 'Forests are important sources of fuel, raw materials…. provide material for defence ……. help in the conservation of soil fertility and play a role in the maintenance of the water regime of the land'.[7]*But these appear only as overarching statements.* The dominant paradigm remained that of harnessing resources, such as water for development, large dams being the centrepiece. The Second Plan and later plans moved in the direction of industrialisation

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[7] See Government of India (1952), Chapter 21 for Forests and Chapter 22 for Soil Conservation.

with natural resources being treated more and more as extractive resources, be it coal, iron ore or oil.

The Second Plan was conceived in an atmosphere of economic stability. It was felt agriculture could be accorded lower priority. The Plan therefore focussed on rapid industrialisation with a focus on heavy and basic industries. The Industrial Policy 1956 was based on establishment of a *socialistic pattern of society* as the goal of economic policy.

With a few ups and downs due to extraneous factors (such as armed conflict), the stated objectives in the Plans continued to be growth and poverty eradication. At times employment creation or foreign exchange conservation was thrown in as the situation demanded but nowhere, in these early years, do we find a reference to probable linkages between environmental conservation and poverty alleviation and the need for environmental policy. Forest degradation as an issue receives an occasional mention. Water resources were significant, to be harnessed for agriculture and provision of drinking water was a top priority. Appears occasionally. Achieving higher rates of investment and significant growth in domestic savings continued to be the major objectives of the plans that followed. Poverty alleviation and a better distribution of income were mentioned occasionally. See, for instance, the objectives of the Third Plan in which the following is stated as one of its objectives: 'to establish progressively greater equality of opportunity and to bring about reduction in disparities in income and wealth and a more even distribution of economic power'.

The Fourth Plan (1969–1974) document contains a reference to the lack of an environmental aspect in planning and development[8]. To quote, 'It is necessary to introduce an environmental aspect into our planning and development. At present there is no point in the structure of government where the environmental aspects receive attention in an integrated manner…… these deficiencies have to be overcome before any advance can be made'. It was around this time that the UN Stockholm Summit on the environment was held in 1972, and the Indian Prime Minister in her statement asked: 'Are not poverty and need the greatest polluters?' This is again emblematic of the continued primacy of the fight against poverty over environmental issues in Indian politics. The Fifth Plan (1974–1979) continued the focus on poverty removal (*garibi hatao)* and self-reliance. Promotion of high rate of growth, better distribution of income and significant growth in the domestic rate of savings were seen as key instruments for achieving this.

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[8] See Chapter 2 of the Fourth Plan on 'the long-term perspective' for details.

1.6   The Decade of the 1980s: The Rise of Environmental Concerns Within the Government

The decade of the 1980s witnessed the rise of concerns with regard to the environment within the government in India. Prior to this, the Wildlife Protection Act had been passed in 1972, and a few acts and rules on water and air quality existed. These were the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981. The Forest Conservation Act was enacted in 1980 and Air (Prevention and Control of Pollution) Act in 1981. A full-fledged Department of Environment was set up in 1980. But it was in 1984 that a Ministry for Environment and Forests was created. These were like the first green shoots. Around 1985, the National Wasteland Development Board was set up. At the same time, the first plan to clean the Ganga was initiated. The Environment Protection Act came in 1986. But all this was still about steps being taken parallel to the mainstream efforts at development.

At the macro policy level, the Sixth and Seventh Plans were ongoing from 1980–1985 and 1985–1990, respectively. How did they look at these issues? The Sixth Plan focussed on objectives such as an increase in national income, modernisation soft technology, ensuring continuous decrease in poverty and unemployment through schemes for transferring skills (TRYSEM) and assets (IRDP) and providing slack season employment (NREP), controlling population explosion, etc. Broadly, the Sixth Plan could be taken as a success as most of the targets were realised even though during the last year (1984–1985) many parts of the country faced severe famine conditions and agricultural output was less than the record output of the previous year. The Seventh Plan was deemed to be very successful as the economy recorded 6% growth rate against the targeted 5% with the decade of the 1980s struggling out of the so-called Hindu rate of growth of 3%. The imperatives of planning in the country continued to be (overwhelmingly) the achievement of a high growth rate and the creation of employment. It was the decade when liberalisation had been started, though in a piecemeal and partial manner and growth was at the centre of attention.

Nevertheless, indications of an understanding on environmental issues and the need for an overall perspective at the centre on it were also seen. The 1980s was the decade that saw the setting up of the Ministry of Environment and Forests (MOEF) in 1984 and the enactment of the Environment Protection Act (1986). Some analysts claim this happened in the aftermath of the Bhopal Gas Tragedy (1984). Difficulties had been faced in claiming compensation from Union Carbide in the absence of legislation relating to storing, handling and use of hazardous substances and a law to provide immediate compensation to victims of industrial accidents. The focus of the Act on pollution, hazardous circumstances and the like seems to confirm this. The outstanding characteristics of environmental legislation in this period were (a) it was centralised and (b) it viewed the environment as wildlife, birds and beasts and at best water. It was ppiecemeal legislation in these areas in an ad hoc fashion.