

Chapter 2

Land and Forest Policy: Resources for Development or Our Natural Resources?

2.1 The Issue

Land, water and forests dominate the range of natural resources significant in India's development. These resources have also been at the centre of several policy interventions: policy declarations, acts and rules as well as incentivising and restraining tax and subsidy structures. Simultaneously, there exists a plethora of literature on the nature of the use of these resources emerging from the social and the natural sciences. Field reality observed by social scientists and their natural science counterparts has been documented extensively in the last three to four decades. In the last few decades, non-governmental organisations in the development sector have also contributed significantly to the understanding from the grassroots on issues related to these sectors. The questions we ask here in this chapter are: Has the policy direction been impacted by the understandings from this literature? What is the empirical learning policy link? Who are the stakeholders and intermediaries who count?

2.2 The Legacy: Centrally Governed Forest Land and Privileged Private Land

Land, when viewed in the official agricultural statistics of India, is divided into several classes. These categories are net sown area, current fallows, fallows other than current, cultivable waste, pastures and other grazing lands, barren and uncultivable land, area put to nonagricultural use and forests. They relate mainly to the use to which land is being put, with net sown area or agricultural land and forest land constituting the larger part of the geographical area. One could reclassify the geographical land area in the country from the perspective of rights over it, with a more nuanced perception of rights. Land can be thought of as (a) privately owned mainly agricultural land; (b) forest land which is mainly government owned; (c) common

land which may be pastureland, village land or fallow, both current and other than current; and (d) privately cultivated land within forests. Further, when we distinguish between ownership rights and user rights, the cross classification between the official categories and the property rights-based categories is closer to the field reality. Community user rights over even privately owned land left fallow (current fallows) may exist. The same is true for government-owned forests which allow grazing rights and even limited fuel collection rights to local communities. This spectrum of rights allows for increases in consumption and welfare of the communities outside of the income generation from privately owned land. The details have been recorded extensively in the literature.

In the policy narratives since independence or even before it, two categories in the above classification dominate: forest land and private agricultural land. Forest land constituted a category where state ownership dominated with pockets of private and common forest land. Legal ownership of about 95% of the forest area was vested with the state. Centrally governed forests had been the target of policy statements since the end of the nineteenth century. After independence, they continued to be seen as the source of a range of goods essential for development. In general, at that stage in the development of the economy, natural resources were viewed as resources mainly for use. Conservation of natural resources was mentioned as an objective of policy only in the context of wildlife and national parks and administered by a central government (through its forest department) in continuation of the colonial state's assumption of its 'eminent domain' over the forested landscape. The National Forest Policy of 1952 placed the needs for national and industrial development above those of the local people. Lele and Menon (2014) notes that 'more lands were brought under the category of reserve forests, and silviculture in state forests was even more emphatically aimed at meeting the industrial needs of a modernising India. ...remarkably this period was not even marked by major protests or debates, as the newly independent state focussed attention elsewhere'.¹

Private agricultural land was the other category which dominated the policy narrative during this period. Roughly 30% of land in India consists of net sown area, or land under agricultural cultivation, which is, in the main, privately owned. Its productivity, measured as agricultural output per unit of land, was perceived to be significant for reduction of poverty through generation of farm incomes and for achieving self-sufficiency in food for the country. Right through the earlier decades after independence, the dominant perhaps the only paradigm of agricultural development was built around increasing agricultural productivity of land. Shah (2014) notes, for instance, 'it is important to note the critical role of land productivity in influencing both income poverty as well as human development, where irrigation is seen as the main driver'. From this perspective, therefore, the focus of policy initiatives was on privately owned land which could contribute to agricultural production. Common land did not enter the dominant discourse of policy.

During the Green Revolution era in agriculture which started from the mid-sixties, priority was given to increasing productivity of land to provide for more

¹ See Lele and Menon (2014) pp. 4–5.

food for the population. Using hybrid seed varieties, fertilisers and surface irrigation was considered the way forward. Extracting more provisioning services from the land and water endowment was the priority in the face of an increasing population and political constraints on imports. Food self-sufficiency was achieved; poverty decreased in Green Revolution regions, but these developments bypassed other large areas, in particular, the dryland regions.

In other words, policies with respect to land and water were focussed on the provision of inputs to facilitate adoption of the new agricultural technology. Expansion of irrigated areas and provision of subsidised fertiliser and water were the focus. Canal irrigation was extended to large tracts with large-scale public investment. This was the time which saw the beginning of subsidised and even free power for agriculture. Given the historical importance of agriculture in India, irrigated agriculture has been highly favoured in receiving disproportionately high fiscal inputs and incentives from the government. This was often at the cost of common property, watershed areas and dryland areas². A dominant farmer lobby had voice at the centre and the states, and its views continued to prevail. A significant and even dominant stakeholder group had been created.

Simultaneously, in the early period after independence, the tenets of social justice in land ownership also entered the considerations of policymakers, though in a limited manner. It happened mainly in the 1950s when legislation related to issues such as the abolition of zamindari, the land reforms and the setting up of cooperative farms was put in place. It was not easy. Land was a 'state subject' under the Constitution of India. And an amendment to the Constitution was required to enable the zamindari abolition to be carried through in the states. Even in the process of this focus on 'social justice', the large variety of institutional arrangements which governed the use of land and forests were very little understood. The overextraction from private zamindari forests following the declaration of their intended takeover by the state was not noted. It was not understood that this overextraction reflected an underlying distrust of the impending state control. This may have been due, in part, to the absence of records regarding detailed user-based property rights on forest land. In the event, the initiatives had a limited degree of success.

2.3 India's Common Lands: An Un-understood and Neglected Category

Common land as a category was little understood in the policy arena up to the 1990s. No specific acts or rules targeted common land in this period. A few studies in the 1980s tried to establish the macro picture with respect to common lands by cross classifying accepted land use categories and common land categories. They

² See Chopra (2016). Her presidential address in 2004, printed in ISAE (2016). Also see Introduction by Sen (2016) in the ISAE volume of 2016. References to common property resources in agriculture came in the presidential addresses of the Indian Agricultural Economics conference only after 1991.

concluded that CPR area was about 21% of geographical area. When looked at statewise, it varied from 10–11% to 30%, with some higher outlying values too.³ Further, both ecologists and the few economists who examined issues from a field-oriented perspective concluded that degradation happened when property rights were in the hands of the state with very little concern given to participation of local communities and recognition of their traditional rights.⁴ Even up to the late 1980s, these field level realities did not find reflection in government policy.

Simultaneously, poverty reduction in the wake of the agriculture-led growth of the 1960s and 1970s was concentrated in a few regions. Chronic poverty continued to be widespread among both rainfed regions and forests, due to the intrusion on their lifestyles and the absence of an understanding of the nature of their property rights. Pockets of poverty overlapped with those of forest cover.⁵ Significant natural resources were found in forests, under state control and ownership for the most part, but also sometimes within watersheds, waterbodies and common lands under varying degrees of common property or open access. It was documented in the literature of the 1980s and 1990s that CPRs (common property land resources) constituted 20–30% of the land area in arid and semiarid parts of the country, that they supported the poor in times of distress and contributed to consumption also in normal times. A consumption of products from forests and waterbodies by the poor prevented starvation and contained hunger, in the presence of poverty. No policy initiatives took this dependence into account. We find therefore that the concentration of agricultural growth in a few of the irrigated river valleys of the country and a lack of understanding of the nature of property and user rights in forested and other common lands of the country constituted a double whammy for the people of these regions. It prevented reduction in poverty by the agency of the new technology, and it took away from them the fall back option of dependence on common lands in times of distress.

As it happened, ‘traditional rights’ whether of the user rights variety or of the ownership rights and privileges type had evolved over centuries and had been shaped over time, sometimes impacted by the preceding centuries of colonial rule. Interestingly, the British did not tamper too much with the structures that existed in large tribal and forest regions of the country.⁶ This complex network of property rights that governed access to and ownership of land was not understood in policy circles, even in independent India. *The only concerns which found expression in the legislation on land of that period related to privately owned land and perceived economic development emerging from it.*

It is interesting to note that this neglect of large sections of land rights happened when rural India was perceived to be of prime importance in the political reckoning of the dominant ruling party. The dominant stakeholders in the rural countryside

³ See Chapter 2 of Chopra et al. (1990) for estimates.

⁴ Jodha (1986), Chopra et al. (1990)

⁵ Several studies during that period documented this.

⁶ See the study by Upadhyaya et al. (2006) for details of rights, privileges and concessions in the state of Himachal Pradesh.

were owners of agricultural land, and the world view of the government with respect to agriculture fitted into their interests.

2.4 Taking Partial Cognisance of Field Reality: Change Through the JFM and Watershed Guidelines in the 1990s

Following on the Chipko movement of the 1970s and the initial experiments in West Bengal, Haryana and Jharkhand, the significance of managing forests with communities was understood. The decade of the 1990s was significant from the viewpoint of new initiatives in forest and watershed development policy and guidelines. Joint Forest Management, in a number of different hues, was adopted in the early years of this decade. The June 1990 circular from the central government to the states asking them to involve local communities in forest management was an upshot of different developments, some of which we list below:

1. Different initiatives of improved conservation with local participation at local levels, documented by academics and activists.
2. Forward-looking foresters were a part of some of these initiatives, e.g. in Bengal⁷.
3. A forward-looking perspective of the government of the day, first spelt out in the National Forest Policy (1988) and then in the Guidelines for Watershed Development Government of India (1992) both of which followed also internalised some principles of participatory development.

The Joint Forest Management initiatives and their recognition by the governments of several states resulted in several varieties of partnerships between the state and people in the management of forests. The rather innocuous-looking DO order of 1990 heralded the beginning of a limited understanding in policy circles. The significance of a range of issues relating to ownership rights, user rights and traditional privileges on forest and common land entered the gambit of discussion in the policy arena. Note that this took place through an understanding of the 'forest land' and 'water' route. Several states adopted one or the other form of Joint Forest Management, and by 2010, the central government claimed that more than one-third of the forest estate in the country was under participatory management.

In parallel, the watershed was recognised as an ecological unit for analysis and action by the Watershed Guidelines of 1992 (as a consequence of the Hanumantha Rao Committee report). These guidelines even mandated the setting up of an institutional structure with peoples' participation at the core, prior to the release of any government funds for the development of watersheds. It seemed that there was a willingness within the government to accept new modes of thinking. The state

⁷Chatterjee, among others, (1996) documents the factors involved in the Arabari experiment in West Bengal.

seemed responsive to the diverse critiques of NGOs, social activists and transnational funding agencies. The watershed programme met with considerable degree of success in different states. In particular, in Madhya Pradesh, the programme was converted into the mission mode. As commented upon by Hanumantha Rao, 'the single most important factor accounting for the positive impact of the watershed development under the government sponsored programme ... is community participation and decentralisation of programme administration made possible under the new guidelines. This has come about on account of political and bureaucratic commitment to the new strategy'.⁸ The 1990s saw the beginning of some change.

An important, albeit contestable source of that change was the National Forest Policy (1988) which was at the time hailed as a forward-looking one. In stating its objectives, it said that 'the principle aim should be to ensure environmental stability and ecological balance..... The derivation of direct economic benefit must be subordinated to this principal aim'. However, the statement of objectives included several others, without any attempt at prioritisation 'increasing productivity of forests for meeting essential national needs, meeting requirements of fuel-wood, fodder, minor forest produce and small timber of rural and tribal populations' and even 'checking the extension of sand-dunes in the deserts of Rajasthan'.

A contradiction of sorts emerges when we look at this shopping list kind of listing, in particular in conjunction with the different Acts and Rules enacted from time to time. While such a contradiction characterises many aspects of environmental policy, the next section views the forest sector in depth to illustrate the confounding implications and the scope it created for judicial intervention.

2.5 Forests as a Case Study: A Story of Policies, Acts, Rules and Judicial Intervention

Three interlinked components constitute the focus of interventions by governments: overarching policy statements, usually enunciated at the centre; laws passed that give substance to the policy and rules, often laid out both by the centre; and states which guide the nitty-gritty of action on the ground. The National Forest Policy (1988) and the institutional changes represented by JFM and the Watershed Guidelines exemplified the first. However, the evolution of acts and rules in the next two decades tells another story. There existed an overconcern in policy circles with two forest-related issues: its conversion to non-forest land and its extractive potential in terms of fuelwood, fodder and non-timber forest products. Such a focus led to several anomalies creating a space for judicial intervention.

The Forest Act (1980) and the subsequent rules (including the Forest Conservation Rules, 2003) increased sequentially central control over procedures for conversion of forest to non-forest land. Note that the Act of 1980 said: 'No state government or

⁸ See Hanumantha Rao (2000). It is a different matter how these worked out in practice. Several writers have commented on it. Note in particular Baviskar (2008).

any other authority, or any other authority shall make, except with the prior approval of the Central government any order directing.....that any forest land or any portion thereof be used for any non-forest purpose..' implying that all proposals for conversion had to go to the central government. By 2003, more detailed procedures for appointment of the committee to approve such conversion had been laid down.⁹

The principles behind the introduction of the JFM and the Watershed Guidelines which referred to more decentralised management and the above centralisation are in direct conflict. There seemed to exist two parallel tracks in policy on forest management. Principles of joint management and community involvement took account of ground reality as studied and reflected in academic and civil society debate. But when it came to enacting law and rules, however, several factors militated. Among them are:

- (a) The sheer absence of trust in local communities and their capabilities to manage forests
- (b) The inherent faith that the government knows best
- (c) The coming together of interests of more vocal groups such as industry and mining
- (d) The unshakeable faith that these groups represent development, partly due to the absence of alternative paradigms of development

2.6 The Judiciary in Forest Policy

The conflicting threads in forest and land policy gave rise to possibilities of differential interpretations. This was compounded by the large diversity of situations over which uniform rules were sought to be imposed. In the event, another critical voice became that of the judiciary, represented by the Supreme Court which started taking unequivocal stands. Given the legally enforceable nature of its pronouncements, these had a long-standing impact on public policy on natural resource issues. So much so that a case filed in a court of law in 1995 became an important landmark in the forestry policy debate. For the next decade and more, the *Godavarman* case of 1995 became the pivot of almost all discussions around forest policy.¹⁰

Note what Rosencranz et al. (2007)¹¹ say on the matter, 'In 1995, T.N. Godavarman Thirumulpad filed a writ petition with the Supreme Court of India to protect the Nilgiris forest land from deforestation by illegal timber operations. The Supreme Court expanded the *Godavarman* case from a matter of ceasing illegal operations in one forest into a reformation of the entire country's forest policy. In its first order on

⁹ See Government of India (2004).

¹⁰ See Lele and Menon (2014) who wish foresters and policymakers to look beyond JFM, *Godavarman* and tigers as the three focal points of forest policy.

¹¹ See Rosencranz et al. (2007) for an in-depth analysis.

the *Godavarman* case, the Court suspended tree felling across the entire country, paralyzing wood-based industries. Despite a series of subsequent orders with far-reaching implications, the case is still pending in the Supreme Court. In the process of hearing over 800 interlocutory applications since 1996, the Court has assumed the roles of policymaker, administrator of policy, and interpreter of law’.

It was claimed that through the *Godavarman* case, the Supreme Court had assumed a legislative role. The consequence of this position taken by the court was, among other things, the December 1996 order which extended the boundaries of forest areas and defined what it called ‘forest-like areas’. This interpretation came in conflict with existing legal classifications of land in several states and resulted in several further conjectures, among them by mining and other non-forest interests.¹²

In time, the Supreme Court (SC) also found that the increased micro management of the vast forests of the country had become more and more intractable. *The court had entered into a territory too complex and diversified for its centralised interpretation and control.* In 2002, it set up its own Central Empowered Committee (CEC). Another institution had been created which was to have ramifications for policy in the future.

Conversion of forest land and amounts to be paid for it continued to be the central issue in forest-related litigation. The CEC in particular brought concepts such as net present value (NPV) into the jargon. The SC again appointed an Expert Committee in 2005 to throw light on matters of contention, in particular the understanding that amounts paid for conversion of forest land to non-forest use were miniscule in particular when compared to the value of the ecosystem services of forest land.

The first decade of the twenty-first century thus saw a nod by the highest court of the land in the direction of the new understanding from academia on forests and their ecosystem services.

Though the findings of the Expert Committee¹³ were diluted considerably by the time acceptable levels of NPV payments were recommended, a process had been set in motion.

This was the first time after 1990/1992 that new understandings from ecosystem studies had been imported into the policy domain. Additionally, a continuity in inputs from the ivory towers of academe had been ensured. The committee for revision of NPV rates which submitted its report in 2015 bears testimony to this.

One of the consequences of this happenstance was the continuing debate on the distribution of the funds collected under CAMPA (as a consequence of the imposition of NPV for conversion of forest land) between the states, the centre and the local bodies. Local bodies were more or less left out of the reckoning and a great deal of attention given to the distribution between the centre and the states.

¹² See the discussion in Khanna (2014), in particular relating to controversies over ‘orange areas’ in Madhya Pradesh and certain areas notified under Sections 4 and 5 of the Punjab Land Preservation Act (1900).

¹³ See Chopra et al. (2006) for details of the recommendations.

Meanwhile, the old mindset of focussing on fund distribution as a measure of success remained. The State CAMPA funds were set up as a result of the 2009 order being passed (amount collected at the centre was 30,000 crores at that time), and the *amicus curiae* promptly told the court that the fund released to states was more than the combined budget of all state forest departments. The questions arise: Are we measuring success through money collected and dispersed? Or was NPV meant to be an economic deterrent to forest conversion? The original intention behind collection of the funds in CAMPA had been forgotten.

2.7 And What of Institutional Change to Decentralised Community Management?

Old mindsets and earlier administrative structures also continue to come in the way of JFM and watershed programmes. JFM turned out to be a top-down initiative which came before its time, with not enough readiness for it, either at the governmental level or the community level. It was not truly participative in its conception as the forest department held the veto of dismissing the managing committee and the key position of secretary was to be with the forest department. Not enough work had been done with communities as well. They were either not prepared or not interested in working out all the design rules that had been left to their domain. This may even have been, in some cases, due to a lack of trust in the forest department originating in the overall authority that it continued to exercise. The legal basis is also claimed to be weak as the arrangement failed to grant security of rights.¹⁴ In a sense then, it could be said to be flawed in terms of its institutional design.

This almost overriding criticism of JFM in practice (based on various factors such as the absence of legal status for forest protection committees, government's right to dissolve them, unilateral inappropriate sharing, etc.) is in sharp contrast to the early enthusiasm expressed by analysts about it. Poffenberger et al., for instance, had claimed that 'it had brought in a reversal of the alienation of forest peoples' rights, of institutional conflict and of ecological patterns of forest degradation'. They claimed also that it could be replicated across regions and states.

To go back one step for perspective, forest user group committees had existed in selected areas of the country much earlier. The Van Panchayats of Uttar Pradesh, the community forestry of Orissa and joint management initiated in West Bengal and parts of Haryana are examples. In the early phases, it was thought that JFM would replicate them. This expectation did not take into account the long-term sociological, legal and cultural dimensions required for the evolution of institutions.

Further and more importantly, a uniform semi-legal structure binding two unequal partners could not be expected to replace the existing dynamics of power

¹⁴ Some commentators claimed that the short-run benefits offered by JFM do not act as additional incentives as they are no different from traditional rights which some communities enjoyed under '*nistar*'.

relations between communities and the forest department. The consequence as expected was that they succeeded partially in very limited pockets where the change expected of the stakeholders was gradual.

As stated earlier, watershed development programmes were adopted in several states. The mission mode in which it was adopted in Madhya Pradesh was spectacular. Its operation, in particular in the district of Jhabua, was heralded initially as the reinvention of governmental and non-governmental institutions.¹⁵ Baviskar (2008) documents however 'the multiple ways in which the mission is appropriated by the situated knowledge and orientations of these actors.(state actors and villagers). An ecologically-rational rendering of the mission is superseded by the tricky tasks of negotiating with tenurial conflicts, troublemakers and administrative tenets'.¹⁶

In hindsight, too much was expected from both JFM and watershed management. They were thought of as a kind of 'panacea' for ending conflicts between the forest department and the people and for increasing forest productivity. Extensive literature on policy-making now tells us that 'panaceas' and 'thought of panaceas' often fail, the reason being the complex dynamics of the manner in which different stakeholders respond to the intervention.¹⁷ And the stakeholders in the forestry sector had inherited more power and information. They called the shots in the partnership. Extensive documentation and information dissemination by activists and academics and the process of development and with it the spread of literacy among the population changed the scenario. But this happened slowly and will take time.

2.8 The Tilt Towards Growth: To and Fro Movement

The last decade of the twentieth century and the first one of the twenty-first also saw a great deal happening in the academic arena as far as forests were concerned. Concepts such as ecosystem services of forests had made headway internationally. Academia in India had been exposed to a great deal of this thinking, and individual studies on valuation of forests had internalised these approaches. The late 1990s had seen the World Bank's capacity building programme, an academic initiative which ran across several institutions in the country giving a thrust to the manner in which sociologists, economists and others thought of the environment. It had been a heady time for academic thinking on environmental issues internationally. And forests and water occupied pride of place in matters Indian academics wanted to research on.

A proliferation of stakeholders with voice in forest governance had indeed taken place. And the role of the courts had accentuated the process. *Court intervention being a long-drawn affair added to the number of stakeholders and processes to be followed. Meanwhile, short duration and fast operating market forces create their*

¹⁵ See Agarwal (1998) and Agarwal et al. (1999).

¹⁶ For details see Baviskar in Chopra and Rao edited (2008).

¹⁷ See Brock and Carpenter (2007) PNAS.

own stake in the interest of faster use of natural capital and this increases the degradation.

The role of market forces saw a strong resurgence in the first and second decades of the twenty-first century. The old somewhat hesitatingly created communal and participatory structures and rules remained and were paid lip service to but were being slowly, almost imperceptibly, being compromised with in the name of development. A few examples are given below to illustrate this.

The NPV Expert Committee of 2006 had mandated certain ‘no-go’ areas where conversion of forest land for no-forest use would not be permissible. In the implementation of the revised report (revised by the CEA), this principle was compromised. Further, in the Verma Committee report (2014), revision of rates for forests was extended to all categories of forests, in effect negating the principle of some forests being irreplaceable. The weak sustainability principle had been accepted, even as the per acre value of forests had increased considerably.

The case of the Western Ghats provides another instance of government priorities moving away from conservation of pristine areas. Several committees over the years have been mandated to ‘identify parameters for designating ecologically sensitive areas’ in the country: the Sen Committee report way back in September 2000, the Committee on Inviolable Forest Areas in 2012 and, in the context of the Western Ghats, firstly the Western Ghats Ecology Experts Panel (WGEPP), set up by the MOEF in March 2010, and then the High-Level Working Group (HLWG) under the chairmanship of K Kasturirangan, which submitted its report in 2013. Each of the committees recommended that ecologically sensitive areas be left untouched, albeit with differences in detail on extent.¹⁸

After the submission of each of these reports, the government adopted an approach of silence for a considerable period of time. The Gadgil Committee report was put in the public domain only after a judicial intervention. In November 2013, almost 8 months after the submission of the HLWG report, the MOEF accepted it ‘in principle’ and decided to go ahead with the implementation of its recommendations. However, in unseemly haste, the MOEF through an order issued on December 20, 2013, stated that a final decision would be taken only after consultation with the states. And this took place, when the views of the state governments had already been elicited by the HLWG itself. As of 2016, the to and fro between state governments and the central ministry continues.

A similar scenario is being played out in the Aravali region of Haryana. The anomalies introduced by depending on economic incentives and valuation exercises emerge clearly when we examine land valuation in peri-urban fringes, such as the Aravalis. Driven by high rates of urbanisation, the demand for land for urban construction and infrastructure pushes the price of land to very high levels. Undoubtedly these are higher than ‘traditional’ valuation of the provisioning ecosystem services (or sometimes even regulating and recreational) provided by these lands. And so the

¹⁸ For more details on the two Western Ghats committees, see Chapter 4, Section VII Expert Committees, Political Economy and Policy Making: The Western Ghats case. See also Chopra (2014).

tensions at the interface between value of land for different uses and by different stakeholders are rapidly increasing. In the face of a huge demand from urban use, driven by purchasing power, retaining land for agricultural or ecological use is not going to be easy. The underlying asymmetries in the distribution of income, information and power result in a very high ability to pay of urban developers leading to high-demand-driven prices. *Therefore, while valuation of land for different ecosystem services may provide additional inputs, an understanding that there exist 'invio-late areas', whether for ecological or distributional justice reasons will have to be a critical component of policy.* Current environmental problem-solving requires decision-makers, ecologists and economists to use 'ethical rationality'¹⁹ in addition to the focus on 'scientific or economic rationality', which they have frequently employed in the past. How else do we factor in the loss of natural capital or the loss of livelihoods for people?

2.9 Conclusions: Stakeholders, Participation and Complexities of Public Policy

We are inevitably led to the conclusion that participation by a range of stakeholders with diverse interests can be very procrastinating and deleterious to critical components of the environment and natural capital. The unevenness in the distribution of information, power and material resources results in confrontations which end in decisions antagonistic to issues focussing on the long run. Most environmental concerns, in particular those relating to land and forests, fall in this category.

What should be the policymakers' role in such situations? There is no one panacea that one can have on offer. Brock and Carpenter (2007) talk of adaptive learning by decision-makers as they proceed. Collander and Kupers (2014) go further and comment on the art of public policy in complex social-ecological systems. Governments need to understand that they are parts of such complex systems with polycentric decision-making (a la Ostrom (2009)). Their actions or interventions can only set in motion a series of actions by diverse stakeholders; so they need to 'nudge' the system towards desired directions. And it is important to remember that a large part of the government implementing and adjudicating components are themselves interested parties (looking to 'rent appropriation') in this complex system. So the nudging has to be through a combination of economic incentives, legal restrictions and social norms. Each of these works through different mechanisms and within different time dimensions, hopefully taking the gamut of complex systems in the right direction.

¹⁹ See Chopra (2011) for a more detailed discussion.

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