

Common property resources at the interface of agriculture and forestry policies: before and after 1988

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Abstract: The structural complementarity, in time and space, of private cultivated resources and public or common uncultivated resources is an important characteristic of Indian agrarian systems. The contribution of natural resources and uncultivated lands for the food security of rural populations and for the economic viability of a vast majority of agricultural farms should be taken into consideration for understanding the present and future stakes in Indian agriculture. Recent rehabilitation, actually and figuratively, of the social, juridical and technical engineering capacities of local population, i.e., ethno-sciences, in resources management appears to favour the emergence of a "post-modern" vision for resource management, by empowering communities, with a shift in the power balance by readjusting the global vision conveyed by the State.

Resumen: La complementaridad estructural, tanto temporal como espacial, de los recursos privados cultivados y de los recursos comunes no cultivados es una característica importante de los sistemas agrarios de la India. La contribución de los recursos naturales y las tierras no cultivadas a la seguridad alimentaria de las poblaciones rurales y la viabilidad económica de la gran mayoría de granjas agrícolas debe ser tomada en cuenta con el fin de comprender los riesgos presentes y futuros en la agricultura de la India. La rehabilitación reciente, tanto la real como en sentido figurado, de las capacidades sociales, jurídicas y de ingeniería técnica de las poblaciones locales, es decir, las etnociencias, en el manejo de los recursos, parece favorecer la emergencia de una visión "post-moderna" en el manejo de recursos, a través de la transmisión del poder a las comunidades, con un cambio en el balance de poder por medio del reajuste de la visión global transmitida por el Estado.

Resumo: A complementaridade estrutural, em tempo e espaço, de recursos cultivados privados e recursos não cultivados públicos ou comuns é uma característica importante dos sistemas agrários indianos. A contribuição dos recursos naturais e de terras incultas para a segurança alimentar das populações rurais e para a viabilidade econômica de uma vasta maioria de propriedades agrícolas deve ser tida em conta para a compreensão das questões actuais e futuras da agricultura Indiana. A reabilitação recente, actual e figurativa, i.e., etno-científica, da gestão dos recursos, parece favorecer a emergência de uma visão pós-moderna para a gestão dos recursos, conferindo poderes às comunidades e com uma transferência do balanço de poderes, reajustada com a visão global transmitida pelo Estado.

Key words: Common property resources, forest policy, joint forest management.

Introduction

The importance, role and future of land and renewable resources are key elements for understanding Indian agriculture. About half the geographic area of the Indian subcontinent is currently uncultivated. Despite their contribution to ecology and rural economy, colonial administrators and, later, politicians, bureaucrats and agricultural economists have shown very little interest in this second half until recently. Although economic and social-ecological conditions for managing agricultural, pastoral and forest lands separately were not met, an institutional dichotomy that is as abstract as it is arbitrary was implemented with the "enclosure of the commons" during the colonial period and continued after independence. By pure convention, this dichotomy is the expression as well as the result of colonial administrative organization, of the subordination of long-term ecological constraints to short-term economic benefits and of the transposition of the mental picture of cartographic experts purely and simply to space and territory. However, studies in French-speaking Africa have shown that map should not be allowed to manage territories.

Beyond spaces and resources, it is their management that comes under scrutiny. It is now a well-established fact that proper management is not possible without authority, that is, without some degree of effective capacity of control and exclusion. Therefore, the question of taking charge of the quality of nature comes first from a pragmatic point of view: Who controls what? And then from a legal point of view: Who owns what? As Alain Bertrand of CIRAD-Forêt said with reference to Madagascar, "it is a paradoxical situation where legitimate practices by the locals are viewed as illegal by the administration while legal practices by the administration are viewed as illegitimate by the locals". Thus, the major risk would be the generalization of an open access regime to, and unsustainable use of, resources because of a public sphere without authority and a private sphere without control. One of the current challenges would be to determine the conditions for reconciling "legitimacy" and "legality", rule of law versus vested interests of the state. Since the 1990s, the Ministry of Environment and Forest (MoEF) and Forest Administration have made a shift in this direction by setting up participatory Forest Insti-

tutions and implementing programmes in several states of India.

To summarize, the current concerns are:

- The structural dependence of Indian agricultural production systems vis-à-vis access and usage of natural resources
- The role of the State as general guarantor
- The necessity of a co-management of uncultivated land and renewable resources
- The difficulties in getting the local people to participate
- The new roles assigned to foresters and their administration.

Complementarity between cultivated and uncultivated lands and resources

Indian agriculture has always been based on a structural complementarity, in time and space, between private cultivated resources and public or common uncultivated (pastoral and forest) ones. Indeed, the contribution of natural resources and uncultivated spaces to the food security of rural households and to the economic viability of a great majority of agricultural farms should be taken into account if we wish to understand the current and future stakes in Indian agriculture and the natural resources sector. For historic and legal reasons (food security and self-sufficiency), Indian land and agricultural policies have always favoured cultivated areas and agricultural development at the expense of the conservation of uncultivated resources and spaces. The evolution of land use over the past fifty years demonstrates its importance.

Agricultural land (net cultivated area) currently represents approximately 142 million hectares, that is, about 47% of the total geographical area of the Indian subcontinent. Although successive so-called "agricultural revolutions" (green, yellow and white) and an augmentation of irrigated land have contributed to increased agricultural production in some regions such as Punjab, Haryana, parts of Tamil Nadu, Uttar Pradesh, Rajasthan and West Bengal for certain crops, regional disparities remain important because of the almost exclusive and disproportionate attention paid by public undertakings and Indian research organizations to "modern" agriculture at the expense of traditional agriculture and dry crops. The dream of agricultural economists and policy-

makers of a general agricultural revolution transcending all regions, crop systems and all classes of landowners soon proved to be utopian (Rao 1992). It soon became clear that despite the postulated theoretical neutrality of new agricultural technologies to the size of the farmland, the application of new technologies benefited mainly the large farms (Rao 1992) with good access to irrigation facilities, access to market places to buy inputs and sell their produce.

To a large extent, the mainstream literature on agricultural economics has been instrumental in producing a distorted picture of the agricultural sector. Although the net irrigated area which enables farmers to get two to three crops a year is about 47 million hectares¹ (35% of the net cultivated area), rainfed agriculture is still the dominant mode of agricultural production with 95 million hectares unirrigated (65% of the net cultivated area), subject to the natural variability of monsoon rains and climatic conditions, depending on the intrinsic quality of ecosystems and using large amounts of biomass harvested outside the farm boundaries. Thus, 78.2% of farmers operate less than 2 hectares (0.64 ha on the average²).

Extension of agricultural land is also the result of land reforms implemented since the 1950s and government land grants under several poverty reduction programmes to help landless agriculturists, insufficient holders (small landowners owning less than 5 acres) and other classes of farmers as well. These reforms sought to reserve about 50%³ of the village common lands as "Allotable Pool Land". When all is said and done, village common lands have been the mainstay of agrarian reforms, enabling the poorest farmers among others to improve their livelihood.

In a more diffuse but no less significant way, the extension of agricultural land is also partly due to a land policy of "laissez-faire" and "fait accompli" (Saxena 1995), exacerbated by vote-catching gimmicks from the political milieu, towards illegal encroachments by various categories of the population (indeed, it is difficult to quantify encroachments as land records, especially those dealing with uncultivated lands, are found to have been tampered with and the regularization process

underway is very slow) (Rao 1992). Even today, the expansion of cultivable lands and the official regularization of encroachments still retain a strong political and symbolic resonance in rural areas.

Finally, the pressure of high human and animal population on uncultivated lands and the small size of farmlands (1.57 ha) pose a constant challenge to the conservation of ecosystems, as well as to the subsistence of rural population engaged in the agricultural sector.

The expansion of cultivation on marginal land due to population pressure on land, seen in the smaller number and shortening of agricultural fallow, and the reduction and impoverishment of cultivable waste, forest and pastures, resulted in a gradual privatization of crop residues and in a decline of seasonal grazing on private lands. Moreover, high-yielding crop varieties (HYV) have also reduced the quantity of crop residues for animal rearing.

Reduction in pastures and increasing livestock gradually resulted in overgrazing and degradation of pastures. This has led to the displacement of animals to the forest for grazing (78% of the forest lands are affected by pastures) (Singhal 2001), a fall in natural regeneration and intensified pruning of branches (in the dry season), gradual opening of the canopy and propagation of adventice (*Lantana camara* and *Ageratum* spp). The demand for fuel wood has also contributed to the intensive pruning of branches. Scarcity of fuel wood was compensated by using combustibles of lower quality: dried dung, crop residues and dry leaves at the expense of the fertilization of cultivated land. Over the long run, degradation of pastures and forest ecosystems have resulted in soil erosion by rains, more degraded land (agricultural, pastoral and forest) and disturbed water cycles. From a systemic point of view, the interplay of the various agropastoral, silvopastoral and agrosilvicultural subsystems have been disturbed over the long term, endangering the sustainability of farming systems and of the environment itself.

Four major evolutions in land use are to be noted for the period 1951-1991:

- Expansion of cultivable land (+20%) (probably under-estimated)

1 India represents 18% of the world's irrigated area.

2 Geometric mean.

3 Based on the proportion of barren land and cultivable wasteland available in each village, a fairly large part of the village commons have been bifurcated and have come under formal state control.

- Reduction in fallow, uncultivable waste and pastures (–43%) (probably underestimated)
- Expansion of forest land (and at the same time, a reduction in forest cover) (+67%)
- Expansion of degraded land (N.A.).

Indeed, as V.M. Rao (1992) wrote “Rural India presents the picture of a paradox of mass poverty coexisting with a vast resource potential that is under-utilised”.

Evaluation of the importance of land resources appropriated as common property

In the absence of appropriate statistics on the ownership of uncultivated land, available estimates are rare, controversial and sensitive.

Two kinds of approaches have been implemented:

(i) The legal approach (*de jure*) is the one adopted by the National Sample Survey Organisation (NSSO 1999) for estimating the area⁴ of “village common lands” in the strict sense. The NSSO’s definition (1999) is as follows: ‘accessible resources that are appropriated, possessed and/or managed jointly by a socially identifiable group and over which no single individual has exclusive right’. Accessibility of resources is established by law. A major drawback of this approach is that only those resources lying within the administrative limits of the village (revenue village) and controlled by village institutions (panchayat) have been taken into consideration:

- (i) Village panchayat grazing and pasture lands
- (ii) Village forest and woodlots not under Forest/Revenue Department and Van Panchayat forest
- (iii) Village sites and threshing floors.

Fallows, pastures, cultivable and uncultivable wastelands under the control of the Revenue Department, and forests classified as protected and non-classified forests under the control of the Forest Department within the administrative limits of villages were excluded from the estimates. Hence, there is an important risk of under-estimation that should be taken into consideration.

(ii) The *de facto* approach is the one currently used by social scientists (Chopra & Gulati 2001). This estimate consists in a reclassification of the

nine-fold classification of land use as reported in the Agricultural Land Use Surveys (LUS). It may also be subject to over-estimation and/ or under-estimation from one item to another, as assumptions with respect to both ownership and the dimension of user rights have been made.

The legal and *de facto* approaches are not contradictory but complementary. They help to evaluate the importance of forest and non-forest land resources actually appropriated by rural households and agricultural farmers (*de facto* approach), and those for which rural households and agricultural farmers have user rights which are legally sanctioned and recognised by law (legal approach). The difference between these two approaches thus helps to measure the importance of land resources for which rights are not well specified or which are disputed (except cultivated land used as seasonal commons).

On the whole, besides the 142 million hectares of cultivated land, rural households and farmers currently appropriate some 70 million hectares of uncultivable land as common property, i.e., about half a hectare of uncultivated land for one hectare of cultivated land.

Forest resources

Forest land in India represents 76.52 million ha (23.3% of the total area). Forest land is 95.8% state land (23.8% of the total area). From the juridical point of view, land-based ownership prevails over resource-based ownership (timber and non-timber resources).

Indian forest laws present the paradox of guaranteeing a large number of rights and privileges to the local population and equally important powers to Forest Departments to restrict these rights and privileges in a highly discretionary manner (Singh 2000). In practice, and at the local level, local populations are often dissuaded from exercising their rights and privileges by the forest administration, and more recently by private entrepreneurs, too (Saxena 1997).

The tragedy of forest policies (1952-1988)

From the first Five-Year Plan (1951-1956) onward, the Planning Commission gave the forest

⁴ Estimates made by the NSSO employ data from *Primary Census Abstract* (1991) and *Villages Directory* (1991).

administration the objective of raising the forest cover to 33% of the total geographical area of the country, that is, 60% in the mountains and 20% in the plains. Although it is arbitrary, the achievement of this benevolent objective is an integral part of administrative rhetoric. In reality, territorial control, hegemony of the forest administration over resources and lands and maximization of land revenues governed forest policies until 1988.

Four major periods are generally distinguished in Indian forest policy from 1947 to the present.

In 1952, the forest administration was asked to gradually convert natural mixed-forests composed of diverse useful but low-value species to high-value plantations of commercial species such as teak, pine or eucalyptus (Saxena 1997). The productive vocation of ecosystems would generate revenue for the state and also supply processing industries (especially paper and wood-pulp industries) at lower rates. The first consequence of maintaining the cost of primary materials at an artificially low rate to benefit industries was over-investment, leading to a significant rise in production and to the adoption of unsustainable methods for resource exploitation (Gadgil & Guha 1992). These two authors, like Saxena (1997), observed that subsidized primary materials (wood and forest by-products) and the priority given to the industries sector have greatly reduced the availability of forest resources to the local population and sapped the bases of traditional systems of resource exploitation.

Conforming to these objectives: “village communities are not authorised to use forest resources that go against national interest (industrial development)” (National Forest Policy 1952).

The direction of the forest policy became clear when the National Commission on Agriculture (NCA) pronounced in 1976 that “the production of industrial wood should be the only reason for the existence of forests, and investment projects should be evaluated on the basis of their economic costs and profits. Future programmes should concentrate on clear felling of natural forests of commercial value that were inaccessible until now and should be replaced by fast growing exotic species in order to maximise the yield per unit area” (GOI 1976).

On reading these lines, we are perfectly justified in questioning the meaning of the expression

“scientific and rational management” of resources and the sacrosanct myth of neutrality of science and technology.

Evaluation of policies up to 1988

Since the 1990s, the Indian forest policy was challenged mainly by its results:

- Failure of earlier policies to check the reduction and degradation of the Indian forest cover
- Gradual generalization of open access to forest resources, wild fauna and flora
- The forest administration alone and “against” the local populations does not have the human and financial resources to apply or to respect its policy of resource control versus exclusion of the local population.

The experiences in India and Africa have shown that where management of natural resources is concerned, ‘there is no rule that the actors have not attempted (and succeeded) in contravening’. Thus, ‘the limits of the regulatory approach are evident’ (Karsenty 1999). Besides the various and varied management tools, this statement implies working with processes (negotiation rather than exclusion process) so as to create positive evolutions rather than forcing reality at the cost of a questionable efficiency, on the one hand, and the cost of high economic and human transactions, on the other. As demonstrated by a number of researchers working at CIRAD during the past 10 years, “often it is the negotiations and talks on the objectives (means) and procedures that give some direction to the tools”.

Last but not least, the next challenge of forest policy is its foundation:

- A sectorial, technical, bureaucratic and centralized approach focusing on a policy of a quantitative supply of commodities rather than a qualitative demand of management
- A quasi-military pyramidal organization and martial ethics favouring a policy of repression of the least influential and smallest number of locals who are perceived as an obstruction. The referent of forest administrators is the “tragedy of the commons” and a neo-Malthusian pessimistic view of the relationship between population and resources via an obsolete conception of the carrying capacity of the environment

- The domination and absence of a challenge to the paradigm of “scientific and rational management” of forest resources, a euphemism to justify the hegemonic role of the forest administration in territorial control, management and commercialization of resources, thus excluding any debate on the aims and methods of forestry
- The pre-eminence of monospecific forest plantations making the milieu artificial, rather than managing the existing resources and forest ecosystems
- A marked preference for selecting high-value commercial species, favouring the selection of exotic fast-growing species at the expense of multipurpose endemic species
- Persistence of an urban, subsidized industrial and commercial bias
- Absence of fiscal incentives and economic tools in a way that is attractive for the local people to follow the rules. In fact, the allocation of revenue from forests to the States alone, but not to people and local institutions, which could create a locally powerful lever⁵, have hindered local conservation efforts, economic development and the sustainable management of resources.

Forest policy since 1988: Changes underway

In his speech to the Lok Sabha in early 1988, the Minister for Environment and Forests made the following statement: The forest policy followed since 1952 has partly failed. For the first time the National Forest Policy (1988) recognized the importance of environmental services linked to the existence of forests as an ecological entity. The maintenance of the stability of the ecological functions of forest ecosystems, especially the conservation of soils and water regimes, was recognized as a top priority for forest lands.

In June 1990, the Joint Forest Management (JFM) constituted the first act of administrative decentralization and major institutional innovation in the domain of natural resources, after more than a century of inaction.

Joint Forest Management (JFM): Unexpected gift or poisoned gift?

Participatory forest management officially marked a paradigm shift. The concept of “Care and Share” summarizes the philosophy and spirit driving the reform.

Participatory forest management programmes aim to create institutional, practical and organisational conditions for mutual apprenticeship, dialogue and long-term co-operation between the forest administration and local people through the mediation of a management committee constituted for this purpose.

Besides involving the local people, this change also gives new roles to forest administrators as facilitators, advisers, negotiators, etc., besides their traditional roles of technicians and representatives of law (Rastogi 2000).

It is for this reason that Saxena (1997) emphasized the necessity to train forest administrators who are well-prepared to assume their new functions and to teach a curriculum that has changed in the last 100 years.

Resolutions of 1 June 1990: Following the circulation of the first Memorandum of Understanding (MoU) stating the new orientations of the forest policy of 1988 to the States and Union Territories (UT) in January 1989⁶, circular no. 6.21/89-PP of the Central Government dated 1 June 1990, enjoined the States to set conditions for “massive participation of the local population through village protection committees for the protection, regeneration and development of degraded forest lands”⁷.

An assessment in August 2001 showed the progress made in this direction in 12 years: 27 States had adopted the resolutions, a little more than 14 million hectares of forest land were actually co-managed with the participation of 62,890 village committees. Madhya Pradesh, with a major part of the degraded land and tribal populations of the subcontinent, alone accounted for about 50% of the area included in this programme.

5 Refer to A. Karsenty (1999) *Les instruments économiques de la forêt tropicale: le cas de l'Afrique centrale*, Maisonneuve et Larousse, Cirad, Paris.

6 Letter no. 1/1/88/TMA dated 13 Jan. 1989.

7 See Annexe no. X.

Indicators of advances in Joint Forest Management (JFM)

Despite a quantitative success, this programme suffers from major drawbacks that make observers doubt the effectiveness of the changes underway, as also the desire of the forest administration to reform itself.

The first drawback consists in having restricted areas under co-management only for degraded forests, which is potentially around 36 million hectares. In fact, they concern only degraded forests classified as “protected” and “unclassified” by the forest administration, village forests administered by village committees and those under the jurisdiction of the Revenue Administration. Forests classified as “reserved”, including the best conserved forests and the network of protected areas, national parks, etc., have been excluded.

The immediate consequence of this selection is that it enables the forest administration to gain a certain amount of control over the management of village forests and those under the responsibility of Revenue Administration, which had been excluded until now.

At the same time, the low biomass productivity of degraded forests implies that the conservation effort of the local population, i.e., limiting their current exploitation, comes before they can receive any benefit. Ultimately, a restriction on existing rights was “imposed” in the name of local population by the forest administration, without compensation by provisionally opening up the most productive forests for them. According to the latest resolutions⁸, it is envisaged to extend the scope of management committees to forests classified as “reserved” up to a maximum of 100 ha per village and 20% of the profits from exploitation based on pilot projects.

Finally, the most sceptical observers vis-à-vis the reality of motives of the administration view the obligation of the local communities to form a committee as a means to control and, if necessary, to define the role of its committees.

Saxena (1997) summarizes quite well the ambiguity of participatory forestry (JFM): “I Manage, You Participate: The Saga of Participatory Forest Management in India”⁹. The main outcome of Joint

Forest Management, as it is actually implemented, has consisted in transferring the operational costs of implementing the projects from the administration to the local population (Sharachandra Lele 2000), without involving the targeted population in decision-making processes for determining the objectives of the projects, choice of sites and choice of the means to be employed.

Conclusions

The structural complementarity, in time and space, of private cultivated resources and public or common uncultivated resources is an important characteristic of Indian agrarian systems. The contribution of natural resources and uncultivated lands for the food security of rural population and for the economic viability of a vast majority of agricultural farms should be taken into consideration for understanding the present and future stakes in Indian agriculture.

Recent rehabilitation, actually and figuratively, of the social, juridical and technical engineering capacities of local population, i.e., ethnoscience, in resources management appears to favour the emergence of a “post-modern” vision for resource management by readjusting the global vision conveyed by the State.

At the level of the Indian subcontinent, participatory forest management is actually a process that is qualitatively significant but quantitatively limited (13% of forest land). Although the forest policies followed since 1952 were partly unsuccessful, another forestry programme, however, ambitious it may be, cannot achieve the same results as rewriting the forest laws can. The gap between the nature of the government’s report and the response during the 1990s is, to say the least, disproportionate.

A detailed examination of the changes made in the resolutions in June 1990 shows that the governments have made only minor concessions: “the rights conceded to the local population through committees do not give much more, and sometimes even less depending on the States, than the rights and privileges already given by the forest administration in more than a hundred years on the occasion of forest inventories (Poffenberger & McGean 1996).

8 Circular no. 22-8/2000 dated 21 Feb. 2000.

9 The original title of the book as reviewed in *Wasteland News* (1997) vol. 12, no. 4. The final title of the book is an abridged version: “The Saga of Participatory Forest Management in India”.

Despite the local people's interest in benefiting from the protection and rehabilitation of degraded forests, a huge imbalance in powers explains the central place of the forest administration in these processes as chief and administrator of projects.

Incidentally, effective participation of the local population and the spirit of "sharing" of responsibilities are not very compatible, since the forest administration remains judge and party at the same time.

The exclusive attention paid to the working of the committees, rules and procedures hinders the consideration of the problem of resource management at a broader level. What are the new principles that should govern interventions by the forest administration? What should be the respective roles of protection committees and village committees? Is a reform of rights and traditional privileges feasible? There are still many problems that have not as yet been addressed by joint forest management.

More than the participation of the people themselves, the success of ongoing reforms will depend on both the capacity of the forest administration to reform itself, on the one hand, and on the capacity of legislators to harmonize the various controls, on the other.

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