



Environment & Society Portal



The White Horse Press

Full citation:

Schug, Donald M. "The Bureaucratisation of Forest Management in India." *Environment and History* 6, no. 2 (May 2000): 229–42.
<http://www.environmentandsociety.org/node/3049>.

Rights:

All rights reserved. © The White Horse Press 2000. Except for the quotation of short passages for the purpose of criticism or review, no part of this article may be reprinted or reproduced or utilised in any form or by any electronic, mechanical or other means, including photocopying or recording, or in any information storage or retrieval system, without permission from the publishers. For further information please see <http://www.whpress.co.uk>.

The Bureaucratisation of Forest Management in India

DONALD M. SCHUG

PO Box 37372

Honolulu

Hawai'i 96837, USA

ABSTRACT

Reform and reorientation are words often heard today within government forest administrations. Efforts to change, however, are seldom accompanied by any analysis of the nature and origins of forest bureaucracies and how their structures may resist reform. This paper employs the case of India's forest administration to illustrate how the political-economic environment, authoritarianism and internal culture have militated against forest conservation and the incorporation of rural interests in forest management.

KEYWORDS

India, forestry, colonialism, government, community

Reform and reorientation are words often heard today within government forest administrations around the world. An editorial in a journal issue devoted to the topic of institutional reform in forestry states that foresters are seeking to make changes 'allowing implementation of policies designed to support a more effective, sustainable performance of forestry in economic development and to ensure the sustainable livelihood of rural people' (Dembner 1994: 2). These efforts to change, however, are seldom accompanied by any analysis of the nature and origins of forest bureaucracies and how their structures may resist reform. The present paper employs the case of India's forest administration to illustrate a historical approach to identifying possible ingrained patterns of dysfunctional bureaucratic behaviour. The term forest administration is used here to refer to both the Office of the Inspector-General of Forests in India's central government and the individual forest departments of each of the British-ruled provinces or post-colonial states.

THE IMPERATIVE OF GOVERNMENT CONTROL

During the eighteenth and early nineteenth centuries the British colonial regime in India acquired by conquest and cession vast tracts of forest land. However, by the mid-1800s there was already growing concern within the colonial administration that the government's forest resources were rapidly being depleted in many parts of the sub-continent. British officials attributed the destruction of India's forests to two factors. One was the lack of a conservation ethic among the rural populace. Based on his extensive tours through the country's forests Dietrich Brandis, a German botanist appointed in 1864 to advise the Government, concluded that, 'Hardly in any case has the foresight of the agricultural population induced them to leave forests standing for the supply of timber, fuel, bamboo and other forest produce.' (1897: 64) The second factor was the wasteful and unchecked exploitation of the forests by European timber merchants. As Brandis (1897: 115) succinctly put it: 'Private enterprise at present means European private enterprise, and Europeans in business in India as a rule have one aim only, that is, to get rich as quickly as possible.'

Given the long record of misuse of forest resources by private interests, both Indian and European, many colonial officials shared Brandis' (1897: 32) contention that, 'In India everything tends to show that the State must endeavour to retain as many of the more important forest tracts as possible in its own hands.' But the record of forest exploitation in India had also demonstrated to Brandis and his supporters that government ownership alone offered no guarantee that the remaining forest lands would be adequately protected. For it had been British officials that earlier had contrived to increase government revenues by awarding long-term leases of public forest land to timber syndicates and leaving the lessees to work the tracts as they pleased (Stebbing 1926: 214). What was required, Brandis argued, was that control over the government's forest estate be entrusted to professionally trained individuals capable of managing the forests according to strict scientific principles.

For Brandis the 'scientific conservancy of the forests' demanded that the entire cycle of forestry operations be performed in a rational and systematic manner: from forest formation to harvest and sales. To apply this scheme over an area as large and as ecologically and socially complex as India would require considerable administrative co-ordination and control. Established systems of forest management in Western Europe provided Brandis with a model for such an administrative structure.

Initially, however, the forest administration that Brandis proposed met with opposition from some prominent political officials within the colonial regime (Brandis 1897: 128). The 'gentleman-amateur' ethic that pervaded British society at the time created a suspicion of the need for specialists in government administration (Subramaniam 1988: 89). The practical judgement possessed by the generalist was valued more than the bookish logic of the specialist. Brandis

BUREAUCRATISATION OF FOREST MANAGEMENT

(1897: 127) lamented that, ‘Systematic forestry was a subject entirely foreign to the majority of civil officers ..., they regarded the measures proposed as Utopian, as the outcome of theoretical speculations.’ It is testimony to Brandis’ persuasive abilities that he was able to convince political authorities of the need for scientific forest management. Not the least important of his arguments was that a forest administration would generate an annual surplus of revenue for the government from the sale of timber and other forest products (Brandis 1897: 35). Brandis further argued that a forest administration would promote the welfare of India’s rural population by supplying villagers with the small timber, fuel, grazing land and other forest produce they required (Brandis 1897: 133).

THE BUREAUCRATISATION OF FOREST MANAGEMENT

After Brandis was appointed British India’s first Inspector-General of Forests he spent the next two decades organising a forest administration that resembled a classic Weberian bureaucracy (see Blau and Meyer 1987). Specifically, it was characterised by the following bureaucratic elements:

Hierarchical authority – The staffing pattern of the forest department established within each province consisted of a multi-tier hierarchy (Brandis 1897: 55). At the apex was the ‘superior’ or ‘controlling’ staff comprised of Conservators and Deputy and Assistant Conservators. Conservators presided over the forest operations of an entire province or a circle forming part of a province and served as departmental heads. Circles were divided into a number of divisions each of which formed the charge of a Deputy or Assistant Conservator, who was responsible for the day-to-day management of forests within their jurisdiction. Divisional officers delegated various management and supervisory tasks to the executive staff comprised of Rangers. At the base of the hierarchy were Foresters and Forest Guards whose duties were mainly forest protection activities. Over the years additional levels were added to the organisational structure. In 1917, for example, the post of Chief Conservator was established to supervise Conservators.

Specialisation – As noted above, Brandis was emphatic that the forest administration be directed by highly trained professionals, and he demanded that particular attention be paid to the selection and education of the controlling staff (Brandis 1897: 56). Candidates were required to have a fundamental knowledge of sciences, and probationers received extensive training at European or British forestry schools.

Brandis also proposed that members of the executive service have a good general education and receive a suitable course of instruction in forestry. By 1878, a Ranger school was established in India at Dehra Dun. With regard to the qualifications of the protective staff, Brandis (1897: 57) stated that what was

‘necessary in order to ensure efficiency are local knowledge, a strong constitution, active habits, honesty, and general intelligence’.

Career structure – Brandis insisted that salaries of forest officers be fixed in accordance with the grade of responsibility and that opportunities for promotion be available solely on the basis of seniority and merit (Stebbing 1923: 51). He reasoned that a well-defined system of remuneration and promotion would ensure that the best candidates were attracted to the forest administration and that its officers would be motivated to perform their duties diligently.

Administrative rules – The final defining characteristic of bureaucracy seen in India’s early forest administration is the requirement that members discharge their duties according to a formal system of rules and procedures. Public administration in Britain and its colonies adhered to the Rule of Law which held that statute law should provide the basis of administrative action. The Government of India enacted its first forest legislation in 1865. However, according to commentators at the time, the act was flawed as it did not make a distinction between forests which required to be closely reserved and those which merely needed general control to prevent destructive use. Nor did it provide a procedure for settling and regulating the customary usufruct rights held by individuals and village communities in some forests (Ribbentrop 1900: 98).

A revised act passed in 1878 (and modified in 1927) established a system of forest classification based on the degree of statutory control by the government. ‘Reserved’ forests were those in which private rights were permanently settled or, if necessary, commuted. The settlement specified who the right-holders were, the area over which the rights could be exercised and the nature of the rights, that is, ‘the amount of timber or firewood which a forest annually owes to right-holders ... as well as the number of cattle which may graze on it and the seasons during which they are to be admitted’ (Ribbentrop 1900: 108–9). The duty of deciding which claims might be admitted as a right was entrusted to specially appointed forest settlement officers (Brandis 1897: 134). Forests classified as ‘protected’ were those in which existing rights were recorded but not permanently settled; existing rights could increase and new rights could emerge. In short, the difference between reserved and protected forests was that in the former everything was an offence that was not permitted, while in the latter nothing was an offence that was not prohibited (Government of India 1894).

In addition to being guided by the Forest Act, India’s forest officers were required to develop and follow detailed written plans that prescribed how particular forest tracts were to be managed for a sustained yield (Brandis 1897: 110). Instructions for the preparation of these ‘working plans’ were codified. Once a plan was completed it was formally sanctioned by the provincial government and could be deviated from only with permission from the designated administrative authority (Ribbentrop 1900). Initially, all working plans, previous to being sanctioned by the provincial government, were submitted to

BUREAUCRATISATION OF FOREST MANAGEMENT

the Office of the Inspector-General of Forests for approval (Brandis 1897:155). After 1911, the Chief Conservator checked the plans and oversaw their implementation (Stebbing 1926:297).

BUREAUCRATIC PERFORMANCE

Under the guidance of Brandis and his successors the forest administration had extended its authority throughout British India by the end of the nineteenth century. During the twentieth century the number of forest officers increased from 10,000 to more than 132,000, and the territory under the control of the forest administration swelled to over one-fifth of India's total land area. More, the forest administration today can boast that nearly all of the country's reserved forests are covered by working plans. Yet, Brandis' ideals of bureaucratic administration were not realised either under colonial rule or after Indian independence in 1947. This section draws on Heffron's (1989) discussion of organisation theory to explore the reasons why the administration's own primary values of rationality and efficiency in forest management were often ignored or subverted. Furthermore, the analysis illustrates how bureaucratic control itself contributed to ineffective management of India's forest resources.

Political-Economic Environment

As noted earlier, Brandis defined the mission of India's forest administration to be to manage the forests so as to give a permanent and annually increasing yield in timber and revenue while supplying the surrounding rural populace with the necessary forest produce. From the onset the forest administration found it difficult to balance these two objectives. Many provinces were largely dependent on land and forest revenue for funds for general administration, public works, education and health (Champion and Osmaston 1962: 260). By the end of the nineteenth century, states Edward Stebbing (1926: 345), the forest administration had come 'to be regarded by the Heads of the Civil Administration and by its own Chiefs as a purely commercial concern – its chief *raison d'être* the production of revenue.'

The emphasis on managing state forests for primarily commercial purposes intensified during the first decades of the twentieth century as the colonial regime endeavoured to make India self-sufficient in forest products and expand wood-based industries (Stebbing 1926: 352).

The importance placed on timber production continued to increase after India acquired independence. A new forest policy underscored the value of timber for 'defence, communications and vital industries' (Government of India 1952). From the First Five-Year Plan in 1951 emphasis was laid on the conversion of 'low' value natural forests into monoculture plantations of eucalyptus and teak

(Chambers et al. 1989: 147). Supported by an infusion of funds from international donors plantation activity increased dramatically in the mid-1970s. Over the next decade an estimated one million hectares of forest land was cleared for growing industrial raw material (Chambers et al. 1989: 147). 'Production of industrial wood,' proclaimed the 1970 National Commission on Agriculture (Government of India 1976: 32-33), 'would have to be the *raison d'être* for the existence of forests.'

Given the limited staff and budget of the forest administration a practical consequence of the emphasis on timber production was a relatively low interest in providing for the forest produce needs of India's peasant farmers. The 1926 Royal Commission on Agriculture (Government of India 1928: 271-2) summarised the priorities of the forest administration:

Because of their small commercial value, and also because the important forests give scope for all the energies of the existing forest staff, little attention has been given to the development of the minor forests which may be of small commercial value but are of considerable importance to neighbouring cultivators. ... It is with the commercial timber forests that generate large revenues for the State that the work of the forest department is, in the main, concerned; and the interests of forest officers cannot fail to be bound up in their development.

The interests of officials alluded to by the Commission were direct and personal. Expansion of a forest department and the resulting creation of promotion opportunities depended upon its earning sufficient revenue to justify such action. Describing one particular case, Stebbing (1926: 93) notes that an increase in forest revenues would eliminate 'much heart-burning amongst the staff caused by stagnant promotion'.

However, at times the forest administration was also beset by external pressures to redress their relative neglect of the forest produce requirements of small farmers. In 1894, the Government of India issued a policy statement that underscored the dependence of India's rural population on forest produce and declared that, 'Every reasonable facility should be afforded to the people concerned for the full and easy satisfaction of these needs It should be distinctly understood that considerations of forest income are to be subordinated to that satisfaction' (Government of India 1894).

Though there was little immediate response to the policy directive by the forest administration as a whole, a series of government enquiries into grievances filed against various provincial forest departments by village farmers shortly after the turn of the century prompted these departments to take remedial measures. Most notable were small-scale trials to reclassify selected tracts of non-timber producing state forests as 'village forests'. These forests were to be managed by village communities for their own benefit with assistance provided by the forest administration. However, despite an enthusiastic endorsement of the scheme by the 1926 Royal Commission on Agriculture, forest officers were

BUREAUCRATISATION OF FOREST MANAGEMENT

reluctant to allocate scarce departmental resources to the management and improvement of village forests once they were created. In Madras Presidency, for example, where several thousand square kilometres of village forests were established, forest officers viewed the transfer of management responsibility as an opportunity to concentrate their efforts on the timber-producing forests (Champion and Osmaston 1962: 171). It was regarded as unnecessary to assist community residents in formulating working plans for the village forests, and no technically trained forest officers were involved in their management (Champion and Osmaston 1962: 118).

The village woodlot component of the social forestry programme initiated by the forest administration during the mid-1970s followed a similar pattern. At the time, the Government of India and foreign donor agencies such as the World Bank were providing considerable funds for forestry projects oriented toward rural development (Shah 1995: 7). The objective of the village woodlot scheme was to meet the requirements of villagers for small timber, fuel and fodder by encouraging the cultivation of trees on community and private land. But as in the earlier experiments in community-based forest management, forest officers did not place social forestry in general, and for the poor in particular, as high on the agenda as more conventional departmental works (Chambers et al. 1989: 191). In general, officers were less interested in developing a sustainable program by enlisting the participation of villagers than in fulfilling targets that came down through the administrative hierarchy such as the number of trees to be planted (Chambers et al. 1989: 165).

External pressures could also tempt the forest administration to depart from the principles of long-term forest conservation. G.S. Padhi (1982: 93) of the Indian Forest Service noted that a preoccupation with maintaining revenues over the short run has induced forest officers to reduce the minimum harvestable tree size set forth in working plans, even if doing so inhibits forest regeneration. The necessity of contending with inadequate budgets and appeasing politicians more interested in immediate financial results than in long-range planning has continued within India's forest administration to the present day (Sunder 1992).

Authoritarianism

Lying behind the appeals of Brandis and his colleagues to scientific management of India's forests by trained professionals was the assumption that villagers were incapable of managing the forest resources on which they depended for their lives and livelihoods. This conviction engendered a paternalistic attitude among forest officers, as exemplified by one officer's reflections on the inception of the forest administration:

[Forest resources] were vital to [villagers'] well being and always they had taken them where they could find them. And then an authority came into being which denied them what they had always looked upon as their rights. They fought most bitterly and,

indeed understandably, against the new tyranny. They had neither the education nor the intelligence to realise that their little village forests were fast disappearing and that, if the process continued, the country would become inhabitable. (Wilson 1961: 64)

The result of this felt need to protect people against their own improvidence led the forest administration to steadily tighten its control over forest use. Most forest officers shared the view of Berthold Ribbentrop (1900: 99), the Inspector-General of Forests from 1888 to 1900, that classification as protected forests 'offer but an insufficient guarantee for their stability and protection' and endeavoured to maximise the area of reserved forests. Often, forests which were initially demarcated as protected were later converted to reserved. Only the forest land of inferior growth was left as protected as a compromise between making it reserved and losing it to cultivation. At the end of the last century there was 210,000 square kilometres of reserved forests and only 23,000 square kilometres of protected (Ribbentrop 1900: 99).

Even the limited rights that villagers were allowed to exercise in some reserved forests were seen as creating an undesirable level of disorder and uncertainty. Brandis (1897: 160) maintained that in 'forests which are not completely under the proprietor's control, in which other persons exercise rights of grazing or cutting wood, regular management becomes very difficult.' He remarked that

In a few provinces, such as Sindh and the Central Provinces, circumstances were favourable at the time of demarcation, and the State acquired at once absolute proprietorship of these forest lands free of all prescriptive rights. In other provinces, the gradual adjustment and extinction of these rights, which materially interfere with the protection and systematic management of the forests, will be a work of time, which will require much care, patience, and conciliatory treatment of the people concerned. (Brandis 1897: 34)

Brandis (1897: 37) noted with satisfaction that 'the procedure by which reserved forests are gradually freed from customary rights ... is regulated by legislative enactments.' However, in practice the legal procedures to commute rights by a grant of money or land were often bypassed due to the zeal of the forest administration to quickly gain unconditional control of as much forest area as possible. During the 1880s, for example, villagers in the Garo Hills of Assam lost all rights to land declared as reserved forests with little or no compensation (Sinha 1993: 113).

In those forests 'burdened' with customary rights forest officers generally attempted to render the rights as rule-bound and regularised as possible. These restrictions 'caused more ill-feeling and misunderstanding than any other part of the Forest Administration' (Ribbentrop 1900: 124-5). Nonetheless, it was hoped

BUREAUCRATISATION OF FOREST MANAGEMENT

that through a process of education the rural populace would gradually come to understand and appreciate the work of the forest administration. Brandis (1897: 135) remarked that

... it is a noteworthy fact, that offences punished under the Forest laws have upon the whole not been numerous. This may be taken as proof that the changes, which the efficient protection and the regular management of the forests have necessarily introduced into the habits of the people in and near the forests, have been made gradually, and as a rule with due regard to their feelings.

However, this optimistic assessment proved premature. During the first half of the twentieth century popular resistance to the extension of reserved forests and tightening of forest rules, combined with a general defiance of British rule, caused the number of forest offences to escalate dramatically. Champion and Osmaston (1962: 69) observed that, with the annual number of offences between 1924 and 1947 never less than 100,000 and as high as 142,000 in 1939, 'the protection and patrolling of forests was a considerable burden'. In 1945, a forest advisor said of the impact of the law and order problem in the forests of the Central Provinces: 'All efforts at scientific management are thwarted by the astounding magnitude of wanton destruction and interference' (quoted in Verma 1983: 54).

In post-colonial India the exercise of customary forest rights continued to be regarded by the forest administration as an obstacle to systematic management. The 1970 National Commission on Agriculture (Government of India 1976: 356) recommended 'that all unclassed and protected forests should be constituted into reserved forests as soon as possible in order that [customary] rights could be extinguished as far as possible in the manner provided by law – steps would have to be taken for meeting the essential requirements of forest produce of the rural people at reasonable prices through forest department depots.' Between 1950 and 1990 the area of reserved forests increased from 320 million to 415 million hectares. The economic hardship suffered by villagers as a result of restricted legal access to forest resources drove them to illicit felling and encroaching on forests for cultivation (Shah 1995: 30). At times, efforts by forest officers to curtail these violations resulted in bloodshed (Palit 1993: 4).

Despite the overall autocratic character of the forest administration, the controlling staff was never a homogeneous group. Owing to the isolation of their posts, Deputy and Assistant Conservators possessed a considerable amount of discretion in the day to day enforcement of rules, and local relations between villagers and the forest administration were generally determined by the personality and character of the forest officer in charge. While some officers insisted on acting strictly within the letter of the law, others adopted a more benevolent attitude and gained the trust and cooperation of villagers.

Internal Culture

From the outset Brandis supported the employment of native Indians by the forest administration. He argued that 'in order to mitigate the friction which is the unavoidable consequence of strict protection and a regular system of working, it is necessary to employ as many competent and professionally trained Native forest officers, not only in subordinate but also in responsible positions' (Brandis 1897: 170). At the turn of the century all of the executive and protective staff were Indians (Brandis 1897: 154). But most of these forest officers found themselves barred from promotion to the controlling staff, as this upper echelon was 'considered a British sanctum' (Chaturvedi 1961:45). The presumption among British officers that Indian subordinates naturally lacked integrity and diligence led them to provide few opportunities for Indians to acquire the training and experience necessary to attain positions in the upper tier of the bureaucracy.

With two exceptions no Indians were recruited directly into the controlling staff between 1866 and 1910 (Stebbing 1926: 328). Even after 1926, when the forestry school at Dehra Dun began to offer training for controlling staff probationers, admission of Indians to the highest ranks proceeded slowly. By 1934, there was still a preponderance of British; out of a total of 281 controlling staff positions, only 92 were held by Indians. The first Indian Inspector-General of Forests took office in 1949, two years after India acquired independence.

The lowest prospects for advancement were held by Forest Guards, who constituted the bulk of the forest administration personnel but generally received little training. Moreover, the pay they received for working in remote areas under harsh conditions was inadequate, and cases of desertion and dismissal for corrupt activities such as extortion of villagers and timber smuggling were not uncommon.

Recent commentary by forest officers and other Indian bureaucrats suggests that elitist attitudes in the upper echelons of government bureaucracies continued after Independence. One civil servant noted:

It is but natural that in a society which always had a inequitable and stratified social system bureaucratic organisations also tend to acquire a caste-like structure. ... We unfortunately revel in bullying and bossing over those who are below us and are excessively meek towards our superiors (Saxena 1990: 166-9).

Within the hierarchical and rigid command structure of the forest administration the controlling staff rarely seek the advice of those in the lower ranks who are ultimately responsible for implementation of programmes (Yadav 1992: 82). Moreover, a recent World Bank report stated that lower level staff continue to be not as well trained as their jobs require, and many Forest Guards still receive no formal training whatsoever (Guhathakurta 1993: 29). Contemporary accounts also indicate that morale in the forest administration as a whole has

BUREAUCRATISATION OF FOREST MANAGEMENT

slumped as a result of the administration's low public image, poor promotional prospects and pay structure and arbitrary personnel policy (Banerjee 1992: 87). In their effort to secure desirable positions and postings the energies of forest officers are often diverted to currying the favour of superiors, to the detriment of their official work (Khan 1995: 22).

In summary, members of the forest administration have not been compliant actors of roles prescribed by the bureaucracy's rules and authority structure. The attitudes, values and behaviours of forest officers are shaped by societal influences and by informal relationships within the organisation. In British India recruitment and promotion of forest officers was guided as much by race prejudice as by an impartial merit system. After national independence other socio-cultural factors such as religion, caste and kinship came into play.

RECENT ATTEMPTS AT BUREAUCRATIC REFORM

In the last decade there has been much discussion among forest officers in India regarding the need for a change in administrative policies and practices in order to stem the increasing degradation and loss of state forests. According to one forest officer, for the first time in the 130 year history of India's forest administration its members are seriously questioning their traditional approach towards managing the forest estate (Palit 1994: 18). A new forest policy adopted in 1988 affirmed that 'a new strategy of forest conservation has become imperative' (Government of India 1988). The revised policy reiterated the 1894 policy's claim that meeting the forest product needs of the rural populace should be the first charge of forest management, and declared that the primary task of the forest administration should be to motivate villagers to identify themselves closely with the protection and development of the forests from which they derive benefits.

In 1990, the forest administration bolstered this participatory approach to forest management by introducing guidelines for a country-wide scheme of Joint Forest Management (JFM), whereby village organisations are assigned responsibility for the protection of adjoining state forests and are given a share of the proceeds from the sale of forest produce obtained from the protected tracts (Government of India 1990). The states containing most of the country's public forests quickly issued resolutions giving formal approval to the new scheme. Substantial funding was provided by foreign donors attracted to the concept of linking afforestation with rural development. By mid-1992 the protection of some 1.5 million hectares of government forest land had been assigned to over 10,000 community groups (Singh and Khare 1993: 281), and JFM was heralded as the portender of an era of cooperation between the forest administration and villagers. In the words of one forest officer:

JFM marks a watershed in the history of Indian forestry. It is the first conscious attempt at conflict resolution and trust building between historically opposed forces to prevent an impending catastrophe (Singh 1995: 28).

Other forest officers, however, have criticised the manner in which JFM has been implemented. Shah (1995/6), for example, suggested that the initiation of JFM programs has in some instances been more of an impulsive response to pressure from donor agencies than a sincere effort to building a lasting cooperative relationship with the rural population. Forest Officer A.K. Banerjee (1996) criticised JFM on the grounds that it does not represent a change in the forest administration's primary focus on producing and retaining exclusive rights over productive high timber forests. He noted that the JFM projects in most states have been largely restricted to degraded forest lands that offer villagers few immediate income-generating opportunities. Even given this restriction JFM programmes are often not participatory in the sense of a equal partnership between the forest administration and village residents (Chopra 1995: 1481). The JFM programmes in most states are characterised by a traditional authoritative approach, involving hierarchy, strict supervision, and an elaborate system of rules that apply uniformly to all situations.

Finally, the unbending hierarchical structure of the forest administration, in which there is little downward delegation of authority or upward flow of information, remains unchanged. To deny lower rank forest officers responsibility and initiative, not to mention adequate pay and training, is particularly counter-productive in JFM which requires close and continuous interaction between field staff and village representatives. 'Until senior officials learn to listen to their juniors,' noted one commentator, 'they will not be able to listen to villagers' (Campbell 1992: 42).

One should not discount the successes JFM has achieved in parts of India in terms of fostering forest conservation and the incorporation of rural interests in forest management. However, the persistence of patterns of bureaucratic behaviour that militate against a more effective and responsive forest administration suggest that institutional reform may be more problematic than first imagined. As one Conservator of Forests stated, 'the move toward participatory forest management is a slow process, taking decades rather than years' (Kumar 1992: 113). One hopes that even this cautious outlook will not be found to be overly optimistic.

REFERENCES

- Banerjee, A.K. 1996. 'Some observations on community forestry'. *Wastelands News* **11**: 43–8.
- Banerjee, V. 1992. Administrative changes for ensuring people's participation in forest administration: West Bengal experiment. In *National Seminar on Forestry Sector Administrative Development*. New Delhi: ISO/SWED FOREST.
- Blau, P.M. and Meyer, M.W. 1987. *Bureaucracy in Modern Society*. New York: Random House.
- Brandis, D. 1897, rep. 1994. *Forestry in India*. Dehra Dun, India: Natraj Publishers.
- Campbell, J.Y. 1992. 'Joint forest management in India'. *Social Change* **22**: 36–54.
- Chambers, R., Saxena, N.C. and Shah, T. 1989. *To the Hands of the Poor*. New Delhi: Oxford and IBH Publishing Company.
- Champion, H. and Osmaston, F.C. 1962, rep. 1983. *E.P. Stebbing's 'The Forests of India', Volume IV*. New Delhi: Periodical Expert Book Agency.
- Chaturvedi, M.D. 1961. 'Abstract from recollections and reflections'. In *Forest Research Institute, 100 Years of Indian Forestry 1861–1961, Volume I*. Simla, India: Government of India Press.
- Chopra, K. 1995. 'Forest and other sectors: critical role of government policy'. *Economic and Political Weekly* **30**: 1480–2.
- Dembner, S. 1994. 'Editorial: the changing role of forestry institutions'. *Unasylva* **45**: 2.
- Forest Research Institute 1961. *100 Years of Indian Forestry 1861–1961, Volume I*. Simla, India: Government of India Press.
- Government of India 1894. Circular No. 22-F in the Department of Revenue and Agriculture.
- Government of India 1928. *Report of the Royal Commission on Agriculture in India*. London: HMSO.
- Government of India 1952. Resolution No. 13/52-F in the Ministry of Food and Agriculture.
- Government of India 1976. *Report of the National Commission on Agriculture, Part IX, Forestry*. Simla, India: Government of India Press.
- Government of India 1988. *National forest policy*. Ministry of Environment and Forests.
- Government of India 1990. Circular No. 6-21/89-F.P. in the Ministry of Environment and Forests.
- Guhathakurta, P. 1993. 'The World Bank in the forestry sector: policies and issues in India'. *Wastelands News* **9**: 5–39.
- Heffron, F. 1989. *Organization Theory and Public Organizations*. Englewood Cliffs, New Jersey: Prentice Hall.
- Khan, I.A. 1995. 'Forest policy and institutional framework'. *Wastelands News* **10**: 19–24.
- Kumar, P.J. 1992. 'Administrative changes for people's participation in forest management'. In *National Seminar on Forestry Sector Administrative Development*. New Delhi: ISO/SWED FOREST.
- Padhi, G.S. 1982. *Forestry in India*. Dehra Dun, India: International Book Distributors.
- Palit, S. 1993. *The Future of Indian forest management: into the twenty-first century*. New Delhi: Society for Prevention of Wasteland Development and Ford Foundation..
- Palit, S. 1994. 'Forest education and training needs'. *Vācham* **5**: 18–25.

- Ribbentrop, B. 1900, rep. 1989. *Forestry in British India*. New Delhi: Indus Publishing Company.
- Saxena, N.C. 1990. 'The world of the IAS – true nature of Indian bureaucracy'. In A.D. Pant and S.K. Gupta (eds) *Bureaucracy, Development and Change*. New Delhi: Segment Book Distributors.
- Shah, S.A. 1995. '150 years of tropical forest management'. *Journal of Tropical Forestry* **11**: 1–15.
- Shah, S.A. 1995/6. 'Status of Indian forestry – I'. *Wasteland News* **11**: 14–32.
- Sinha, A.C. 1993. *Beyond the Trees, Tigers and Tribes*. New Delhi: Har-Anand Publications.
- Singh, D. 1995. 'Joint management saves Darjeeling forests'. *WWF India Quarterly* **5**: 28–9.
- Singh, S. and Khare, A. 1993. 'People's participation in forest management'. *Commonwealth Forestry Review* **72**: 279–83.
- Stebbing, E.P. 1923, rep. 1982. *The Forests of India, Volume II*. New Delhi: A.J. Reprints Agency.
- Stebbing, E.P. 1926, rep. 1982. *The Forests of India, Volume III*. New Delhi: A.J. Reprints Agency.
- Subramaniam, V.A. 1988. 'A socio-historical overview'. In D. Rowat (ed) *Public Administration in Developed Democracies*. New York: Marcel Dekker.
- Sunder, S.S. 1992. 'Facing the challenges in the forestry sector'. In *National Seminar on Forestry Sector Administrative Development*. New Delhi: ISO/SWED FOREST.
- Verma, R.K. 1983. *Working Plan for Government Forests of Raisen District 1983–84 to 1997–98*. Indore, India: Chintamani Press.
- Wilson, C.C. 1961. 'My memories of the forests of India'. In *Forest Research Institute, 100 Years of Indian Forestry 1861–1961, Vol. I*. Simla, India: Government of India Press.
- Yadav, J.P. 1992. 'Administrative changes for ensuring people's participation in forest administration'. In *National Seminar on Forestry Sector Administrative Development*. New Delhi: ISO/SWED FOREST.