**Questioning Kaufman: How cross level political coalitions interact with organizational structure to determine outcomes in forestry agencies**

## Author Information

Forrest Fleischman

Department of Forest Resources, University of Minnesota Twin Cities

115 Green Hall

1530 Cleveland Avenue N.

St. Paul, MN 55108

[ffleisch@umn.edu](mailto:ffleisch@umn.edu)

Forrest Fleischman is an assistant professor in the Department of Forest Resources at the University of Minnesota, Twin Cities. His research focuses on understanding how political and administrative factors influence the management of forests in India and the United States.

## Abstract:

Kaufman’s *Forest Ranger* is considered a landmark study of how organizations can be structured to elicit compliance from field officials, yet there have been few attempts to validate Kaufman’s claims. I argue that the outcomes observed by Kaufman resulted from interplay between organizational structure and political context, a variable ignored by Kaufman. I support this argument using case studies of two agencies with similar structures to Kaufman’s U.S. Forest Service, but poorer outcomes: the same agency today, and India’s forest departments. I show that both differences in organizational structure and poorer outcomes are the result of political context. Specifically, coalitions assembled around agencies use the implementation process to shape outcomes in ways that could not be accomplished solely through changing laws or formal administrative structure. This points to the importance of building supportive field-level coalitions to complement administrative reforms.

**Practitioner Points:**

1. Political contexts, including degree of public consensus over goals and levels of corruption, play an important role in shaping organizational outcomes.
2. Interplay between political contexts and organizational structure are more important than the internal structure of an organization alone.
3. Successful administrative reforms require building supportive political coalitions.

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## Introduction:

## How can organizational leaders insure that actions taken by subordinates meet organizational goals? In a classic study, [Kaufman (1960)](#_ENREF_36) proposed an explanation for how the United States Department of Agriculture Forest Service (USFS) insured compliance from field staff. According to Kaufman, the USFS was an effective organization because it had an institutional structure and organizational culture that elicited high levels of compliance and effective policy implementation. Kaufman’s *Forest Ranger* continues to be widely read among both foresters and students of public management, 2 book reviews of his work have appeared in *PAR* in the last decade ([Luton 2007](#_ENREF_46), [Burton 2012](#_ENREF_5)), and the book is frequently included in lists of classics in the field ([Lynn Jr 2015](#_ENREF_47)). Although a number of studies have examined how the USFS changed after Kaufman’s 1950s field work ([Twight and Lyden 1988](#_ENREF_80), [Tipple and Wellman 1991](#_ENREF_79), [Carroll, Freemuth, and Alm 1996](#_ENREF_9), [Clarke and McCool 1996](#_ENREF_11), [Koontz 2007](#_ENREF_40)), none of these studies have examined whether Kaufman adequately explained the phenomena he observed, nor whether his explanation can be applied to other contexts. Given the broad influence of this work, it is surprising that critical and comparative evaluations have not been conducted.

In this article I argue that Kaufman’s explanation was incomplete because Kaufman ignored political context, and in particular, the goals of the USFS’s supporting political coalition. By political context, I refer to the broad set of interactions between an agency and its external political environment, including its relationship with its formal political superiors (i.e. courts, legislators, and the chief executive), but also with interest groups and local stakeholders. By political coalition I refer to a loosely coordinated group of political actors who shared goals with respect to the agency mission ([Jenkins-Smith et al. 2014](#_ENREF_33)). Kaufman stated repeatedly in the preface and introduction to *The Forest Ranger* that political context was not relevant for his argument, writing “insofar as Service relations with the environment impinge on the internal functioning of the organization, they are examined here, but they are extraneous for the most part and therefore not treated at length (Kaufman 1960, p. 6).”

This argument has clear relevance for the design of administrative reforms. If Kaufman was correct that structure and culture were crucial for understanding administrative outcomes, but political context was not, then apolitical structural reforms have great potential to improve the performance of public agencies. By contrast, the argument I advance here suggests that agency effectiveness is rooted in political processes that build support for agency missions. This argument has a long history in public administration, although I place more focus on the interrelationships between bureau-level politics and field implementation conditions ([Durant 2015](#_ENREF_17), [Long 1949](#_ENREF_45), [Carpenter 2001](#_ENREF_7), [Carpenter and Krause 2012](#_ENREF_8)). Using historical analysis and comparative case studies I show that the mid-20th century success of the USFS was the result of a political coalition that favored effective policy implementation. This coalition helped to create the organizational structure and acted in the field to support its effectiveness at using public lands to extract resources. When actors with other goals gained political power in Washington and in the rural areas where most forests were located, they were able to alter and/or repurpose those structures to achieve goals other than efficient compliance. Thus, the effectiveness of agency behavior is an outcome of political processes in which goal-oriented external actors seek to alter agency activities both by changing laws and by altering the ability of field officials to carry out those laws (for similar arguments see [Moe 1990](#_ENREF_55), [Moe 2005](#_ENREF_54)).

I use two lines of evidence to support my claims. First, I provide evidence from other sources that the structure of the USFS was itself the result of political context, and that political developments that introduced substantial conflict over organizational goals between 1960 and 1990 decreased compliance and implementation effectiveness. I to argue that the crucial differences between the USFS of 1960 and of 2015 are that powerful political actors do not support core components of the USFS mission and that political conflict over that mission means that agency officials no longer are certain with what they are supposed to comply. This lack of consensus is reflected in laws passed since 1960, however, I use path tracing ([Collier 2011](#_ENREF_15), [Kay and Baker 2015](#_ENREF_37)) to show that it was political conflict itself that led to changes in laws, and thus undermined the effectiveness of organizational structure.

The second line of evidence I draw on is comparison with my original ethnographic research on forest departments in 21st century India ([Fleischman 2012](#_ENREF_20)). In spite of institutional structures and organizational cultures that are remarkably similar to those of Kaufman’s USFS, Indian forest departments struggle to obtain compliance from field staff, and programs are poorly implemented. As is the case with the changing context of the USFS, understanding the goals of political actors outside of the agency is crucial to understanding agency shortcomings. In this case, rather than political conflict, I show that poor compliance in India is driven by politicians’ use of forest departments to support short-term electoral goals, including fundraising and distributing goods to key clientele. While the specific causal mechanisms in play in India are clearly different from those in the USFS, they share two common features. First, political coalitions use the policy implementation process to achieve goals that are not clearly articulated in legislation. Second, low compliance and poor implementation are the result of political coalitions focusing on goals other than agency effectiveness. In both cases, politically powerful actors are well served by ineffective forestry agencies. Shifting this dynamic may require agencies to redefine their goals and build new coalitions.

**Kaufman’s theory**

Kaufman chose the USFS because it had a reputation for effectiveness. He argued that effectiveness stemmed from how the organization elicited compliance from its field offices, in spite of their being located in remote locations where supervision was difficult. According to him, “the men in the field are apparently doing what the top officers want done in the field… Field compliance in the Forest Service is not total, naturally, but it is so high, despite powerful factors tending to reduce compliance, that it cries out for study” ([Kaufman 1960, p. x-xi](#_ENREF_36)). It is important to note that Kaufman’s description of compliance focuses not merely on whether officials followed organizational rules, which they did, but on a broader sense of compliance with the wishes of agency leadership. Field officials not only followed the letter of the law, but used their substantial discretion to make decisions that were identical to those their superiors would have made had it been their decision. As such, what Kaufman refers to as compliance goes beyond what most scholars today would refer to with that term, and is very close to what later scholars would call effective top-down policy implementation ([Sabatier 1986](#_ENREF_70)). Kaufman did not measure compliance in his study, but instead focused on examining the reasons compliance occurred, conducting extensive background research on the agency, including interviews with senior officials, and then conducted week-long ethnographic studies of 5 district rangers, scattered throughout the country.

Kaufman (1960, p. xiii) argued that, “The success of the Forest Service in welding the behavior of hundreds of geographically dispersed and relatively isolated Rangers into a unified organizational pattern apparently rests heavily on manipulation of the perceptions, thinking, and values of members of the Service.” Kaufman divided his analysis into three categories: “procedural devices for preforming decisions,” “detecting and discouraging deviation,” and most importantly, “developing the will and capacity to perform.”

Procedural devices for preforming decisions refer to formal rules governing bureaucratic behavior. These rules, including both laws and regulations written by the USFS or other agencies, were contained in a “Forest Service Manual,” which was the “bible” of the District Rangers (Kaufman 1960, p. 95). Additions were made at regional levels, and each ranger district prepared plans which “set long-range… quantitative and qualitative goals, break these down into shorter-range objectives...” and defined “steps and stages by which the goals are to be achieved.” (ibid p. 99) These formal rules were further complemented by “a steady flow of ad hoc instructions from higher headquarters… memoranda, letters, circulars,” (ibid p. 101) as well as by regular reviews by higher level officials, formal procedures for dispute resolution, and detailed budgets.

Preformed decisions were reinforced by procedures for detecting and discouraging deviation, Kaufman’s second category. The first procedure was formal reporting, including the keeping of official diaries, enabling higher officials to monitor behavior. Falsification of reports was made difficult due to the multiplicity of overlapping reports, and because of an ethos that encouraged reporting mistakes. The second was regular inspection. A variety of specialized and general inspections were carried out at 1-5 year intervals. Most inspections were carried out by the immediate supervising official, although there were occasional visits by higher level officials. Inspections were planned ahead of time, “surprise is not particularly important in an agency where slow biological processes set the pace (ibid 143.)” Inspections were not merely about catching wrong-doing – instead they were opportunities to confer, problem-solve, and suggest improvements. In addition to formal reporting and inspection, frequent transfers helped insure that wrong-doing was detected – while an individual might hide his malfeasance from his superiors temporarily, he would be unlikely to hide it from his successor. Formal sanctions were available, but rarely necessary.

Kaufman believed that preformed decisions and detection procedures were essential aspects of the USFS’ effectiveness, but were insufficient to explain the observed behavior. Kaufman emphasized the ways that managers “… try to control what goes on *inside* each individual organization member, to get them to do *of their own volition* what the managers want them to do…” (ibid p. 160). The USFS followed a number of practices that had the effect of eliciting “voluntary conformity” (ibid p. 198) such that formal rules and enforcement mechanisms were a secondary aspect of compliance. This began with recruiting young men “who value the work itself and to whom the agency as an organization is attractive,” (ibid p. 164) while deterring those who might be a poor fit with the agency, and continued with training: 90% of the professional staff held forestry degrees and “many decisions and actions taken in the field are implanted in these men during their pre-service education (ibid 166).” Forestry training at the bachelors’ level was concentrated in a small number of schools, and focused on technical issues – “biology, ecology, silviculture, and forest economics (ibid p. 165).” On-the-job training was informal, as senior staff mentored juniors working under them.

Several practices helped to build employee identification with the organization beyond recruitment and training. Distinctive uniforms and signage built an identity for the USFS that differentiated it from other public services. Transfers were encouraged as a way of broadening the outlook of foresters, and promotions usually required accepting a transfer. Thus, during a forester’s early years, “he never has time to sink roots in the communities in which he sojourns so briefly… Only one thing gives any continuity, any structure, to his otherwise fluid world: the Service… Thus, the Forest Service acquires a more or less fraternal aura for its newer members.” (ibid p. 178) The vast majority of promotions came from within the organization, insuring that higher level officers had experience in the organization and sympathy with the difficulties of their subordinates. At the same time, promotions were based primarily on merit, as judged by superior officers, such that those who conformed more closely to organizational ideals would rise rapidly in the ranks. Washington and regional offices regularly sought the opinion of field staff on important policy issues, and “recommendations and complaints *do* get back to the higher levels, sometimes generate action, and do not (unless carried to an extreme) result in injury to the sources for being outspoken.” (ibid p. 187)

According to Kaufman, the combined effect of these practices –pre-formed decisions, detection procedures, and procedures to elicit voluntary conformity – were important. Relatively uniform background and training lowered barriers to communication that might arise in organizations employing multiple kinds of professionals, and frequent movement and promotion from within insured that employees had strong networks within the organization. Frequent transfers prevented capture, insuring that foresters were more loyal to the organization than to local communities. Put together, these factors provided a complete explanation of the USFS’ success.

**The missing political context**

If Kaufman’s theory was correct, we would expect changes in organizational structure to affect agency performance. On the other hand, changes in political context would not matter, as Kaufman repeatedly argued in the introduction. In order to test Kaufman’s hypothesis, I compare his findings with two “most likely” cases – agencies that we would expect, based on similarity to the conditions described by Kaufman, to have similar outcomes ([George and Bennett 2005](#_ENREF_25)). A difficulty with this comparison is that Kaufman did not define or explicitly measure compliance or effectiveness, his dependent variables. As I pointed out above, his definitions of compliance and effectiveness are very much in line with what later scholars would call effective top-down policy implementation ([Sabatier 1986](#_ENREF_70)). Effective top-down policy implementation requires not only that field officials comply with the letter of the law, but also that they use their discretion to make decisions consistent with the unwritten wishes of their superiors (i.e. “voluntary conformity,” discussed above). In the cases that follow I follow Kaufman in jointly analyzing compliance with written laws and the less formal aspects of compliance.

The first case is the USFS over time. Kaufman’s study presented a snapshot of the USFS in the 1950s, however examining a longer history raises questions about the adequacy of Kaufman’s explanations. The second case is contemporary forest departments in India. Because of the structural similarities between these agencies and the USFS, we would, again, expect them to have similar outcomes, but they do not. In both cases, I present evidence that the goals of the agency’s supporting political coalition interact with structure to determine outcomes.

**The political context of the 1950s USFS**

The USFS of the 1950s was supported by a powerful political coalition that supported increased resource extraction from public lands to benefit industrial interests. Actors with other interests were excluded from the political process. Although Kaufman avoids mention of political interactions, he did find that district rangers faced little political opposition at the local level, and worked closely with local businesspeople who were involved in extractive industries and supported agency actions. Other studies from this period support his picture of rural communities dominated by powerful alliances between government and industry ([Kaufman and Kaufman 1946](#_ENREF_35), [Selznick 1949](#_ENREF_73), [Gaventa 1980](#_ENREF_24)) and of a politically powerful USFS ([Clarke and McCool 1996](#_ENREF_11), [Carpenter 2001](#_ENREF_7)) and the close relationship between agency, extractive industries, and Congressional oversight committees earned it a reputation as an “iron triangle” ([Wilkinson and Anderson 1985](#_ENREF_86), [Clary 1986](#_ENREF_12), [O'Toole 1988](#_ENREF_59), [Hirt 1994](#_ENREF_28), [Hoberg 2001](#_ENREF_29)).

**Challenges to the consensus**

The history of the USFS after 1960 provides our first test case for Kaufman’s theory. Since Kaufman’s time, district ranger offices have moved from quiet cooperation to noisy contention – confronted with protests and lawsuits, including by dissident employees ([Tipple and Wellman 1991](#_ENREF_79), [Keele et al. 2006](#_ENREF_38), [O'Leary 2009](#_ENREF_58)). By the mid-2000s the USFS was showing one of the lowest employee satisfaction levels of any government agency ([Partnership for Public Service 2015](#_ENREF_61)), was losing approximately 25% of the lawsuits brought against it, indicating that it no longer consistently followed the law ([Keele et al. 2006](#_ENREF_38)), and suffered from high levels of confusion over the agency mission ([Dialogos 2007](#_ENREF_16)) and criticism for its organizational capacity ([Auer et al. 2011](#_ENREF_1)). In contrast to Kaufman’s free flow of information upward through the hierarchy, a recent survey found that USFS employees had little confidence in their ability to influence agency leadership ([Laatsch and Ma 2016](#_ENREF_43)). Taken together, these studies show an agency where field officials no longer consistently comply with either the letter of the law or the intentions of their organizational supervisors. I argue that three closely related changes led to a decline in agency effectiveness. First, once environmentalists gained political power in the 1960s ([Hays 1987](#_ENREF_27)), there was no longer a consensus about how the USFS should act. How can field employees carry out the wishes of their superiors when superiors themselves disagree about the goals of the agency ([Dialogos 2007](#_ENREF_16), [Auer et al. 2011](#_ENREF_1))?

Second, environmentalists created new legal structures that enabled them to hamper the field-level implementation of projects they opposed in ways consistent with theories of principal-agent dynamics in US politics ([McCubbins, Noll, and Weingast 1987](#_ENREF_49), [Wood and Waterman 1991](#_ENREF_87), [Meier and O'Toole 2006a](#_ENREF_51)). While environmentalists probably would have preferred to create laws mandating the USFS to follow their priorities, they were more successful at passing procedural laws, particularly the National Environmental Policy Act and the National Forest Management Act, that created opportunities for public participation in decision-making ([Rochon and Mazmanian 1993](#_ENREF_69), [Wilkinson and Anderson 1985](#_ENREF_86), [Sabatier, Loomis, and McCarthy 1995](#_ENREF_71), [Hoberg 2001](#_ENREF_29), [Nie 2008](#_ENREF_57)) and forced the USFS to hire more diverse professionals who in turn favored more diverse outcomes ([Tipple and Wellman 1991](#_ENREF_79), [Koontz 2007](#_ENREF_40)).

New structures – themselves the result of new political coalitions – ultimately enabled environmental interests to halt significant portions of the resource extraction agenda of the USFS and transform the kinds of scientific information used in USFS decision-making ([Yaffee 1994](#_ENREF_89), [Durbin 1996](#_ENREF_18), [Kohm and Franklin 1997](#_ENREF_39), [Hoberg 2001](#_ENREF_29)). For environmentalists who opposed resource extraction, a less effective USFS was an agency that caused less harm, and thus numerous legal challenges to USFS projects that agency leaders viewed as hampering effectiveness ([USDA - Forest Service 2002](#_ENREF_82)) were seen by environmentalists as victories even if they undermined agency morale ([Nie 2008](#_ENREF_57)).

The third change that degraded the USFS’ capacity was a result of the other two. Without the clear base of political support provided in the 1950s by extractive industries, the USFS became vulnerable to the belt tightening that began across the US government in the 1990s. While [Clarke and McCool (1996)](#_ENREF_11) predicted that the USFS would maintain their past supportive political coalition, in fact, the USFS found in the 2000s that – as an agency that no longer supplied extractive industries but was distrusted by environmentalists – it no longer had reliable allies in Congress. As a result, the agency has seen flat or declining budgets for most of the last 2 decades, while fire suppression activities have taken up an increasing and unpredictable portion of the budget, leading to dramatic declines in the organization’s ability to undertake basic management tasks ([USDA Forest Service 2014](#_ENREF_83), [Vilsack 2015](#_ENREF_85)). Furthermore, it appears that the USFS’ fractured mandate, a result of conflict over agency goals, has inhibited the agency’s ability to adapt to increasing fire frequency and severity ([Reiners 2012](#_ENREF_66), [Fleming, McCartha, and Steelman 2015](#_ENREF_23)) and other emerging challenges ([Laatsch and Ma 2016](#_ENREF_43)).

**Testing Kaufman’s theory in an alternative context: India**

Further questions about the role of organizational structure in eliciting compliance arise from comparison with India’s forest departments. The structure of the USFS that Kaufman praised originated in India, where it was developed by the British Indian forest departments, and was copied by the founders of the USFS in the early 20th century ([McGeary 1960](#_ENREF_50), [Miller 2001](#_ENREF_53), [Barton 2001](#_ENREF_4), [Balogh 2002](#_ENREF_3)). Indian forest departments, which are organized at the state level ([Chaturvedi 2016](#_ENREF_10)), retain a structure similar to that described by Kaufman in the US in the 1950s ([Fleischman 2016](#_ENREF_22)), and Kaufman’s theory thus predicts that they will exhibit high levels of field compliance. Between 2009 and 2011 I conducted an ethnographic study of forest department decision-making in eight central Indian forest divisions, in a study design that consciously imitated Kaufman’s (1960) study ([Fleischman 2012](#_ENREF_20), [2014](#_ENREF_21)). This research included interviews with 146 forest department employees and 94 other stakeholders in forest issues. Most of these interviews occurred as I followed foresters conducting their everyday work, and thus, while some more formal interviews were only 30 minutes long, many interviews occurred through several days spent “soaking and poking” ([Fenno 1990](#_ENREF_19)) in the field official’s work. I gathered over 5,000 pages of field notes and 10,000 pages of primary documents. An Indian forester I met who had read *The Forest Ranger* while visiting the US told me “I got chills down my spine reading it,” because what Kaufman described about the USFS in the 1950s was remarkably similar to his experiences working in remote Indian forests during the 1980s (interview with informant 127, August 17, 2010). In contrast to Kaufman’s predictions, these organizations are unable to obtain compliance from their field staff.

**Structural Similarities between the USFS and Indian forest departments**

Today’s Indian forest departments follow similar formal procedures to Kaufman’s USFS to preform decisions and insure compliance. The departments create detailed management plans, circulars, and ad-hoc instructions and field staff are made aware of new policies and procedures. Indian forest departments also follow similar procedures for detecting deviations: officers maintain detailed logs of their activities, and these are examined by supervisors during frequent field and office inspections. Transfers are also frequent, although they are more often used as a political sanctioning mechanism (see below) than as a means of broadening exposure ([Fleischman 2016](#_ENREF_22)). One significant difference is that there are a larger number of formal ranks, and information flow from lower ranks appears more limited than that described by Kaufman, perhaps a result of a more hierarchical culture ([Aycan et al. 2000](#_ENREF_2)).

Indian forest departments also follow similar practices for eliciting voluntary conformity to Kaufman’s USFS. As in the USFS, forest officials are recruited at a young age and promoted up through the ranks, and perhaps even more than reported by Kaufman, join a service with a distinctive identity. In contrast to the USFS, less emphasis is put on recruiting those interested in forests, and more to training. Because government jobs offer security relative to the Indian private sector, many young people appear for numerous civil service examinations, hoping to obtain *any* government job ([Jeffrey 2009](#_ENREF_32)). Among 146 interviewed forest officials, only six mentioned a specific pre-service interest in nature or forests as a motivation for joining the department. Most simply thought that the job they got in the forest department was their best shot at a secure job. In the words of one retired officer, “people like me, coming from urban environments… I think I saw a forest first only after joining the Forest Department.” (interview with informant 127, Nagpur, August 17, 2010). Once officers are recruited, they are sent to training academies operated by the forest departments where they are given courses that range from 6 months to 2 years. These programs explicitly focus on building a strong sense of esprit de corps and self-identification with the organization ([Hannam 2000](#_ENREF_26), [Indira Gandhi National Forest Academy 2010](#_ENREF_30)). Most foresters graduate with a strong sense of belonging to an important and valuable service and even officers who admitted they initially joined the service simply to obtain a good job are proud of their profession and public service.

Once training is completed, Indian forest officials receive continued inputs designed to elicit voluntary conformity. As in the USFS, frequent transfers encourage the development of loyalty to the organization rather than the locale – transfers are more frequent in India. And more than in the USFS, forest officers live and work in circles symbolically and physically separated from the rest of society, wearing distinctive uniforms, and living in separate forest officer colonies. Furthermore, given that forests are located in remote and impoverished areas, many forest officers spend most of their careers socializing in a limited circle of other forest officials who may represent the only college educated people in small towns. All of these should serve, as in Kaufman’s case, to reinforce loyalty to the agency and conformity to its objectives.

**Politics and implementation failure**

The compliance and implementation effectiveness of Indian foresters is low across a wide variety of programs ([Fleischman 2016](#_ENREF_22)). These programs include wildlife protection, where field officials sometimes collaborate with poachers and fail to carry out monitoring programs ([Narain et al. 2005](#_ENREF_56), [Shahabuddin 2010](#_ENREF_74)), village relocation out of protected areas, where money allocated for villagers is pocketed by officials ([Rangarajan and Shahabuddin 2006](#_ENREF_64), [Shahabuddin 2010](#_ENREF_74)), joint forest management, where officials fail to involve villagers in decision-making ([Springate-Baginski and Blaikie 2007](#_ENREF_76), [Lele and Menon 2014](#_ENREF_44)) or even follow the instructions of their superiors ([Verma 2004](#_ENREF_84)), and land rights programs in which forest officials have been accused of lying to villagers about the content of the program (see [Kashwan 2011](#_ENREF_34), [Reddy et al. 2010](#_ENREF_65), [Saxena et al. 2010](#_ENREF_72), [Kumar and Kerr 2012](#_ENREF_41)). The Supreme Court has taken significant powers away from forest departments because it finds the departments untrustworthy ([Upadhyay, Chohan, and Vaidya 2009](#_ENREF_81), [Thayyil 2009](#_ENREF_78)). I observed field supervisors struggling to get their employees to complete simple tasks such as filling activity diaries. Even the Forest Departments’ own accounts of their work are replete with frustration over their failure, as this typical quote from a management plan describing the results of past management suggests:

This type of working was not at all followed. Marking was done without properly adhering to the marking rules and many pre-selection trees were also felled. The plantations taken up have not been really successful mainly due to wrong selection of species, grazing and recurrent fires. Cutting back operations have not been carried out in many cases due to paucity of funds. ([Singh and Mishra 2004 p. 67](#_ENREF_75))

It is important to point out here that even with a well-functioning forest department, forest management in India might have disappointing outcomes because of other factors that affect Indian forests, including intensive demands on resources, a poor legal framework, and a broader pattern of poor governance across sectors. Yet independent of these broader contextual factors, foresters fail to carry out the orders of their superiors. The few existing studies converge with my own observations on the primary source of failure: influences from both local and regional politicians ([Fleischman 2016](#_ENREF_22)). Since independence, politicians have re-shaped the bureaucracy to serve political ends ([Potter 1996](#_ENREF_63)). Indian politicians use government agencies, including forest departments, to raise money for political campaigns and to deliver clientelistic goods to their supporters. Fundraising is accomplished through a highly politicized and corrupt system of transfers that seems common across agencies, and was a common topic of discussion among my informants (for thorough descriptions of this system see [Zwart 1994](#_ENREF_90), [Potter 1996](#_ENREF_63), [Iyer and Mani 2011](#_ENREF_31), [Bussell 2012](#_ENREF_6)). For the forest department, the delivery of clientelistic goods is accomplished by allowing political allies to harvest forest products illegally from forests, and foresters report almost constant pressure from politicians against law-enforcement activities (This is also described by [Robbins et al. 2007](#_ENREF_67), [Robbins et al. 2009](#_ENREF_68)). Forest officials who are unwilling to cooperate with this system are transferred to posts with less authority, reinforcing the corrupt transfer system. As a result politicians achieve their goals of promoting their political power, while field-level foresters are unable to protect forests from illegal harvests.

As in the US case, many structural differences between Indian forest departments and Kaufman’s USFS are the result of political context. Supervisors have difficulty using official sanctioning processes not only because of strong public employee unions and a very slow legal system, but also because politicians seeking control over the bureaucracy intervene informally to halt disciplinary procedures against their political allies within the bureaucracy. Frequent transfers that disrupt project implementation are desirable to politicians who benefit from transfer-related bribes. More broadly, the lack of effective information flows from subordinates to superiors, which some other commentators have identified as a crucial barrier to effective policy implementation ([Matta and Kerr 2007](#_ENREF_48)), may be the result of a broader cultural disposition towards paternalism and high levels of power distance ([Aycan et al. 2000](#_ENREF_2)), indicating that elements of political context other than the goals of political actors also matter.

**Discussion**

I have argued that the political contexts Kaufman ignored were crucial to the success of the USFS he studied. Policy implementation was effective, and field compliance was high not only because there was an effective organizational structure, as Kaufman argued, but also because the agency’s political principals worked effectively to support the field level implementation of agency programs. In the 1950s the USFS focused on resource extraction, and implementation was supported by a strong pro-extraction coalition that dominated forest politics both in Washington and in remote forest towns. Without this external political pre-condition, organizational structure could not insure effective implementation.

Evidence for this claim comes from examining two forestry agencies that are similar to Kaufman’s USFS, but achieve poorer outcomes. Although contemporary forest management in the US and India differ in terms of the actors that are involved in implementation, as well as their goals (see Table 1), in both cases two processes work together to break down field-level implementation when political support declines. First, those who do not support field level implementation, such as US environmentalists, or those who favor repurposing implementation activities towards clientelistic activities, such as Indian politicians, change structures that obstruct their ability to influence field implementation. In the US case, this meant introducing requirements for public participation in decision-making, while in India it meant increasing political authority over the transfer of bureaucrats. Second, even without structural change implementation of field activities becomes difficult when powerful political actors are in conflict over what should be done, as in the case of the contemporary USFS, or when there is political pressure to focus on tasks other than those countenanced in the law, as in India.

(table 1 about here)

The argument I present here matters for three reasons. First, reexamining Kaufman’s findings provides an opportunity to deepen theoretical understanding of the relationship between external political forces and agency effectiveness by emphasizing the interplay between formal organizational structure and politics – and in particular, local politics. In contrast to past work which examines short-term relationship between external political actors and bureaucratic outcomes ([McCubbins, Noll, and Weingast 1987](#_ENREF_49), [Wood and Waterman 1991](#_ENREF_87), [Meier and O'Toole 2006b](#_ENREF_52), [Yackee 2015](#_ENREF_88)) or the long-term political strategies agency leaders use to gain power ([Long 1949](#_ENREF_45), [Carpenter 2001](#_ENREF_7), [Carpenter and Krause 2012](#_ENREF_8)), this paper emphasizes the ways that political coalitions can influence long-term agency effectiveness through the combination of formal structural change and informal field-level actions. Powerful agencies often attract opposition and/or actors who wish to redirect that power to their own purposes, and power may shield agencies from adapting to these changes, leading them to eventually undermine their own prestige ([Durant 2015](#_ENREF_17)). The environmentalists in the US who pushed for new environmental laws at the federal level took a first step in changing national forest policy, yet initial changes resulting from the passage of the National Environmental Policy Act and the National Forest Management Act were modest ([Wilkinson and Anderson 1985](#_ENREF_86)), and the more dramatic changes discussed here came as a result of the actions of hundreds of field-level activists and government officials over decades ([Yaffee 1994](#_ENREF_89), [Durbin 1996](#_ENREF_18)). Similarly, the domination of India’s forest governance by corrupt politicians is less the result of any particular formal policy, and more the outcome of the informal experimentation by local politicians in finding ways to survive in a competitive political landscape. Future research should examine more carefully the relationship between national and local political coalitions in the process of policy change and implementation: we understand little about how political movements that cross these spatial scales are built and maintained, nor about how they build relationships with local agency personnel that contribute to the processes of change described here.

The second reason that the arguments in this article matter flows directly from the first. Reformers have sought to fix the problems in both US and Indian forest management through changing legal frameworks. In the US, these efforts have often focused on weakening environmental laws ([e.g. USDA - Forest Service 2002](#_ENREF_82)), while in India they have pushed for laws granting more rights to rural communities ([Kumar and Kerr 2012](#_ENREF_41)) or increased funding and independence for forestry agencies ([Kumar 2014](#_ENREF_42)). Yet if the USFS of the mid-20th century was effective not because of its organizational structure, but because of the political consensus that supported the agency’s mission, then increasing agency effectiveness will require developing a redefined mission and a supporting political coalition that can overcome conflicting priorities. These lessons are relevant to other agencies that might propose internal structural reforms – drawing on the lessons of Kaufman and others about internal organizational behavior – to solve problems that originate in the broader political environment.

If solving administrative problems requires getting the politics right, how is this done? The building of political coalitions is a large subject that goes beyond the scope of this article, and should be an important direction for future research in this area. In the cases described here, foresters themselves played crucial roles in defining the forestry agenda throughout the late 19th and early 20th century ([McGeary 1960](#_ENREF_50), [Miller 2001](#_ENREF_53), [Carpenter 2001](#_ENREF_7), [Stebbing 1922](#_ENREF_77)), but after the middle of the 20th century, the greatest initiatives were taken by US environmentalists ([Hays 1987](#_ENREF_27)) and Indian politicians ([Zwart 1994](#_ENREF_90), [Potter 1996](#_ENREF_63)). While early foresters focused on building effective agencies so that they could achieve their policy goals, more recent political entrepreneurs had other aims, which ultimately undermined agency effectiveness. A simple change in administrative structure that aimed to restore older patterns is not likely to be effective due to fierce opposition from those who have been empowered. We do not understand well why these shifts in rhetoric and initiative occurred, and this should be a direction for future research. One plausible theory is that the power of agencies promoted a backlash from the publics that were poorly served by those agencies ([Durant 2015](#_ENREF_17)). Further research is also needed to document the strategies that have been used successfully to forge new, effective political coalitions, and that might provide a way forward for those who wish to get the politics right.

The final reason this argument matters is that it illustrates broader problems for understanding context in the study of public administration. Some scholars have expressed concern that prominent results from quantitative studies are based on a small number of datasets, calling for attention to the importance of contextual variables ([O’Toole and Meier 2015](#_ENREF_60)). Qualitative case studies might seem to offer an advantage in this respect, since they allow more room to explore context. Yet qualitative studies can also ignore contextual variables, particularly in the absence of a vigorous program of comparative analysis, a program that is largely lacking in public administration ([Perry 2016](#_ENREF_62), [but see Coleman and Fleischman 2012](#_ENREF_14), [Coleman 2014](#_ENREF_13)). Kaufman ignored political context because it seemed uninteresting – for fifty years the USFS had faced a stable political context in which it was the dominant policy actor ([Carpenter 2001](#_ENREF_7)). He thus looked to administrative structures as the source of the Forest Service’s distinctiveness. Only by comparing Kaufman’s agency to similarly structured agencies operating in different political contexts can we see the importance of political context in determining outcomes.

**Conclusion**

In this article, I have argued that Herbert Kaufman’s explanation of the success of the USFS in molding its employees to follow central directives was incomplete because Kaufman ignored the political context of the agency. Kaufman’s agency was successful because it was supported by a strong political coalition that helped build an effective structure and supported it in the field. As I have shown, similar agencies lacking this supportive political environment are likely to founder. Getting internal institutions “right” is insufficient for building effective organizational cultures. Building effective organizational cultures inside of public agencies also requires developing political supports outside of the agency that support the passage of legal reforms and effective field-level implementation of those reforms. Reformers wishing to improve public agency performance must consider the politics of the reform process if they wish to be successful. In order to support these efforts, public administration scholarship needs to devote greater attention to understanding how the interactions between public agencies and external political actors across scales from national governments to field offices influences the shaping of organizational reputations and the outcomes of public programs.

**References**

Auer, Matthew, Kenneth Richards, David Seesholtz, Burnell Fischer, Christian Freitag, and Joshua Grice. 2011. "The U.S. Forest Service and Its Responsibilities under the National Environmental Policy Act: A Work Design Problem." *Public Organization Review* 11 (2):135-153. doi: 10.1007/s11115-010-0115-6.

Aycan, Zeynep, Rabindra Kanungo, Manuel Mendonca, Kaicheng Yu, Jürgen Deller, Günter Stahl, and Anwar Kurshid. 2000. "Impact of Culture on Human Resource Management Practices: A 10-Country Comparison." *Applied Psychology* 49 (1):192-221. doi: 10.1111/1464-0597.00010.

Balogh, Brian. 2002. "Scientific forestry and the roots of the modern American state: Gifford Pinchot’s path to progressive reform." *Environmental history* 7 (2):198.

Barton, Gregory A. 2001. "Empire forestry and the origins of environmentalism." *Journal of Historical Geography* 27 (4):529-552.

Burton, Jason. 2012. "Kaufman’s Forest Ranger, Still Serving." *Public Administration Review*:no-no. doi: 10.1111/j.1540-6210.2012.02591.x.

Bussell, Jennifer. 2012. *Corruption and Reform in India Public Services in the Digital Age*. Cambridge: Cambridge University Press.

Carpenter, Daniel P. 2001. *The forging of bureaucratic autonomy : reputations, networks, and policy innovation in executive agencies, 1862-1928*. Princeton, N.J.: Princeton University Press.

Carpenter, Daniel P., and George A. Krause. 2012. "Reputation and Public Administration." *Public Administration Review* 72 (1):26-32. doi: 10.1111/j.1540-6210.2011.02506.x.

Carroll, Franklin O., John C. Freemuth, and Leslie R. Alm. 1996. "Women Forest Rangers: Revisiting Kaufman's The Forest Ranger." *Journal of forestry*.

Chaturvedi, Rohini. 2016. "India's forest federalism." *Contemporary South Asia* 24 (1):1-18. doi: 10.1080/09584935.2015.1132189.

Clarke, Jeanne Nienaber, and Daniel McCool. 1996. *Staking out the terrain : power and performance among natural resource agencies*, *SUNY series in environmental politics and policy*. Albany: State University of New York Press.

Clary, David A. 1986. *Timber and the Forest Service*. Lawrence: University Press of Kansas.

Coleman, Eric A. 2014. "Behavioral Determinants of Citizen Involvement: Evidence from Natural Resource Decentralization Policy." *Public Administration Review*:n/a-n/a. doi: 10.1111/puar.12249.

Coleman, Eric A., and Forrest Fleischman. 2012. "Comparing Forest Decentralization and Local Institutional Change in Bolivia, Kenya, Mexico, and Uganda." *World Development* 40 (4):836-849. doi: 10.1016/j.worlddev.2011.09.008.

Collier, David. 2011. "Understanding Process Tracing." *PS: Political Science & Politics* 44 (04):823-830. doi: doi:10.1017/S1049096511001429.

Dialogos. 2007. Integrating Mission Accomplishment with Safety at the U.S. Forest Service: Diagnostic Memo Summary (Draft). Washington, DC: USDA-Forest Service.

Durant, Robert F. 2015. "Whither Power in Public Administration? Attainment, Dissipation, and Loss." *Public Administration Review* 75 (2):206-218. doi: 10.1111/puar.12332.

Durbin, Kathie. 1996. *Tree Huggers: Victory, Defeat & Renewal in the Northwest Ancient Forest Campaign*. Seattle: The Mountaineers.

Fenno, Richard F. 1990. *Watching politicians : essays on participant observation*. Berkeley, Calif.: Institute of Governmental Studies, University of California at Berkeley.

Fleischman, Forrest. 2012. "Public servant behavior and forest policy implementation in Central India." Ph.D. 3527562, Indiana University.

Fleischman, Forrest. 2014. "Why do Foresters Plant Trees? Testing Theories of Bureaucratic Decision-Making in Central India." *World Development* 62:62-74. doi: <http://dx.doi.org/10.1016/j.worlddev.2014.05.008>.

Fleischman, Forrest. 2016. "Understanding India’s forest bureaucracy: a review." *Regional Environmental Change* 16 (1):153-165. doi: 10.1007/s10113-015-0844-8.

Fleming, Casey J., Emily B. McCartha, and Toddi A. Steelman. 2015. "Conflict and Collaboration in Wildfire Management: The Role of Mission Alignment." *Public Administration Review* 75 (3):445-454. doi: 10.1111/puar.12353.

Gaventa, John. 1980. *Power and powerlessness : quiescence and rebellion in an Appalachian valley*. Urbana: University of Illinois Press.

George, Alexander L., and Andrew Bennett. 2005. *Case studies and theory development in the social sciences*, *BCSIA studies in international security*. Cambridge, Mass.: MIT Press.

Hannam, Kevin. 2000. "Educating an Environmental Elite: The Training of the Indian Forest Service." *International Research in Geographical and Environmental Education* 9 (4):285-295.

Hays, Samuel P. 1987. *Beauty, Health, and Permanence*. New York: Cambridge University Press.

Hirt, Paul W. 1994. *A Conspiracy of Optimism: Management of the National Forests since World War Two*. Lincoln, NE: University of Nebraska Press.

Hoberg, George. 2001. "The Emerging Triumph of Ecosystem Management: The Transformation of Federal Forest Policy." In *Western Public Lands and Environmental Politics*, edited by Charles Davis, 55-85. Boulder, CO: Westview Press.

Indira Gandhi National Forest Academy. 2010. *Training Handbook: Professional Training Course*. Dehra Dun, India: Indira Gandhi National Forest Academy.

Iyer, Lakshmi, and Anandi Mani. 2011. "Traveling Agents: Political Change and Bureaucratic Turnover in India." *Review of Economics and Statistics* 94 (3):723-739. doi: 10.1162/REST\_a\_00183.

Jeffrey, Craig. 2009. "Fixing Futures: Educated Unemployment through a North Indian Lens." *Comparative Studies in Society and History* 51 (01):182-211. doi: doi:10.1017/S0010417509000085.

Jenkins-Smith, Hank C, Daniel Nohrstedt, Christopher M Weible, and Paul A Sabatier. 2014. "The advocacy coalition framework: Foundations, evolution, and ongoing research." In *Theories of the policy process*, edited by P. Sabatier and Chris Weible. New York: Westview Press.

Kashwan, Prakash. 2011. "Democracy in the Woods: The Politics of Institutional Change in India's Forest Areas." PhD, School of Public and Environmental Affairs, Indiana University.

Kaufman, Harold Frederick, and Lois C Kaufman. 1946. *Toward the stabilization and enrichment of a forest community*: Montana Study, University of Montana.

Kaufman, Herbert. 1960. *The Forest Ranger: A Study in Administrative Behavior*. Washington D.C.: Resources for the Future.

Kay, Adrian, and Phillip Baker. 2015. "What Can Causal Process Tracing Offer to Policy Studies? A Review of the Literature." *Policy Studies Journal* 43 (1):1-21. doi: 10.1111/psj.12092.

Keele, Denise M., Robert W. Malmsheimer, Donald W. Floyd, and Jerome E. Perez. 2006. "Forest service land management litigation 1989-2002." *Journal of Forestry* 104 (4):196-202.

Kohm, Kathryn A., and Jerry F. Franklin, eds. 1997. *Creating a Forestry for the 21st Century*. Covelo, CA: Island Press.

Koontz, T. M. 2007. "Federal and State Public Forest Administration in the New Millennium: Revisiting Herbert Kaufman’s The Forest Ranger." *Public Administration Review* 67 (1):152-164. doi: 10.1111/j.1540-6210.2006.00704.x.

Kumar, Kundan, and John M. Kerr. 2012. "Democratic Assertions: The Making of India's Recognition of Forest Rights Act." *Development and Change* 43 (3):751-771. doi: 10.1111/j.1467-7660.2012.01777.x.

Kumar, P J Dilip. 2014. "Climate Change, Forest Carbon Sequestration and REDD-Plus." *Economic & Political Weekly* 49 (21):22-25.

Laatsch, Jamie, and Zhao Ma. 2016. "Climate-Change Communication Within Public Natural Resource Agencies: Lessons Learned From the U.S. Forest Service." *Society & Natural Resources*:1-17. doi: 10.1080/08941920.2015.1107790.

Lele, Sharachchandra, and Ajit Menon. 2014. *Democratizing Forest Governance in India*: Oxford University Press.

Long, Norton E. 1949. "Power and Administration." *Public Administration Review* 9 (4):257-264. doi: 10.2307/972337.

Luton, Larry S. 2007. "Review: Digging Deeply 47 Years Later: Herbert Kaufman's "The Forest Ranger"." *Public Administration Review* 67 (1):165-168.

Lynn Jr, Laurence E. 2015. "Herbert Kaufman, The Forest Ranger: A Study in Administrative Behavior." In *The Oxford Handbook of Classics in Public Policy and Administration*, edited by Steven J. Balla, Martin Lodge and Edward C. Page. Oxford: Oxford University Press.

Matta, Jagannadha Rao, and John Kerr. 2007. "Barriers Beyond the Partners: Bureaucratic and Political Constraints to Implementing Joint Forest Management in Tamil Nadu, India." *Environment, Development and Sustainability* 9 (4):465-479.

McCubbins, Mathew D., Roger G. Noll, and Barry R. Weingast. 1987. "Administrative Procedures as Instruments of Political Control." *Journal of Law, Economics, & Organization* 3 (2):243-277.

McGeary, M. Nelson. 1960. *Gifford Pinchot, forester-politician*. Princeton, N.J.: Princeton University Press.

Meier, Kenneth J., and Laurence J. O'Toole. 2006a. *Bureaucracy in a democratic state : a governance perspective*. Baltimore, Md.: Johns Hopkins University Press.

Meier, Kenneth J., and Laurence J. O'Toole. 2006b. "Political Control versus Bureaucratic Values: Reframing the Debate." *Public Administration Review* 66 (2):177-192.

Miller, Char. 2001. *Gifford Pinchot and the Making of Modern Environmentalism*. Covelo, CA: Island Press.

Moe, Terry. 2005. "Power and Political Institutions." *Perspectives on Politics* 3:215-33.

Moe, Terry M. 1990. "Political Institutions: The Neglected Side of the Story." *Journal of Law, Economics, & Organization* 6:213-253.

Narain, Sunita, HS Panwar, Madhav Gadgil, Valmik Thapar, and Samar Singh. 2005. Report of the Tiger Task Force: Joining The Dots. edited by Union Ministry of Environment and Forests Project Tiger, Government of India. New Delhi.

Nie, Martin. 2008. "The underappreciated role of regulatory enforcement in natural resource conservation." *Policy sciences* 41 (2):139-164.

O'Leary, Rosemary. 2009. "When a Career Public Servant Sues the Agency He Loves: Claude Ferguson, the Forest Service, and Off-Road Vehicles in the Hoosier National Forest." *Public Administration Review* 69 (6):1068-1076. doi: 10.1111/j.1540-6210.2009.02064.x.

O'Toole, Randal. 1988. *Reforming the Forest Service*. Covelo, CA: Island Press.

O’Toole, Laurence J., and Kenneth J. Meier. 2015. "Public Management, Context, and Performance: In Quest of a More General Theory." *Journal of Public Administration Research and Theory* 25 (1):237-256. doi: 10.1093/jopart/muu011.

Partnership for Public Service. 2015. "The Best Places to Work in the Federal Government." Partnership for Public Service, accessed March 1, 2015. <http://bestplacestowork.org/BPTW/rankings/detail/AG11>.

Perry, James L. 2016. "Building Global Public Administration Knowledge." *Public Administration Review* 76 (4):533-534. doi: 10.1111/puar.12588.

Potter, David C. 1996. *India's political administrators, from ICS to IAS*, *Oxford India paperbacks*. Delhi: Oxford University Press.

Rangarajan, Mahesh, and Ghazala Shahabuddin. 2006. "Displacement and Relocation from Protected Areas: Towards a Biological and Historical Synthesis." *Conservation and Society* 4 (3):359-378.

Reddy, M. Gopinath, K. Anil Kumar, P. Trinadha Rao, and Oliver Springate-Baginski. 2010. *Obstructed Access to Forest Justice: The Implementation of Insitutional Reform (FRA - 2006) in Andhra Pradesh Forested Landscapes*, *CESS Monograph - 13*. Hyderabad: Centre for Economic and Social Studies.

Reiners, Derek. 2012. "Institutional Effects on Decision Making on Public Lands: An Interagency Examination of Wildfire Management." *Public Administration Review* 72 (2):177-186. doi: 10.1111/j.1540-6210.2011.02486.x.

Robbins, Paul, Anil Chhangani, Jennifer Rice, Erika Trigosa, and S. Mohnot. 2007. "Enforcement Authority and Vegetation Change at Kumbhalgarh Wildlife Sanctuary, Rajasthan, India." *Environmental Management* 40 (3):365-378.

Robbins, Paul, Kendra McSweeney, Anil Chhangani, and Jennifer Rice. 2009. "Conservation as It Is: Illicit Resource Use in a Wildlife Reserve in India." *Human ecology* 37 (5):559-575.

Rochon, Thomas R., and Daniel A. Mazmanian. 1993. "Social Movements and the Policy Process." *Annals of the American Academy of Political and Social Science* 528:75-87.

Sabatier, Paul A. 1986. "Top-down and Bottom-up Approaches to Implementation Research: A Critical Analysis and Suggested Synthesis." *Journal of Public Policy* 6 (1):21-48.

Sabatier, Paul A., John Loomis, and Catherine McCarthy. 1995. "Hierarchical Controls, Professional Norms, Local Constituencies, and Budget Maximization: An Analysis of U.S. Forest Service Planning Decisions." *American Journal of Political Science* 39 (1):204-242.

Saxena, N.C., Devendra Pandey, Achyuta Samanta, A.K. Jha, A.K. Srivastava, Bachitter Singh, Arupjyoti Saikia, Ashish Kothari, C.K. Sreedharan, Jarjum Ete, K.S. Sethi, Ranjana Gupta, A.M. Singh, Mannu Lal Markam, Ramdhan Lal Meena, Rashmi Shukla Sharma, Ravi Chellam, Ravi Rebbapragada, Roma, Sharachchandra Lele, Vasavi Kiro, V.R. Khare, and Rakesh Kumar Dogra. 2010. Manthan: Report: National Committee on Forest Rights. edited by Government of India Joint Committee of Ministry of Environment and Forests and Ministry of Tribal Affairs, ,. New Delhi.

Selznick, Philip. 1949. *TVA and the grass roots, a study in the sociology of formal organization, by Philip Selznick*. Berkeley: University of California press.

Shahabuddin, Ghazala. 2010. *Conservation at the crossroads : science, society, and the future of India's wildlife*. Ranikhet; Bangalore: Permanent Black, in association with the New India Foundation ; Distributed by Orient Blackswan.

Singh, Jarnail, and S.S. Mishra. 2004. The Working Plan for Nagpur Forest Division (Nagpur District) 2004 For the period (2004-05 to 2013-14). edited by Office of the Conservator of Forests, Working Plan Division. Nagpur: Government of Maharashtra.

Springate-Baginski, Oliver, and Piers M. Blaikie. 2007. *Forests, people and power : the political ecology of reform in South Asia*, *Earthscan forestry library*. London; Sterling, VA: Earthscan.

Stebbing, Edward Percy. 1922. *The Forests of India vols. i-iii*. London: Dodley Head.

Thayyil, Naveen. 2009. "Judicial fiats and contemporary enclosures." *Conservation and Society* 7 (4):268-282.

Tipple, Terence J., and J. Douglas Wellman. 1991. "Herbert Kaufman's Forest Ranger Thirty Years Later: From Simplicity and Homogeneity to Complexity and Diversity." *Public Administration Review* 51 (5):421-428.

Twight, Ben W., and Fremont J. Lyden. 1988. "Multiple Use vs. Organizational Commitment." *Forest Science* 34 (2):474-486.

Upadhyay, Sanjay, Shilpa Chohan, and Archana Vaidya. 2009. *India's Forests and the Judiciary: The Godavarman Story*. New Delhi: Enviro-Legal Defence Firm and WWF-India.

USDA - Forest Service. 2002. The Process Predicament: How statutory, regulatory, and administrative factors affect National Forest Management. Washington DC: USDA Forest Service.

USDA Forest Service. 2014. The Rising Cost of Fire Operations: Effects on the Forest Service’s Non-Fire Work. Washington, DC: USDA Forest Service.

Verma, Dharmendra. 2004. "Bureaucracy, Forests and Participation: A Case Study of the Implementation of Joint Forest Management in Madhya Pradesh, India." PhD, Centre for Development Studies, School of Social Science and International Development, The University of Wales, Swansea.

Vilsack, Tom. 2015. "USDA Blog: The Cost of Fighting Wildfires is Sapping Forest Service Budget." US Department of Agriculture, accessed December 26, 2015. <http://blogs.usda.gov/2015/08/05/the-cost-of-fighting-wildfires-is-sapping-forest-service-budget/>.

Wilkinson, Charles F., and H. Michael Anderson. 1985. "Land and Resource Planning in the National Forests." *Oregon Law Review* 64 (1-2):1-373.

Wood, B. Dan, and Richard W. Waterman. 1991. "The Dynamics of Political Control of the Bureaucracy." *The American political science review* 85 (3):801-828.

Yackee, Susan Webb. 2015. "Participant Voice in the Bureaucratic Policymaking Process." *Journal of Public Administration Research and Theory* 25 (2):427-449. doi: 10.1093/jopart/muu007.

Yaffee, Steven L. 1994. *The Wisdom of the Spotted Owl: Policy Lessons for a New Century*. Washington, DC: Island Press.

Zwart, Frank de. 1994. *The bureaucratic merry-go-round : manipulating the transfer of Indian civil servants*. [Amsterdam]: Amsterdam University Press.

Table 1: Comparison of political contexts and organizational structures of forest administration

|  |  |  |  |
| --- | --- | --- | --- |
|  | **USFS, 1950s** | **USFS, Present** | **India, Present** |
| **Outcome** | Organizational Compliance, effective implementation | Internal conflict, medium implementation | Low compliance, poor implementation |
| **Political supporters** | Alliance of local business interests & extractive industries | Conflicting alliances of environmentalists & extractive industries | Politicians |
| **Goals of political supporters** | Efficient implementation of resource extraction | Environmentalists want Resource conservation, industries want more extraction | Obtain bribes, deliver clientelistic goods to supporters |
| **Methods of political control** | Narrow hiring, local and national political pressure | Public participation, legal processes, local protest | Transfers |
| **Role of transfers** | Frequent, maintains organizational loyalty | Frequent, maintains organizational loyalty | Very frequent, facilitates bribery and discipline |
| **Level of corruption** | Low | Low | High |
| **Level of consensus** | High | Low | Low |
| **Educational backgrounds** | Homogenous (all foresters) | Very diverse (numerous professions) | Diverse at start, but all receive extensive homogenous training |
| **Information flow** | Bidirectional between field and supervisors | Bidirectional between field and supervisors | Information mostly flows down from supervisors to field staff |