Parwara Van Panchayat Forest III

Institutional Analysis of the Van Panchayat/Forest Council System in Uttarakhand, India

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March 5, 2012

Location: The original location for this case study was Parwara Village, Dhari Tehsil, Nainital District, state of Uttarakhand (fka. Uttaranchal), India. For purposes of this report, the study area has been expanded to include Van Panchayats and the new Joint Forest Management Councils throughout the state of Uttarakhand.

Uttarakhand is located in the northern part of India, south of China and east of Nepal, in the foothills of the Himalayas. Formerly known as Uttaranchal, a province in Uttar Pradesh, Uttaranchal became the 27th Indian State in 2000. In 2007, the state's name was changed from Uttaranchal to Uttarakhand (Uttarakhand, 2011).

Google maps: http://www.nationsonline.org/oneworld/map/google_map_Uttaranchal.htm

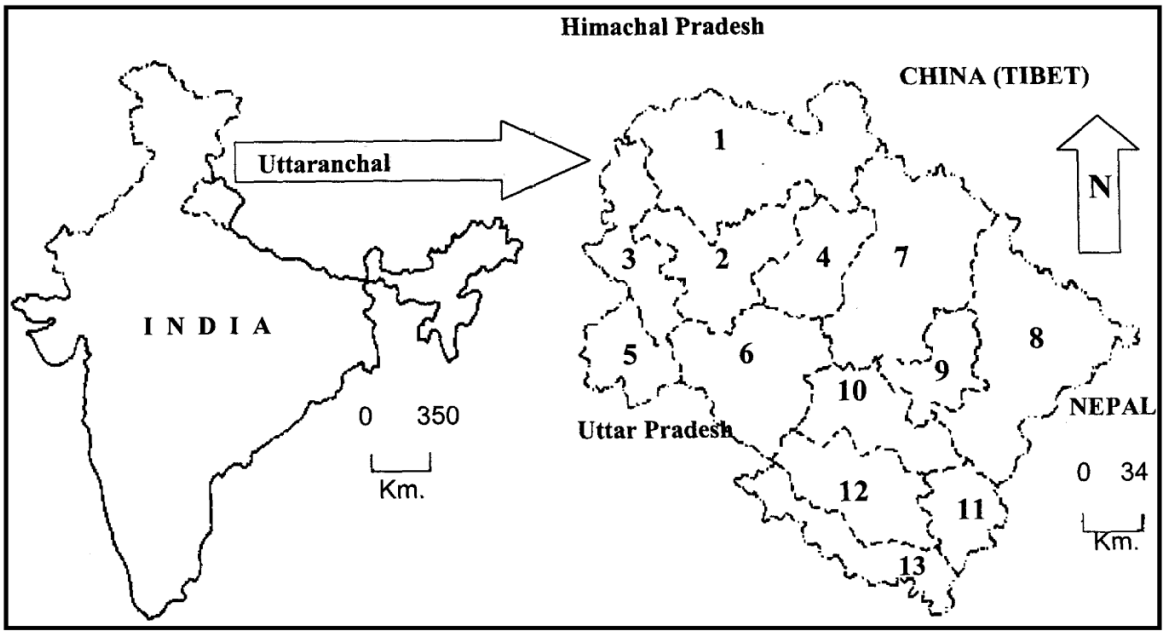


Figure 1. Location of study area (Indian state of Uttarakhand). The numerical values indicate the localities of districts in the state. 1: Uttarkashi, 2: Tehri, 3: Dehradun, 4: Rudraprayag, 5: Haridwar, 6: Pauri, 7: Chamoli, 8: Pithoragarh, 9: Bageshwar, 10: Almora, 11: Champawat, 12: Nainital, and 13: Udham Singh Nagar.

Kala, C.P., et al. (2004).

Uttarakhand Statistical Data

	2011 Census	2001 Census
Total geographical area of Uttarakhand	53,483 sq km	
Forest area	34,651 sq km	
Cultivable land	793,000 ha (= 7,930 sq km)	
Inhabited villages		15,761
Total population	10,116,752	8,489,000
Rural population	7,025,583	6,310,000
Decennial growth rate (2001-2011):	7.64% (2001 to 2011)	19.34% (1991-2001)
Population density	189 persons per sq. km	159 persons per sq. km
Literacy rate	79.63%	71.6%
Rural literacy rate	77.11%	

(Census of India (2011); and Nautiyal, S. (2011)).

Resource System Size: 12,089 Van Panchayats managing approximately 544,965 hectares (5,449.65 sq. km) (Rawat, V., et al., 2010).

Compared to 6,777 Van Panchayats managing approx. 4,000 sq. km in 2004 (Mukherjee, P., 2004).

Resource System Location: State of Uttarakhand, Country of India

Uttarakhand encompasses three major agro-climatic zones which range from lower elevation (500-1000 m above sea level (asl)); middle elevation (1000-1800 m asl); to higher elevation (1800-3600 asl), with varying micro-climates within those areas. However, the Van Panchayats (VPs), including the Parwara VP, are present only in the hill districts between 1000 m and 2000 m (Nautiyal, S., 2011; Mukherjee; Kumar, A., et al., 2005).

Resource Unit Type:

Main appropriated resources: grass (for grazing and collection); forest trees (fuelwood, leaf litter, fodder, construction timber).

Other resource units: dry leaves, twigs, mushrooms, fruit, medicinal plants, and resin.

Main forest tree species: Quercus leucotrichophora (oak), Quercus semicarpifolia (oak), Pinus roxburghii (chir pine or long-leaved pine), and Pinus caribaea (non-native chir pine introduced by the Indian forest department). The region hosts three major communities of chir pine: sal/pine (*Shorea robusta/Pinus roxburghii*), pine pure stand, and oak/pine (*Quercus leuchotrichophora/Pinus roxburghii*) (Kala, 2004).

I. CASE HISTORY SUMMARY

This paper is an extension of two prior case studies about the Parwara village Van Panchayat (Van Panchayat (VP) is Indian for forest council):

(1) 1988 Parwara VP Forest which covered the status of its social-ecological system (SES) from approx. 1931 to 1985 (Case No. 34); and

(2) 2008 Parwara VP Forest II which provided a SES update from the mid 1980s to 2007 (Case No. 159).

Initial Parwara VP case study (approx. 1931 to 1985) indicates that forest lands were protected, and that the rate of biological resources available and withdrawn went from a moderate shortage at the beginning of the time period to balanced at the end of the study, although the rate of unit withdrawal was estimated to increase.

There was no indication that any forest appropriators were being disadvantaged, and the study evaluators felt that the villagers had *de jure* rights of access to forest resources. There is no mention of government interference or international funding (Schlager, et al.).

Parwara VP II (approx. mid 1980s to 2007) reflects increased government control with concomitant decreased local level control of the forest. The VP forest exhibits increased degradation and soil erosion due to overgrazing and excessive lopping of tree branches for fodder by villagers.

Parwara village is described as homogenous with no caste or gender inequalities reported. Confusion over property rights is leading to conflict (Bastian).

Current evaluation (2012) revealed no recent scientific updates related specifically to the Parwara VP Forest beyond those addressed in the case studies above.

This analysis extends the SES study boundaries beyond the Parwara village VP to provide an institutional analysis of various types of forest councils in the state of Uttarakhand, India, including the traditional VPs, new VPs, and Village Joint Forest Management (VJFM), as gleaned from various scientific and governmental publications available in early 2012.

This information was compared and contrasted to the information provided in the previous studies to tease out key data updates and to reveal emerging patterns of development within the SES. In doing so, three key drivers of change have been identified that have the potential to further undermine SES robustness (Anderies, et al., 2004):

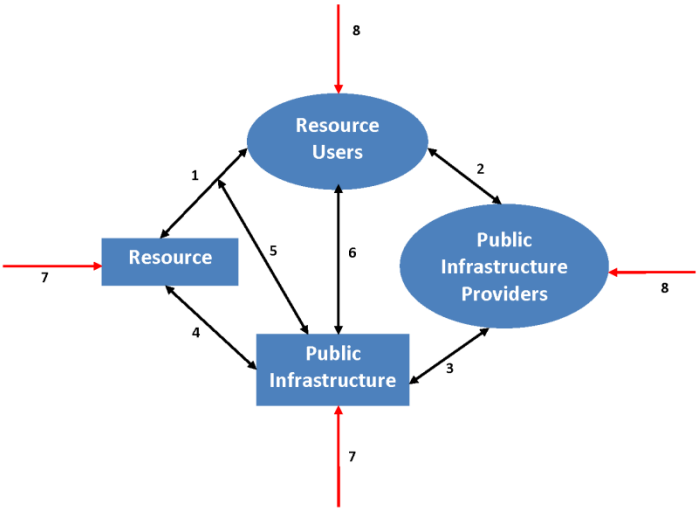
(1) The continued exclusion of women and lower castes (which represent the majority of the very poor) in the forest council decision-making processes;

(2) The lack of clearly defined *de jure* property rights to forest resources for the indigenous *pahari* (hill people) is pitting conservationists against indigenous rights activists; and

(3) Institutional path dependency and international funding are facilitating increased state control by the Indian Forest Department (FD) to the detriment of participatory local governance.

II. KEY DATA UPDATES

This section provides data updates on the key elements of the SES robustness model (Anderies).



Resource

The forest degradation outlined in the Parwara VP II report appears to be accelerating throughout Uttarakhand with Rawat, et al. (2010), reporting a "high degradation of forests" around agricultural fields and villages, leading to the following positive feedback loop:

1. Old growth forests are being removed at a faster rate than young forests are being generated leading to an overall reduction in forest density and canopy cover (Kumar, et al., 2005);
2. This canopy desiccation and resulting canopy-water loss, along with continued overgrazing, is responsible for the expansion of xerophytic (drought) conditions (Briant, Gond, et al, 2010);
3. The rapid replacement of oak tree species by pine, which has a high establishment rate in disturbed forests and is more susceptible to recurrent fire, is making forests more fire prone, thus leading to an increase in top soil and nutrient loss, erosion, and loss of biodiversity (Kumar); and
4. Old growth trees are more susceptible to drought and fire – closing the loop and accelerating the ecosystem decline (Briant, et al.).

Additionally, Nautiyal (2011) also implicates:

5. Conversion of forest lands for agricultural purposes; and
6. Illegal and commercial exploitation of remaining forest resources to meet the commercial demands of pharmaceutical and aroma-chemical-related industries.

Resource Users / Patterns of Interaction

The following SES elements affect resource users' decision-making processes:

1. In Uttarakhand, crops are rainfed and forest products serve as a social security net in times when the monsoons fail or when crops do not yield enough (Springate-Baginski, et al., 2009).

2. Unemployment in Uttarakhand is high (45%) resulting in high male out-migration in search for work (Mukherjee, P., 2004; Sarin, M., 2001).

3. The women left behind are the effective managers of the rural households and forest resources (Mukherjee).

4. Village VPs consist of between seven to nine members, most of which are men. Women are rarely members of VPs (Cyrus, 2011) and, if they are, they likely do not actively participate (Mukherjee).

5. Higher castes can have 80% representation on village VPs, with lower castes having little or no representation (Cyrus).

6. There is no set rotation schedule or election cycle for VP members with some serving for a decade or longer (Cyrus).

7. VP members are elected through an open election system, with villagers raising their hands to vote, which leads to group pressure, favoritism, discrimination, and reelection of the same VP members (Cyrus).

By superimposing the above elements into the social hierarchy of the Indian society, two main influences on collective decision-making emerge that were not addressed in the two previous reports but merit further investigation:

Caste System Influence on Collective Decision Making

Indian society is dominated by the Hindu caste system which over centuries has facilitated a rigid system of ranked social inequality based on the caste one is born into and from which it is extremely difficult to escape. This "varna" system is generally organized into three castes: upper (Brahmins), middle (Kshatriyas, Vaisyas and Sudras) and lower (Panchama). In contemporary India, the government refers to Panchama or untouchables as scheduled castes (Vijaya, M., et al., 2008).

Although both Parwara Village VP studies and Sarin (2001) report that *pahari* (hill/mountain) village communities are relatively homogenous with regard to local castes, the literature indicates that this homogeneity may be localized and not applicable to all forest council situations in Uttarakhand. Moreover, 2001 census data reflects that more than 1.5 million people (18% of the total population) in Uttarakhand belong to the scheduled castes, many of them likely living in village VPs (Data Highlights, 2001).

Gender Influence on Collective Decision Making

India is a patriarchal society in which women do not own or control privately held land, and their rights to forests are mediated through the male head of the household (Sarin, 2001).

Due to the high outmigration of men to find employment, 40% of rural households in Uttarakhand are actually headed by women. Even if men are present, societal restrictions call for

a highly biased division of labor with women bearing the burden of most agricultural work, including ploughing, livestock care, collection of firewood, fodder, leaf litter, and non-timber forest produce from village commons and forest land (Sarin).

Despite being the primary users of the forest resources, women are traditionally excluded from the formal decision-making process at the community level, either by not being elected to the VP council or, if elected, not being allowed to actively participate in VP meetings.

Public Infrastructure Providers.

The following information is provided to supplement the historical context of the previous reports, and to provide a more regional analysis of different types of forest councils now in existence in Uttarakhand.

Prior to British Colonial Rule

Village panchayats dealt with community affairs and were arbiters of intra- and inter-village disputes. They exercised direct control over the use and management of cultivated lands and forest common areas within customary village boundaries with little interference from early rulers. Resource degradation was avoided by using the agricultural lands and forest resources on a spatially and temporally rotational basis, including seasonal migration of livestock to alpine pastures and grasslands. High dependence of the people on forest resources created conservation values embedded in cultural and religious traditions, such as the maintenance of sacred groves (Sarin, 2001).

British Colonial Rule

Under British colonial rule forests were plundered by commercial enterprises with the support of the Indian national government (Springate-Baginski, 2009).

Springate-Baginski sees the formation of the Imperial Forest Service in 1864 by the British as a "critical juncture" in Indian forest rights because the agency viewed local peoples' customary use rights of forests as an obstruction to private enterprise and economic gain (2009). This set the stage for policies designed to exclude local people from commercially viable forests.

Forest Department (FD)

The FD has retained near autonomous rule over India's forest resources since its inception. The agency controls most forest lands which generate large revenue streams (both legal and illegal), and it operates with little democratic or judicial oversight (Springate-Baginski).

Van Panchayats

The Van Panchayat Act of 1931 was formed to assuage villagers who, after being denied access to the forest resources they had traditionally relied upon, engaged in a large-scale local rebellion that included incinerating forests (Sarin).

Under the Van Panchayat Act, villages can apply for legally constituted village forests (*de jure* right) which were demarcated from within the Class I and civil *soyam* forests and governed by a forest council, the VP.

Village Forest Joint Management (VFJM)

Contrary to its name, VFJM, which was introduced by the Forest Department in 1997, curtails local participatory governance by strengthening the state's control over forest resources (Mukherjee). The development of VFJMs is the direct result of a condition placed on a $65 million World Bank loan to the Uttar Pradesh Forestry Project (Sarin, 2001 qtd. in Mukherjee).

Public Infrastructure.

Institutions / Uttarakhand

Reserved Forests

69% of Uttarakhand forests are classified as reserve forests and are under the FD's direct control. These forests contain groves of the commercially most prized trees to which no community access rights are granted. However, Mukherjee reports that villagers regularly ignore these prohibitions and access reserved forests to harvest non-timber products.

Protected Forests

16.8% of Uttarakhand forests are classified as protected forests (called civil land in the Kumaon region; and *soyam* land in the Tehri Garhwal region).

Protected forests are managed by the Revenue Department (RD) with the collaboration of village VPs, and under the jurisdiction and oversight of the FD (Sarin).

These forests are generally located adjacent to settlements with limited right of local access (open access) to forest resources. However, that access can be revoked at any time at the pleasure of the FD (Springate-Baginski).

Panchayati / Community Forests

Approximately 13.6 % of Uttarakhand forests are under VP (forest council) rule.

VPs represent a hybrid form of state ownership and community management (Sarin; Mukherjee). In contrast to civil/*soyam* forests, VP forests are not open access, but are legally demarcated village forests designed, managed, and implemented by elected VPs under the guidance of the following laws and regulations:

1. Kumaun Panchayat Forest Rules enacted under §28(2) of the 1927 Indian Forest Act (see below for details),
2. Revenue Department rules;
3. "Technical advice" of the FD; and
4. VP's individual working rules concerning forest use which have evolved independently within each village VP.

(Mukherjee, 2004)

Mukherjee (2004) identifies four major problems plaguing existing VPs:

1. The lack of effective and easily accessible dispute resolution mechanisms;

2. Inter-village inequity in the availability of forest areas (particularly with regard to women and lower castes);

3. The erosion of VP authority (by the FD); and

4. The limited control over forest-based livelihoods and income.

Village Forest Joint Management (VFJM)

VFJM is the FD's response to a $65 million World Bank loan received in 1997 which was being provided to fund participatory resource management projects, particularly those targeting women and the poor. Instead of using the funding to correct some of the weaknesses evident in existing VPs, the FD has promoted the implementation of VFJM within VPs to substitute current VP rules. In doing so, VFJM rules allow the FD to become the dominant partner in the management of VPs and civil/*soyam* forest lands.

The decision-making autonomy of VPs participating in VFJM is now subject to the "supervision, direction, control, and concurrence of the Divisional Forest Officer" (Sarin, Defenders of the Forest). The position of "forest guard," which was eliminated after the villagers' riots in the early 20th Century, is reestablished as a non-elected member secretary on the VP council, and as the VP bank account holder. This provides the forest guard with direct control over VP governance and VP funds, and is a "direct violation of the democratic decentralization of governance by vesting power and authority in a non-elected representative of the [FD] bureaucracy" which further undermines the credibility and legitimacy of VPs (Sarin, Defenders; Mukherjee).

New Van Panchayats

The inflow of vast funding provided by the World Bank for VFJM has also had profound effects on VPs. Prior to the late 1990s, VPs were local initiatives created by local populations to protect the forest resources upon which they depended. Now instead of villagers applying for VP status with the government (a need-based and demand-driven process), the FD is actively demarcating the remaining civil/*soyam* lands into new VPs (supply-driven) under VJFM rules, irrespective of whether VPs are required or not, and ignoring local community management arrangements and/or boundary disputes.

III. EMERGING PATTERNS

The continued exclusion of women and lower castes from local participatory governance.

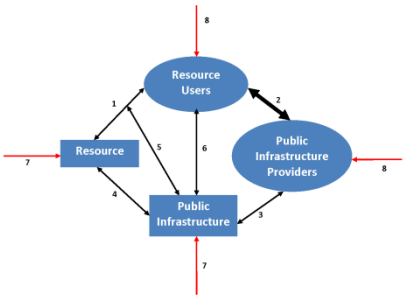
Ballabh, V., et al.'s study of four selected villages in Uttarakhand shows that caste ranking influences group decision-making with regard to forest resources by giving higher castes greater representation and more power (2002).

Moreover, Colfer (2011) reports that blacksmiths, who are members of the scheduled caste and uniquely dependent on firewood to make a living, described feeling excluded from forest user group decision-making and unable to challenge the *status quo* because of illiteracy and social perceptions. Ojha (2008) characterized this as "symbolic violence" because the lack of decision-making input forces lower castes to illegally harvest the forest resources they need for their

survival, which results in further exclusion from society when they are caught and branded as criminal "forest destroyers" (qtd. in Colfer).

Uttarakhand village women provide a fascinating insight into how the decision-making processes of local women can influence participatory governance both positively and negatively. In the 1970s, in response to large-scale commercial logging projects in local forests, village women in the Chamoli district spearheaded the Chipko ("tree-hugging") movement in which women encircled trees with their bodies to protect them from being logged and demanded more local control over the extraction and processing of forest products (Sarin). The movement quickly spread to various parts of Uttarakhand and garnered international support allowing many women to have a say in VP councils.

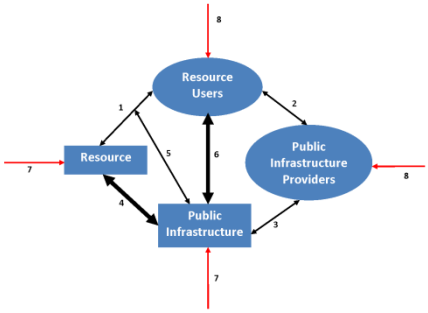
However, in the late 1980s, when the FD unilaterally established conservation areas and either evicted villagers and/or revoked their access to forest resources within conservation boundaries, there was a backlash, particularly by former Chipko activists who abandoned environmental protection measures and started the *ped kato andolan* (cut the trees) movement More recently, women have been engaged in the *jhapto cheeno andolan* (snatch and grab) movement to express their resentment against the national government's actions and the resulting alienation and disempowerment of local populations, which is particularly felt by women (Sarin, 2001). Sarin uses the Pakhi village VP to illuminate women's involvement in VP governance from 1958 to the introduction of VFJM in 1999 (Sarin, Defenders of the Forests).



The continued marginalization of women and scheduled castes represents a weakness in the link between resource users (operational level) and public infrastructure providers (collective choice level) resulting in social and ecological conflict due to the fact that the individual choices of the marginalized will result in decisions (overharvesting) that do not benefit the long-term survival of the SES. Moreover, Uttarakhand forest councils also violate the collective choice arrangement design principle of long-enduring sustainable institutions (Ostrom, 1990) by not including women/scheduled castes in the group that can modify the rules governing the resource, thereby excluding those most dependent on the resource from providing their input into the decision-making process.

The lack of de jure property rights to forest resources is pitting conservationists against indigenous populations.

The FD is responsible for the enforcement of the Forest Conservation and Wildlife Protection Acts and has used this power to implement conservation laws without consulting or considering villagers' customary rights to, and dependence on, forest resources (Sarin, Defenders; Springate-Baginski). This has led to conflicts when villagers suddenly find that their access to forest resources has either been restricted or cut off due to endangered species' protections or other forest conservation measures. These actions place conservationists' interests in direct conflict with the needs and rights of local villagers. The resulting resentment and alienation is increasingly expressing itself in local movements, such as "cut the trees" and "snatch and grab," as well as the deliberate killing of protected wildlife (Ogra, 2008).

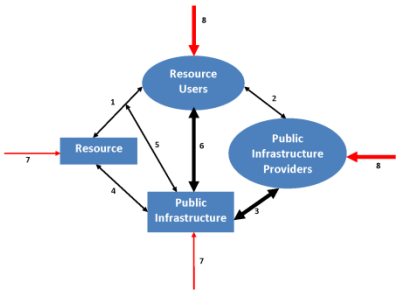


Springate-Baginski emphasizes that customary institutions, such as forest councils, are vulnerable to appropriation from outsiders and top-down forces. Without irrevocable *de jure* property rights, as they were intended under the 1931 VP Act, villagers are left without an effective institution to protect their forest access rights from the disparate interests and corruption of the FD. This represents a weakness in the link between resource user and the public infrastructure (property laws) which is being exploited by the FD to favor conservation efforts over villagers' access rights. The backlash and deliberate destruction of trees and killing of endangered animals by villagers due to the FD's policies represents a weakness in the link between the public infrastructure and the resource. Overall the FD's policy implementation violates Ostrom's (1990) minimal recognition of rights to organize design principle by not acknowledging users long term tenure rights to the resource.

Institutional path dependency and international funding are facilitating increased state control by the Indian Forest Department (FD) to the detriment of participatory local governance.

Institutional path dependency, including political and economic power, has caused the FD to continue to pursue policies that view villagers as "encroachers" and/or as not capable of managing forest resources sustainably. This philosophy reflects itself in "generalized rules and regulations in the name of 'participatory governance' that [have] crippled" VPs and reduced the spirit of local governance to that of a powerless non-official manager (Mukherjee). These actions are being further aided through World Bank funding provided to the FD without any oversight and understanding of the underlying social structure and institutions.

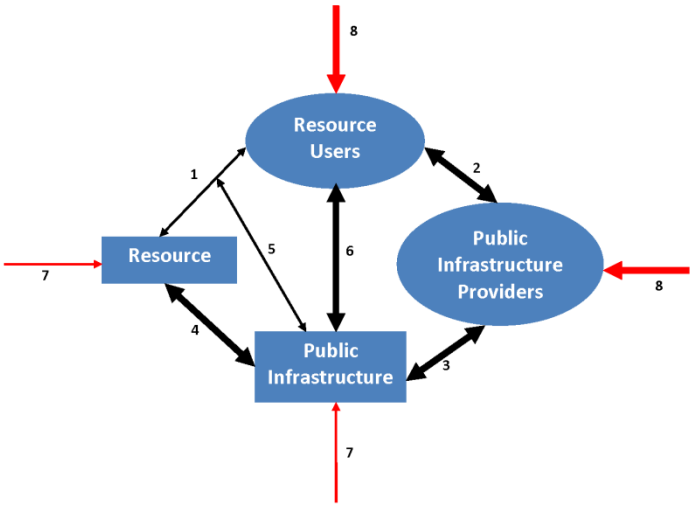
The FD has used the World Bank funding to insert VFJM rules into existing and newly established (by the FD) VPs allowing the FD an unelected seat on the VP council (forest guard) and direct control over VP funding. This is a circumvention of the spirit of the 1931 VP Act and the intent of the funding provided by the World Bank, both of which were to strengthen local governance. The FD has asserted further control over village forest decision-making processes by deploying teams of FD representatives and NGO 'social motivators' to communicate and develop micro-plans for the forest management of villages. VP leaders with experience in community forest management are purposely excluded from the process (Mukherjee). As a direct result of VFJM, the number of VPs in Uttarakhand has increased from 61 in 1947 to 12,089 in 2010. This top-down approach, which now requires a separate VP per village (previously VPs could consist of multiple villages who accessed a certain forest area) has led to the abrupt reorganization of existing multi-village VPs and an inequitable distribution of forest resources (Mukherjee).



The FD's assertion of power and control over participatory local governance in Uttarakhand represents a weakness in the link between public infrastructure and public infrastructure providers. The changes to the governance structure of VPs due to the implementation of VFJM also represent an external force on the public infrastructure providers with increasing conflict and uncertainty. In an environment that exhibits high

unemployment and low cash income, the temptation of large sums of World Bank money under VFJM is also causing conflict among villagers desperately seeking to gain control of the money, further widening the rift between village elites and marginalized groups, such as women and scheduled castes. This represents an external force on the resource users and a marked weakness in the link between public infrastructure and resource users.

2012 Robustness Model of Uttarakhand Forest Councils:



IV. SUMMARY/CONCLUSION

Although the VPs of Uttarakhand have their weaknesses, particularly with regard to the inclusion of women and scheduled castes, the basic principles of the original VP institution are sound, and there is reason to believe that some of the older VPs continue to operate in a manner that meets intra-, inter-generational, and interspecies equity. However, the external forces on the social actors due to the FD's implementation of World Bank funding, as well as the institutional path-dependency of the FD, which favors top-down control over forest resources and VP funding, is threatening local participatory governance of Uttarakhand's forest councils. This paper specifically identifies three emerging issues which result in four compromised links in the SES framework that have the potential to shift the SES into an undesirable state. Further research into these emerging issues may lead to potential solutions on how the plurality of laws and regulations implemented by the FD may be teased apart and nested in order to de-evolve the existing institutional framework by strengthening the identified weaknesses.

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