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**Tradition and Sovereignty:
Conflicts Over the Forests of Dir-Kohistan**

Shaheen Rafi Khan

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13

Tradition and Sovereignty: Conflicts over the Forests of Dir-Kohistan

Shaheen Rafi Khan

13.1. Introduction

This chapter addresses the links between resource rights, local livelihoods, insecurity and conflict in the Dir-Kohistan Valley (referred to henceforth as Dir-Kohistan) within an institutional framework.¹ It has some of the best-endowed forest resources in the country. Over the past three decades, these resources have degraded severely due to a combination of rapid population growth, increasing market forces, and an institutional set-up favouring resource extraction rather than sustainable use where natural resource ownership and management by communities has gradually been displaced by the state.

The community-based rights and management of resources has its roots in customary law, which is historically known as *garzinda wesh*, or moveable distribution (Sultan-e-Rome 2002). It ensured equitable distribution of land, water, pastures, and forests. State ownership and management of forest resources on the other hand fall within the ambit of statutory law and are defined by two sets of legislation. The 1927 Forest Act was a territorial law with a strong enforcement orientation. It divided forests into three categories: reserve forests, protected forests, and village forests. Dir-Kohistan's forests were declared protected forests in 1975. Under this act, the Forest Department (FD) had the power to close forests and forbid communities from extracting timber, fuelwood, fodder, and other forest products. Where permission to do so was granted, as in Dir-Kohistan's protected forests, it was curtailed by a system of permits and fines. The 2002 North Western Frontier Province (NWFP) Forest Ordinance retained these clauses but also introduced

¹ The institutional context refers in this case to resource rights and systems of management and adjudication through which these rights are exercised.

Shaheen Rafi Khan

provisions relating to joint forest management (JFM). The ordinance was the outcome of a broader institutional reform process, involving forest-dependent communities in management and monitoring.

Both state and community-based institutions have a say in the mediation of conflicts over the use of natural resources and the distribution of commercial benefits arising from them. The *jirga*, a body of nominated village elders, adjudicates criminal and common-property issues. It is not a permanently constituted body but a flexible one where nominated elders come together over specific issues and in specific places to mediate conflicts and resolve issues. Once a decision is taken, the *jirga* disbands until the next issue arises. Concurrently, communities also have recourse to civil and Islamic courts on adjudication of these issues.

We find an increasing dominance of statutory law, which has subsumed customary entitlements to natural resources. Firstly, institutional inability to enforce these laws has transformed communities from guardians to predators of the commons. Secondly, it has induced ingress by commercial loggers who collude with the Forest Department and local notables to extract timber well in excess of sanctioned limits. Thirdly, the lack of transparency in distributing royalties to communities with entitlements has twice led to conflicts between communities and the state. In one such case, a *jirga* was constituted to mediate the conflict.

A key factor in the disintegration of the state governance system has been the rapid increase in the prices of timber, fuelwood, and non-timber forest products (NTFP) over the past three decades, which has brought about incompatibility between the need for conservation, the commercial interests of loggers, and the financial benefits derived by the Forest Department and civil-administration functionaries. Dasgupta (this volume) refers to the need to study markets 'in order to understand the institutions that govern CPRs'. Agrawal (2001: 1659) provides the local context for this by pointing to 'the gradual change in articulation with reference to external markets'. Available evidence indicates that prices driven by external markets have provided perverse incentives to and engendered uncontrolled logging by what is commonly called the 'timber mafia'.

The rules of the game, which define our frame of analysis, are resource rights (North 1990).² The organizational forms, which determine the efficacy of these rights and shape them over time, have two functions: systems of natural resource management and systems of adjudication or conflict resolution. As indicated, two resource rights regimes coexist in the case-study area. Vani (2002) defines these as two distinct frameworks of governance. Customary law invests ownership and user rights in the same collective, namely the local communities. In contrast, statutory law separates ownership

² The institutional approach of this chapter draws heavily upon North (1990).

Conflicts over Dir-Kohistan's Forests

and user rights. The management and conflict resolution systems through which these rights are exercised are, respectively, community-centric and state-centric.³ A factor in such deterioration is the growing incompatibility between the state's conservation mandate and the emerging structure of incentives.

Section 13.2 sets the context for the study. Section 13.3 describes customary and statutory law and the governance systems (for natural resource management (NRM) and conflict resolution) associated with them. It examines the interface between the two systems of law and governance in an evolving context, in other words, how they contradict and complement each other. Local government institutions and their potential for resource management are briefly touched upon. Section 13.4 provides documented and anecdotal evidence of degradation that has occurred concurrently with the emerging dominance of state management institutions. Section 13.5 analyses the emerging structure of perverse incentives and assesses their impacts on relations between the state and communities. Section 13.6 concludes with discussions and policy recommendations.

13.2. The context

Dir-Kohistan has a population of 112,695 with a male-female ratio of 51:49 (Government of Pakistan 1998). The three main ethnic groups are the *kohistanis* (40 per cent), the *pathans* (50 per cent), and the *gujjars* (10 per cent).

Dir-Kohistan is situated in the extreme north of the upper Dir District in the NWFP.⁴ It is part of the region, which lies at the confluence of the three highest mountain ranges of the world, the Karakorum, the Hindu Kush, and the Himalayas. It borders the Chitral district to the north and the Swat district to the east. The total area of Dir-Kohistan is 12,000 km² (412,570 acres) with land-use classes given in Table 13.1.

The land-use classifications fall within three distinct ecosystems (oak forests, coniferous forests, and alpine pastures) and transitional zones. The oak (*Quercus ilex*) forests radiate upwards from the valley bottom and terminate laterally in the mid-valley section. The mixed coniferous forests are found near the upper ridges of the mid-valley section, converging on the valley floor and up the valley slopes in the northern uplands. The alpine pastures extend beyond the tree line to permanent snowfields with fairly large freshwater lakes.

³ The evolution of resource rights, their impacts on forest management and the communities, and the deterioration of state institutions are well recorded by Guha in his seminal work on ecological history (Guha 1983).

⁴ Geographically, it lies between 35.9° to 35.47° north latitude and 71.52° to 72.22° east longitude.

Shaheen Rafi Khan

Table 13.1. Dir-Kohistan land-use classification

Land use	Type	Acres	%
Forest	Coniferous	137,000	33.3
	Broad-leaved	11,917	2.9
Agriculture	Rain-fed	17,365	4.2
	Irrigated	16,555	4.0
	Pasture and rangeland	229,338	55.6
Total land		412,570	100

Source: Ghazi Marjan Work Plan, 1973–93.

Note: The data excludes snowfields.

The valley elevation ranges from 4,000 to 12,000 feet above mean sea level. The climate is dry temperate with an annual rainfall of approximately 1075 mm. Precipitation occurs mainly in the winter and the spring. The valley's three micro-ecological zones correspond with specific agricultural practices. Agricultural land cuts across ecosystems. It comprises silt and sediment deposits along the valley bottom, alluvial fans, terraced encroachments into oak forests, and land converted for potato cultivation in coniferous forest and pastures. Although Dir-Kohistan is rich in floral and faunal biodiversity, the wildlife population in the valley is decreasing due to relentless hunting.

The region, historically, has great strategic value. Originally, in the late nineteenth century, British colonial rulers regarded it as a bulwark against Russian expansionism. While stability in the region continues to be vital to Pakistan's political and strategic interests, the imperatives of good governance associated with such stability are lacking. Dir-Kohistan's administrative integration with Pakistan in 1969 triggered divisive forces, which culminated in open conflict on a number of occasions, the most notable being the aerial bombing of the valley by the Pakistan Air Force in 1976.

The genesis of the problem lies in the failure to provide development and justice to the local communities. Dir-Kohistan's social and economic indicators are far below that of the national average. The Pakistan Human Development Report, 2003, has compiled economic and social statistics for all of Pakistan's districts. In Table 13.2, we present indicators (in terms of rank ordering) for the seven poorest districts in the NWFP, which has a total of twenty-four districts. Dir-Kohistan falls in the low to mid-level in these rankings. It does poorly on the income indicators and relatively better on the indicators for health and education. But that is little consolation when, on average, twenty districts in the NWFP perform better.

Literacy levels are well below the national average at 45 per cent. In Dir-Kohistan, the literacy rate is 21 per cent for men and not more than 6 per cent for women. The distressingly low average for women reflects both social and cultural inhibitions and the dearth of educational facilities. Water

Conflicts over Dir-Kohistan's Forests

Table 13.2. Human development indicators (HDI) in the NWFP

	Literacy	Enrolment	Immunization	Real GDP/PC	Education	Health	Income	HDI
<i>Battgram</i>	3	3	3	5	2	3	3	3
<i>Hangu</i>	7	7	6	1	7	5	1	7
<i>Indus-Kohistan</i>	1	1	1	7	1	2	5	1
<i>Lower Dir</i>	6	6	7	3	6	7	2	5
<i>Shangla</i>	2	2	2	6	3	1	4	1
<i>Tank</i>	5	5	4	4	5	6	6	6
<i>Upper Dir</i>	4	4	5	2	4	4	1	4

Source: Pakistan, National Human Development Report, 2003.

Note: Number 1 represents the most impoverished district.

supply and sanitation, health services, road infrastructure, and energy supply are both deficient and of poor quality.

The social organization in Dir-Kohistan is based on segmentary lineage. Anthropologists classify these societies as a subtype of 'acephalous' or headless societies. In other words, these societies have no internal hierarchies (Barth 1956). Genealogical distances determine kinship loyalties. While male relationships within the community are egalitarian, a strict hierarchy defines male-female relations. More precisely, women are an excluded group, disempowered and marginalized, with no social or economic rights. As indicated later, during the pre-invasion era, the local leaders (*khans*) did not enjoy hereditary title but were nominated for service to the community and the ability to entertain.

The economy is based on subsistence agriculture, with income from agriculture, forest royalties, livestock, and labour services, both down-country and abroad. Landholdings are small and climatic conditions limit crops to a maximum of two per year. Subsistence involves making use of different ecological spaces, namely agricultural land, pastures, and forests. Sustainable livelihoods depend on a careful husbanding of these resources.

13.3. Resource rights and systems of governance in Dir-Kohistan

13.3.1. Customary law⁵ (*Riwaj*)

A brief foray into Dir-Kohistan's history sets the context for the discourse on resource rights. Dir-Kohistan's history can be traced back more than 350 years. Originally the valley residents were non-Muslim, primarily *kohistanis*, who presently constitute 40 per cent of the population and lay hereditary claim to the valley's communal resources (coniferous and oak forests, rangelands, and

⁵ See Sultan-e-Rome (2002). Additional information was gathered through focus-group discussions and interviews with valley residents and notables.

Shaheen Rafi Khan

alpine pastures). In 1640, the *Akhund Khel*, a clan of the *Yusufzai pathans*,⁶ invaded the valley. The local *kohistanis* residing in the main valleys, Ganshal, Dhogdara, Gawaldai, and the main Dir-Kohistan valley beyond Patrak, fled to the higher and inaccessible mountain areas. In time, partly driven by the need to survive, they converted and returned to their homelands. As the *pathans* settled in the valleys and took up sedentary occupations and multiplied, a two-tiered, centralized leadership emerged in a relatively short time. The *mashers* and *maliks* (elders and chiefs), representing the second leadership tier, began to pay homage to the *Akhund khel khans* of the *Yusufzai* tribe whose progeny became the ruling family of Dir. Ghazan Khan was the most powerful *khan* of Dir before the British invasion in 1895. He died in 1884 and was succeeded by his son, Sharif Khan. In 1895, the British conferred upon him the title of *nawab* as a reward for his loyalty.

Customary law governing rights to natural resources (forests, agricultural land, rangeland, pastures, and wasteland) is rooted in a system known as *garzinda wesh*, defined literally as 'moveable distribution'. The invading *Yusufzai pathans* introduced this system in the mid-seventeenth century and over time the *kohistanis* adopted it too. The guiding rationale was that as land differed in composition, location/accessibility, fertility, and availability of water, it was necessary to ensure equal sharing of its best and worst features. The permanent aspect of this system was the allotment of all categories of land among the main tribes. Each allotment included a mix of agricultural and forest (*zangal*), pasture (*warshoo*), and wasteland. The sub-tribes within each tribe reallocated the land and houses every five, seven, or ten years, depending on what was agreed upon mutually. The local term for the segments subject to reallocation was *dawtar*. The shareholders in this arrangement were referred to as *dawtaris*.

In addition to the fixed land boundaries separating major tribes, occupations and tribal status also led to the creation of permanent entitlements known as *serai* while the owners of such lands were called *stanadars*. These were community land grants that were turned over to holy families/persons to construct mosques as well as for self-sustenance.⁷ A more important type of land grant, which subsequently had significant political ramifications, was to the tribal elders, which was referred to as *khan serai*. Originally, these grants had a functional purpose in providing resources to entertain, a critical requisite for leadership: the categories were *daday serai* (maize-serving area), *mela serai* (guest area), and *telu serai* (oil-burning area in the *hujra*). *Serai* holdings were *mundai* (with defined borders) and did not preclude *dawtar* shares.

⁶ *Yusufzai* is the tribal generic for various clans, such as *painda khel*, *akhund khel*, and *sultan khel*.

⁷ Arguably, these grants can be viewed as the first manifestation of private property. A similar reference is made in Mukhopadhyay (this volume) to land grants in Goa, India, given by the Portuguese colonial rulers to European settlers.

Conflicts over Dir-Kohistan's Forests

In effect, the distribution among sub-tribes was more actively enforced with respect to agricultural lands, villages, and oak forests. In the more remote coniferous forests and alpine pastures, the main tribal partitions determined access rights. The sub-tribes had common access within these partitions reflecting their limited subsistence needs in relation to the vast forest resources. Grazing was a more wide-ranging activity with potential for intertribal discord. But this was resolved through the payment of *qalang* (grazing tax) between sub-tribes in the oak forests and between main tribes in the alpine pastures.

Surprising similarities can be found between this system and the rotational fishing quotas in the study by Gunawardena and Steele (this volume). These similarities span diverse ecological and spatial boundaries. The differences relate to environmental impacts rooted in the respectively fixed and moveable aspects of the two systems.

While the *garzinda wesh* system ensured equitable access to CPRs, the environmental consequences of such a system can only be presumed since they have not been documented. In the absence of a sense of rootedness in a particular area, one could infer communities did not have an interest in resource conservation. However, it is difficult to disentangle the *wesh*-induced effects on degradation from those generated by natural processes, such as population growth and commercial inroads.

13.3.1.1. EVOLUTION OF CUSTOMARY RIGHTS

During the *nawabi daur* (tenure), the *garzinda wesh-serai* system evolved into more formal arrangements. To start with, the *serai* grants were tenure/lifetime entitlements. However, they acquired hereditary status as the leaders acquired more power. In time, the *nawabs* (local rulers) also laid claim to communal resources. Rahmat Ullah Khan who reigned in the last quarter of the seventeenth century was the first *nawab* to impose fiscal burdens on the communities. In return for user rights, he levied various taxes such as *begar* (co-opted labour) and *ushr* (land tax) for the use of agricultural land and forests, and *qalang* (grazing tax) for grazing pastures.⁸ The *nawab* claimed control over the forests and forced the communities to provide him with timber and, later, to allow his designated contractors to cut the trees. Initially, the internal customary distributions (*garzinda wesh*) remained intact as long as communities paid the price.

The *quid pro quo* arrangements following the British colonial invasion increased the *nawabs'* hold on community resources. In return for ensuring stability, the British gave the ruling *nawabs* (Muhammad Sharif Khan and his grandson Shah Jehan Khan) a free hand to rule. The period from 1895

⁸ The communities paid *ushr* directly and performed *begar* on the *nawab's* behest. They collected *qalang* from the *gujjars* and paid a portion to the *nawab*.

Shaheen Rafi Khan

up to 1969, when the government of Pakistan formally annexed Dir State, was the most autocratic. It also saw changes in traditional property relations. The *nawabs* gave land grants to favoured courtiers and servants, not to all valley residents. In particular, they allotted residential land to landless *gujjars* in return for *begar* (services in the form of labour). This created a potential conflict situation; especially as later the grantees also claimed forest royalty rights by virtue of their permanent holdings. An important contribution of the *nawab* was to give permanent rights to existing owners of agricultural land. These rights were codified in law.⁹

The Constitution also barred extraction of minerals and medicinal plants from forests except for medical treatment. Similarly, fishing and hunting were banned. However, no formal land settlements took place as in neighbouring *Swat* and *Chitral*. The moveable distribution aspects of the *garzinda wesh* system have virtually disappeared by now. Towards the end of the *nawab's* reign, the sub-tribes and clans began to lay permanent claim to oak-forest tracts. In more recent years, a portion of these tracts has been carved up into private/family holdings. Commercial land transactions are now common. The only feature of customary law, which continues to prevail, is the main tribal partitions in coniferous forests and the alpine pastures. While the *nawab's* fiat restricted extraction of some forest products, customary law continued to govern subsistence activities in these forests.

The accession to and subsequent administrative merger with Pakistan freed communities from the *nawabi daur*, and they stopped paying taxes. To all intents and purposes, the rights-related clauses of the *nawab's* constitution became null and void with the merger. The communities also instituted cases against the *nawab* for illegal appropriation of agricultural lands and urban property, most of which are still in process. The combination of a growing human and livestock population, the interweaving of private and communal property, and the rising price of timber have created an unstable environment with regard to property and access rights. Neither customary nor statutory law has been able to grapple satisfactorily with the emerging claims and conflicts.

Customary law in Dir-Kohistan contains ethnic biases. The *kohistanis* invoke this law to claim forest access rights and the bulk of forest royalties, denying the *pathans* and *gujjars*. In the valleys (Dhok Dara, Gwaldai, Bela) with dominant *pathan* and *gujjar* populations, access and royalty rights are not contested. The problems arise in the predominantly *kohistani* valleys, where minorities have either been granted land by the *nawab*, or have purchased it. The *kohistanis* claim the *nawab's* grants are illegal and have contested them in court. They claim rights to the valley's resources by virtue of lineage.

⁹ According to section 25, if a person has a continuous possession of land, residence, and tree for fifteen years then s/he is the actual owner of that property and others have no claims over the property. All the property-related issues/conflicts will be decided according to Islamic law (Constitution of Dir State, 1963).

Conflicts over Dir-Kohistan's Forests

Customary law also excludes women from a share in forest royalties. The government has deferred to this by excluding women from the list of those entitled to such royalties.

13.3.1.2. NATURAL RESOURCE MANAGEMENT UNDER CUSTOMARY LAW¹⁰

Subsistence is based upon the simultaneous exploitation of a number of ecological spaces and characteristically involves the coordination of activities. Communities had to ensure an intricate balance between agriculture and herding, supplementing these activities with extraction of wood and non-wood products from the forests. To meet the irrigation requirements for their crops, communities jointly build and maintain a system of head-works and water channels. Head-works diverted river and stream water into irrigation ditches that brought water down to the valley floor. Wooden viaducts were made to span chasms and cliffs. Keeping this intricate system in repair was a substantial challenge for the community and demanded continual joint action. The farmers who benefited from a particular channel worked collectively to maintain it. Water from these channels was also used to power watermills and, presently, power generators.

With climatic conditions limiting agricultural activity to one to two crops a year, livestock herding is an important economic activity both as a source of meat and dairy products. Herding follows the cycle of water and pasture availability. The highland pastures are most productive during spring and summer and the herds migrate up so as not to interfere in agricultural activities. They move back down to the villages after harvesting and graze in the oak forests and fields, with supplements of dry fodder.

The description above serves to illustrate the fact that communities tend to harmonize agricultural activities with what the resource base can support. Sustainable use of natural resources is critical to their survival. By the same token, establishing clear rights with regard to the timber forests offers the promise of lifting them out of their poverty and also ensuring sustainable management of these forests. However, as we note later, the institutional climate encourages predatory practices and communities tend to go along with them for their own survival.

This study finds communal ownership to be a precondition for equity. The conservation benefits are less clear. While there is a presumption that the moveable distribution aspect of the *garzinda wesh* system might be at odds with resource conservation, more recently, the allocations have become permanent, which might lead to sustainable use. But neither aspect has been quantified and attempts to do so would be difficult. This compliments the

¹⁰ This subsection is based upon information provided by local community elders and personal observation.

Shaheen Rafi Khan

findings of Mukhopadhyay (this volume) wherein equity-conservation links do not evolve as is expected by a section of the literature in this area. He too finds that the increase in equity does not necessarily lead to greater sustainability.

13.3.1.3. ADJUDICATION UNDER CUSTOMARY LAW: THE JIRGA¹¹

Despite the historical evolution of customary law and CPR management, differences within and across communities over resource rights and use are bound to be inevitable and require mediation. The traditional *jirga* dates back to pre-Islamic times and in its original, pure form, was shaped by two opposing tendencies. First, it included leaders drawn from patrilineal descent groups. These descent groups were exogamous, meaning that men within each descent group married women from different descent groups, an act which both cemented relations and crystallized identities between these groups. The emphasis was on maintaining peace and was dictated by external threats from other tribes/ethnic groups. Thus, *jirga* decisions had a tempering influence on disputes involving women/wives, property or violence, and factional discord and political disintegration. These decisions favoured conciliation although penalties for murderers and other criminals were harsh with either exile or confiscation of property. Even today *lamo aman* (village peace) is a respected value and to be called *aman pasand* (peace lover) is a compliment, more surprising in the prevailing culture of guns, drugs, and violence.

The *jirga* is a consultative assembly of respected elders nominated by the communities and is entrusted with the authority to take decisions, which are binding upon individuals, feuding groups, or the community as a whole. Communal resource rights give rise to intercommunity differences at many levels, but these tend not to escalate into open violence and are resolved by the *jirga*. The various forms in which these tensions manifest themselves are:

- Within communities: over arable land and private family holdings in oak forests. These are settled within the community.
- Between ethnic groups: primarily over timber. As discussed earlier, the minorities (*pathans and gujjars*) claim rights in terms of forest royalties. While the government has conceded these in principle, it is only a recent *jirga* decision, which has created a precedent for the actual transfer of royalties to them. However, their claims continue to be contested by the *kohistanis*, especially in valleys where they have little representation.
- Between villages: over agrarian land, community oak forests, and boundaries between coniferous forests.

¹¹ This section draws upon Keiser (2002).

Conflicts over Dir-Kohistan's Forests

In many ways, the *jirga* is the only hope of redress and it is beginning to both supplant and support formal legal institutions. The local communities often find themselves frustrated by the lengthy, biased, and expensive judicial processes. The *jirga* system is popular because it dispenses speedy justice—albeit within its male-dominated parameters—and is relatively unbiased and inexpensive. The institution has survived political vicissitudes, partly because the judicial and departmental processes have failed to deliver. In fact, on key occasions, the state relied on *jirga* mediation to diffuse potential crises. As we show later, the state empowered it to implement judicial decisions on forest royalties, which it was unable to do itself. By and large, the *jirga* is not prone to be coerced or its decisions subverted because of the inherently democratic manner in which it is constituted and its accountability to the communities. In the few cases where its members have been manipulated by vested interests, such as the forestry department and timber contractors, they have been removed swiftly and have faced social ostracism.

13.3.2. Statutory law (*qanoon*)

Statutory law governing resource rights in Dir-Kohistan has historically been defined by two key pieces of legislation:

- The Forest Act, 1927;
- The NWFP Forest Ordinance, 2002.

The Forest Act, 1927, divided public forests into three classes: reserved forests, village forests, and protected forests. This act also empowered the provincial government to regulate private forests or wasteland (*guzara*). Under this act, the government declared the forests of Dir-Kohistan state forests in 1972 and protected forests in 1975. The NWFP Forest Ordinance, 2002, which supplanted the earlier Act, retains these forest categories. Further, it provides the legal framework for the NWFP Protected Forest Management Rules, 2001. In effect, the legal clauses governing resource rights and access in the two acts are almost identical, empowering the NWFP Forest Department to: (a) declare forest categories; (b) reserve trees; (c) close forests and specify acts prohibited in protected forests; (d) make rules for protected forests; and (e) impose penalties. The penalties, both financial and custodial, for infractions have been made more stringent under the Forest Ordinance, 2002.

The new Forest Ordinance also represents the culmination of an extended forestry reform process, which began with the National Conservation Strategy (NCS) in 1991. The NCS recognized the importance of social forestry in future development of the forestry sector and recommended the establishment of participatory, community-based management systems, based on cost sharing and with the active involvement of women. The draft NWFP Forest Ordinance includes key social forestry concepts such as participatory forest management

Shaheen Rafi Khan

plans (FMPs), assigning management rights to village communities, JFM, community participation in regeneration schemes, and leasing out government forests for social forestry and other purposes. However, the emerging consensus is that the Forest Ordinance, 2002, and the Protected Areas Management Rules, 2001, are no different from the anticommunity thrust of the laws and regulations that they have supplanted. Thus:

The existing laws are punitive in nature and do not provide any incentives for compliance with their provisions. Indeed, they are based on the gamekeeper-poacher approach and are considered unduly harsh, not so much in the matter of punishments (which till recently were on the low side) but in the uncompromising application of its provisions, particularly those relating to restrictions on use of timber and other forest produce. Critics have pointed out that the laws make no distinctions between subsistence-oriented violations and violations based on commercial interests. (Hamid 2002: 34)

If anything, the new Ordinance has introduced more stringent fines and penalties, which underscores its enforcement mindset. Moreover, the discretionary power of the divisional forest officer to appoint village forest officers and issue management orders to them, originally applicable to trees and brushwood in wastelands in *Hazara* only, has been extended to cover all forest produce in all types of forests.¹²

Statutory law in Pakistan separates ownership and user rights. It invests ownership of forest resources in the government and curtails user rights for the forest-dependent communities by both subsuming and diluting their customary rights. Implicit in this is a conservation mandate, which is at odds with socio-economic justice. Further, the state agencies do not possess adequate means for enforcement. In a defensive reaction, they tighten statutory law/regulatory controls which, in turn, call for stricter enforcement. Ultimately, forest-dependent communities are alienated from their resource base and other players, as well as members of the community, and begin to exploit the hiatus between the law and its enforcement. This gives rise to conflicts in the mediation of which official courts are either lax or are incapable.

13.3.2.1. NATURAL RESOURCE MANAGEMENT UNDER STATUTORY LAW

Resource management under statutory law has an impact on two types of resource use: subsistence and commercial. Subsistence use (extraction of fuelwood, fodder, other NTFP, timber for house construction, etc.) is governed by a system of permits, fines, and penalties. The prior open access to these resources under customary law is now subsumed under statutory regulations.

¹² For a critique of the Forest Ordinance, see Hamid 2002.

Conflicts over Dir-Kohistan's Forests

These regulations have become instruments for both rent seeking and violations and have brought communities into open conflict with the Forest Department. Notwithstanding recent reform efforts to include communities in forest management, the Forest Department continues to view them as intruders and the forests as a valuable source of timber. The enforcement bent of the line departments is more prone to encourage resource overextraction than sustainable use. When communities are denied or have limited access to resources to meet subsistence needs, they are forced to circumvent the forest laws and engage in predatory acts.

The duality evident in the Forest Department's enforcement make-up and the use of rules and regulations to extract rent also characterizes the commercial exploitation of forest resources. Various timber-contracting systems have been in force after Partition in 1947. In fact, even before Partition, the *nawab* had designated contractors who carried out logging activities and sold the timber down-country.¹³ The first system after Partition was one of departmental harvesting. The Forest Department hired the labour crew or work contractors and sold the timber through sealed tenders or open auction. The contractor system eventually replaced this arrangement and the Forest Department began to auction standing forests to timber contractors. Timber prices were fixed and revenues were distributed between the Forest Department, the contractors, and the concessionists.¹⁴ Standing volumes were marked and their cutting time defined. However, as timber prices continued to rise, the fixed prices had to be renegotiated which made the system cumbersome. Moreover, the contractors manipulated the system by cutting well in excess of marked trees and understating sales.

After open conflict between communities and the government in 1976 over forest royalties, the government abolished the contractor system and replaced it with the Forest Development Corporation (FDC), on the understanding that it would promote mechanization and scientific management. Forest cooperatives with the intent of involving local communities were also established. The change was aimed at a more efficient, flexible, and transparent management. In 1987, the net-sale system replaced the fixed-price system. The net-sale system linked revenue distribution to the prevailing price of timber and labour costs. In effect, however, nothing changed. The FDC inflated its costs and delayed sales and royalty payments to the communities. Such

¹³ Forests were an important source of revenue during the colonial era. Between 1902 and 1927, the *Dir nawabs* sold thousands of trees to outside contractors. To be exact, 39,000 *deodar* (cedar) trees were sold in 1918 and 71,500 trees were targeted for felling during 1921–3. Worried about the downstream impacts, particularly on the *Swat Canal* system (*Panjpora* valley formed the main catchment area), the British initially negotiated with the *nawabs* to stop the cutting. Unsuccessful in their efforts, they sealed off the downstream movement of timber (Mumtaz 1989).

¹⁴ The term concessionists, which is inserted in statutory law, is resented by the communities because it gives a discretionary context to their resource rights.

Shaheen Rafi Khan

deferred payments allowed the original contractors to slip back in. Indigent communities needed immediate payments and they sold their concessions to the contractors for a pittance, signing over their rights through collective powers of attorney. The covert practice of harvesting well in excess of the marked trees continued too. The so-called forest cooperatives were subverted into arrangements for perpetuating contractor interests.

13.3.3. *The scope for local government*

The military government established the National Reconstruction Bureau (NRB) in the year 2000. The NRB is a think tank entrusted 'with the mission to formulate policy for national reconstruction to generate fundamental thoughts on promoting good governance to strengthen democracy through the reconstruction of state institutions' (PINs 2006). The NRB prepared a national devolution plan and after extensive stakeholder consultations presented it to the nation in August 2000. Its basic principles are defined as 'people-centred, rights- and responsibility-based, and service-oriented.'

The devolution plan has two crucial implications for forestry:

- It allows the creation of citizen community boards (CRBs) around the issue of forest resources. In other words, the devolution concept would allow the formation of community groups dealing with forestry matters outside the structure (and control) of the Forest Department. Such boards could, in principle, enter into an agreement with the FD for joint forest management and in a much more substantive way than in the present arrangements specified in the NWFP Forest Ordinance, 2002.
- The plan subordinates the district level FD staff to the district coordination officer (DCO) and, through him, to the chief mayor. District-level FD staff would thus lose their importance in the FD hierarchy.

This could be seen as one possible path to institutional remediation, suggested by Vani (2002), which dovetails the micro with the macro. Vani, who argues in favour of a decentralized governance framework on the grounds that it ensures the sustainable management of natural resources better, however suggests a balanced approach that promotes 'harmony between macro- legal (statutory) and micro-legal (customary) frameworks' (Vani 2002).

Shyamsundar (this volume) cites evidence based on a global survey to demonstrate that devolution leads to better interactions between state agencies and communities and enhanced environmental outcomes. However, several caveats, documented by Mishra (2005), are in order, which cast doubt on the viability of decentralized governance frameworks. The underlying premise for his scepticism is the relationship between state-sponsored management institutions and local user communities which he describes as 'one of distrust

Conflicts over Dir-Kohistan's Forests

and confrontation rather than one based on mutual cooperation.' He cites case histories on collaborative management also known as JFM initiatives in Orissa to illustrate their failure. He also demonstrates that pure community-led initiatives in the same state (the *Sulia Paribesh Parishad* in the Sulia forest in the district of Nayagarh) were more successful than the other.

13.4. Perverse incentives in the forestry sector

Perverse incentives arise as a result of a misalignment of incentives and responsibilities. The Forest Department, for instance, which has a conservation mandate, confronts an emerging complex of perverse incentives inimical to conservation. A key contributing factor has been the rapidly rising prices of timber products over the past three decades which has led to ingress into the valley by the 'timber mafia'—that is, contractors who are organized and operate on a large scale. Their excesses are evident in logging well beyond sanctioned limits. Such groups collude with the Forest Department and civil administration functionaries for mutual gain (Khattak *et al.* 1997 and Hamid 2002). The FD staff have seen an erosion in their standards of living, which has made them vulnerable to financial inducements. The risks associated with trying to curb an increasingly lucrative business coupled with the prospect of illegal gratuities makes it difficult for FD staff to resist these inducements. Other factors contributing to the decline in professional integrity and competence are the politicization of appointments, inadequate training, and the lack of non-monetary incentives that might offset the lure of illegal gratuities (Hamid 2002).

There is increasing divergence between forest fines and penalties and timber prices.¹⁵ This, coupled with discretionary punishments, the scarcity premia attached to forest permits, and the lack of transparency in the interpretation of rules and regulations, has created a perverse structure of incentives for unsustainable levels of timber extraction. There is no discernible increase in the real incomes of the staff in the long run. When compared with other sectors (private organizations, donor agencies, semi-corporate bodies, etc.), the trends become even more unfavourable.

Absolution is not possible for the other key player, the communities, either. Forests meet the subsistence needs of communities and have agricultural potential via conversion to cropland. *A priori*, this ought to create nurturing mindsets. But the reality is that weak property rights create uncertainty about future subsistence and income streams, especially in an inflationary environment. The concern is that forests will disappear no matter what the

¹⁵ Sustainable Development Policy Institute (SDPI) in-house unpublished calculations (1998).

Shaheen Rafi Khan

community might do (Inayatullah 1996). Even in privately owned forests (*guzaras*) 'right holders may see in regeneration a reintroduction of state property rights, which may stifle even natural regeneration' (Azhar 1993). Somanathan (1991) finds that 'the fundamental reason for deforestation is the system of property rights which denies the local people certainty about future benefits from forestry. This has destroyed the incentive to use forests sustainably.'

13.4.1. *Subsistence needs: the trigger for human insecurity*

The Forest Department tends to choose the path of least resistance, coming down heavy-handedly on the disempowered communities, who rely on the forests to meet their subsistence needs, while colluding for personal gain and profit with vested interests. As noted, the rising prices of timber, fuelwood and forest products, an erosion in the standard of living of the forest custodians, fines and penalties that are selectively applied and fail to match the nature of the transgression, and royalties that are appropriated by the rich and powerful have all combined to create a structure of perverse incentives antithetical to conservation. The irony is that the key inroads into forest resources are being made by commercial and development groups which the management is not in a position to oppose and, in fact, cooperates with.

13.4.2. *Forest royalties: the trigger for conflict*

The excesses committed by the timber contractors overshadow community inroads into forests. The timber trade also has a distinct anticommunity bias: while communities are entitled to a substantial share (60 per cent) of royalties from the logging in 'protected' forests, active collusion between the timber contractors, village elders (*masheran*) and the Forest Department have deprived them of the bulk of these royalties.¹⁶ Although the organizational (direct contracts, FDC) and financial (fixed-price, net-sale system) arrangements have been diverse, without exception they have limited the community share in revenues to a minimum.

There have been two episodes of open conflict in Dir-Kohistan over this issue. The first episode occurred in 1976 when the government declared Dir-Kohistan's forests as protected. In an attempt to secure higher royalties and curb the progressively greater inroads into the forests by the contractors who have been engaged in logging activities since the *nawabs* were in power, the local people staged a march against the government at Sheringal, the capital of Dir Kohistan. The government initially deployed the Frontier Constabulary to control them but as the conflict escalated and became more extended, it

¹⁶ Information provided by local elders. Also see Khattak *et al.* (1997).

Conflicts over Dir-Kohistan's Forests

called in the army and, eventually, had to use the air-force to subdue the communities. All three ethnic groups took part in the conflict. Subsequently, the Bhutto government negotiated with the communities and increased their share in royalties from 25 per cent to 60 per cent. The *Sultan Khel* and *Painda Khel* tribes, who took the brunt of the casualties, received a larger share (80 per cent).¹⁷

The second episode occurred in the 1994–2000 period, and was spurred by a market-driven collapse in governance systems. The main timber species of commercial value are deodar (cedar), blue pine, fir and spruce. Their prices currently range between Rs 1–1.25 lakhs (US\$1,500–2,000) per tree.¹⁸ While creating an enormous potential for enriching the communities, wealth of such magnitude also acted as a magnet for the timber contractors. They colluded with the Forest Development Corporation (FDC), local notables (*maasharan*), and the Forestry Department to work the system to their advantage. Through the use of unauthorized powers of attorneys and manipulation of the net-sale system, the contractors appropriated the bulk of the royalties leaving the communities with a pittance. In a weak legal and institutional environment, rising prices have acted as perverse incentives. They underscore the paradigm shift in which resource extraction has begun to take precedence over sustainable use.

Thus, we have a classic case where communities have rights on paper but are without the legal, institutional or political means to avail themselves of these rights—in other words, a growing divergence between *de jure* and *de facto* rights. Ideally, well-defined rights and entitlements, and mechanisms to implement them provide a cushion against external shocks. When this is not the case, external shocks can make weak governance systems even more fragile. In the Dir-Kohistan case, these shocks generate two opposing, conflict-generating trends:

- A direct correlation between rising prices and financial entitlements of communities (royalties);
- An inverse correlation where deteriorating governance denies them these entitlements while contractors take the slice.

The causes for the two episodes of conflict differ. Specifically, in the first case, the disagreement is over royalty rates; in the second, the cause of conflict is manipulation of an ostensibly improved system. Or, to put it differently, where communities were ripped off in the first case, their pockets were picked in the second.

¹⁷ *Ibid.*

¹⁸ Personal communication. Compare this with Pakistan's current per capita income of US\$730.

Shaheen Rafi Khan

13.5. Evidence of degradation¹⁹

Dir-Kohistan's rich forests and watersheds are important as a source of livelihood. Their neglect leads to biodiversity loss, soil erosion, dam sedimentation, and down-country floods. Baseline and trend data on degradation have been difficult to obtain, forcing us to draw on descriptive and visual evidence.²⁰ The descriptive evidence of degradation is presented in various project documents.²¹ The causes, symptoms, and visible signs of degradations are indicated in three areas.

13.5.1. *Land-use changes*

Agriculture is no longer able to support the population, forcing people to convert forest and grazing lands to agricultural use. Since the land is not ideally suited to agriculture, large tracts are being converted to compensate for low productivity. Further, these are poorly terraced tracts on upland slopes. Hence, there is high erosion and erosivity (8 per cent of the land in the valley is cultivated). The three major land-use changes are conversion of coniferous forests, rangelands and alpine pastures, and oak forests to agricultural use. In the coniferous forests, rangelands and alpine pastures, this practice is known as *karin*.

13.5.2. *Rangeland and pasture degradation*

Rangeland (temperate and alpine) is being overgrazed and degraded as the growing population attempts to meet its nutrition needs through increasing animal numbers (56 per cent of the land comprises rangelands and alpine pastures; in addition, oak forests provide leaf fodder). Livestock also compete with wild ungulates for rangeland resources. More than 50 per cent of the grazing herds now consists of goats that are voracious feeders. Overgrazing has led to the replacement of grass and scrub with non-palatable seasonal shrubs and forbs. Furthermore, soil erosion due to the loss of vegetative cover is increasingly evident. Area-wise, too, grazing lands are shrinking due to conversion to agricultural use.

¹⁹ The sources of information for this subsection are: (a) project reports of the Environmental Rehabilitation Project in NWFP and Punjab (ENRP); (b) EEC Evaluation/Preparation Mission Report, 1992; (c) Revised PC-1 of the GoNWFP, Dir-Kohistan Upland Rehabilitation and Development Project, 1995; and (d) field observations and consultations with communities.

²⁰ The IUCN and the European Commission launched a 7-year project in 1996 to address the problem of degradation.

²¹ EC Evaluation/Preparation Mission Report, August 1992.

Conflicts over Dir-Kohistan's Forests

13.5.3. *Wildlife loss*

The area under pristine forest is reducing fast as deforestation and erosion take their toll. This reflects the activities of the 'timber mafia', as well as of local communities striving to make ends meet in a hostile ecological and non-transparent institutional environment. Consequently, although the status of wildlife in Dir-Kohistan is not well documented, there are reports that some species such as markhor (*Capra falconeri*), snow leopard, musk deer, and pheasant have become endangered due to habitat destruction. Illegal hunting also contributes to the problem. A survey carried out by the NWFP Wildlife Department referred to various illegal hunting methods adopted by the locals and out-of-season hunting (Shakeel 2002).

13.6. Discussion and conclusions

13.6.1. *Resource rights*

Two related issues are addressed in this chapter:

- What changes to the existing resource rights regimes need to be made to resolve the problems described and analysed?
- Are existing mechanisms and processes adequate to implement the recommended changes in the existing resource rights regimes and, if not, what is required?

Resource rights in Dir-Kohistan are multifaceted. As indicated, both statutory and customary laws govern resource rights. These can be defined in terms of private property and communal access to resources. Further, they relate to both subsistence and commercial (royalty) aspects.

13.6.2. *Private property*

Customary law governs private property rights. Their historical precedents can be traced back to the *serai* grants which became hereditary entitlements under the *nawabs*. Over time, the *nawabs* forcibly acquired both agricultural land and urban property. They also granted agricultural lands in return for *begar* (labour services) performed by the ethnic minorities (*gujjars*) and migrants who settled in the valley.²² The expanding scope of private property also reflects land-use changes in the oak forests. The process of converting large forest tracts into private family holdings, and of the lower slopes into terraced fields, has been ongoing for some time. Private property transactions have become a common feature.

²² The communities are presently contesting these grants in the civil courts.

Shaheen Rafi Khan

Tensions over private property tend to occur within and between communities but are resolved by the *jirga*. Such tensions can be diffused further if the existing demarcations and land-use changes were brought within the ambit of the existing land settlement policy as is the case in *Swat* and *Chitra*, especially when they are being entered in the *wajab-ul-arz* (record of rights). However, this should be attempted on a pilot scale and with the concurrence and active participation of the *jirga*. While land terracing may be environmentally unsound, it is driven by demographic realities and needs to be combined with plantation.

13.6.3. Subsistence rights

Subsistence rights in coniferous forests reflect the interplay of statutory and customary law. Communities' original subsistence rights were determined under customary law (*garzinda wesh*). These rights have been conceded under statutory law but are heavily restricted, originally under the Forest Act, 1927, and now under the Forest Ordinance, 2002. While the laws restrict and complicate community access to forest resources, they are also ineffective in view of the Forest Department's limited enforcement capabilities. Moreover, statutory restrictions are both resented and ignored. The process of degradation and conversion of forests to arable land and pastures (*karin*) continues apace, fuelled largely by demographic compulsions.

The proposed intervention in this case is the introduction of community forest management (CFM). Nepal's success stories in CFM are well documented (Kanel, this volume). Among other things, a key factor in this success is the socialization of the FD to the potential role of the communities in all aspects of NRM. As a result, the FD has become a facilitator (gatekeeper) rather than co-manager—an arrangement which has proved to be tangibly successful in terms of benefits accruing to the communities and revenues to the FD.

Ghate (this volume) proposes a more inclusive role for the FD. Her contention is that communities are hierarchically structured which distorts participation as well as distribution of benefits. Also, forests generate global ecological benefits which the community may not factor into its activities. Finally, community initiatives need to be supported by the state in the form of technical and financial inputs which communities lack. In particular, Ghate refers to the need to ensure community property rights. It may be mentioned that JFM as defined and practised in Pakistan is a donor-driven idea, which the FD has manipulated to its advantage without relinquishing any of its existing powers. In contrast, Kanel and Ghate see the state's (FD) role differently—as adviser, facilitator, financier, and monitor. In other words, the FD needs to transform its autocratic mindset into a more enabling one.

Conflicts over Dir-Kohistan's Forests

13.6.4. *Rights to forest royalties*

Rights to forest royalties are determined by customary law and are contentious in that they discriminate across ethnic groups and against women. However, two constituted commissions have weighed in on these issues, recommending a more just and gender-inclusive distribution. Also, *pathans* and *gujjars* have full royalty entitlements in the valleys in which they are in a majority. Basically, the existing lacunae need to be resolved through a process of negotiation between the government and the *jirga* (which remains the most representative and effective institution), and by invoking the provisions of Islamic law governing property rights and entitlements. However, as we noted, inequity in distribution is a source of intercommunity tension but not conflict.

Conflict has had more to do with governance lapses. In the first place, the communities resent being described as concessionists when they feel the forests have historically been theirs to use. But the crux of the problem lies in the manner in which their royalties are flagrantly appropriated. Community forest management (CFM), adapted to emerging market realities, would be an inclusive solution (Jodha 2005).

Clearly, the FD has failed on two counts: first, it has circumscribed community rights to subsistence resources; second, it colludes with the 'timber mafia' to deprive communities of commercial benefits from the forest. Jodha (2005) points to remediation as having two interlinked aspects. First, there is a need to restore community-based management of common property resources (CPR). Second, such management needs to factor in market incentives.

For CPR-revival or rehabilitation, almost exclusive dependence on nature (for bio-physical regeneration, flows, etc.), needs to be supplemented by new possibilities provided by modern technologies, market, and management systems, including new change agents and mobilizers. This calls for realization that CPRs are not merely means of resource conservation but productive assets of the communities. Enhanced productivity and incomes through CPR offer better incentive for improved management of CPRs than subsidies, etc. (Jodha 2005: 15)

13.6.5. *Grazing rights*

Grazing rights in the alpine pastures and in the oak forests also come within the frame of customary law. The tribal and sub-tribal divisions remain intact. Use of these pastures across tribes and by itinerant *gujjars* is still subject to payment of *qalang*. Shrinking pastures and increasing livestock numbers are the key threats. These threats should be addressed through technical and environmental interventions, such as increasing animal productivity via nutrition improvements and undertaking environmental conservation/rehabilitation of

Shaheen Rafi Khan

these pastures. They do not call for fundamental changes in grazing practices, which have survived through centuries, or in the communal ownership and tenure systems in which these practices are embedded.

To sum up, the reach of statutory law should not be extended further given that it is both punitive and ineffective. The first task should be to address this weakness rather than extend its scope. CFM offers the prospects of more efficient management, improved access, and just distribution, both with respect to subsistence and royalty rights. Resource ownership and access rights in pastures, oak forests, and arable land should remain within the domain of customary law. This law and the *jirga*, which mediates tensions arising from the practice of this law, have popular roots and are more enduring. In contrast, state systems, which supplanted the autocratic rule of the *nawab*, have proven to be inept. In fact, as in the case of forest royalties, the *jirga* succeeded where the courts failed to provide redress.

In conclusion, the key resource rights and related system interventions proposed are in the areas of:

- Private property;
- Subsistence;
- Forest royalties; and
- Grazing.

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