

**Forest Management Paradigms and Resource
Rights in Historical Perspective: Evidence from
the Swat District, Pakistan**

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Forest Management Paradigms and Resource Rights in Historical Perspective: Evidence from the Swat District, Pakistan

Talimand Khan

Abstract

This paper focuses on forest management systems and resource rights in three different geographical zones of Swat District, Pakistan. Each zone has distinctive social and historical characteristics in relation to forest management and resource rights and their impact on conservation and sustainable use of the forest resources. Further, the paper analyzes three peculiar historical regimes with regard to their management mechanisms, resource rights, and the transition from one regime to another. It is argued that the interplay between geography and management schemes drive the use of forest resources in the Swat District.

The paper makes some comparisons between informal (community) management and management by formal (state institutions) and finds that inclusion or exclusion criteria regarding resource rights laid down by a particular management system create situations that lead either to a sense of ownership or deprivation among stakeholders. Another finding is that the management of forests in the Swat District changed from community to formal institutions which could not maintain the balance between the customary and statutory resource rights arrangements. As a result, conflicting interests created an opaque resource rights situation that prompted predatory attitudes among the various stakeholders. The paper recommends renegotiating the resource rights regime coupled with changes in the role of the Forest Department (a state institution) from a command and control approach to that of a facilitator in the process of forest management. Developing alternative energy sources, particularly in the forested areas, may also help to conserve forest resources.

1 Introductions and Background

The Northwestern mountainous regions of Pakistan were endowed with a thick forest cover and biodiversity. The last four decades have been a period of unprecedented deforestation, which the experts (recorded) at the rate of 4.2 to five percent annually. Since the 1990s, a number of studies have documented the causes and factors responsible for deforestation, environmental degradation and their associated effects (Ali et al. 2006; Shahbaz et al. 2007; Khan et al. 2007; Sultan-i-Rome 2005 and 2006; Suleri 2002; Pellegrini 2007; Shahbaz and Ali 2004; and Yusuf 2007 and 2009). Most of the literature has looked at the problem of forest management from the prism of formal institutions, state policies and management paradigms, while ignoring the interface of informal institutions, historical knowledge, traditional rights and management mechanisms which evolved over time.

While considering the entire spectrum of causes and factors contributing to deforestation and its consequent environmental cost, the changing resource rights regimes become visible. Ineffective regimes have resulted from the external intervention of modern institutions, which are alien to local communities. The intrusion of inappropriate institutions resulted in resource

rights abnormalities and management practices that took their toll on natural resources, especially forests (Yusuf 2007 and 2009; Hasan 2001). On the other hand, the sense of alienation that resulted in ruthless deforestation was accelerated by factors like easy accessibility and availability of means of transportation, high prices, the lack of alternative income generating opportunities and failure of the modern institutional framework.

In this backdrop, this paper analyzes the transition from customary management and resource rights regimes into a statutory one and its impact on natural resource use. The local communities of the mountainous areas of Northwest Pakistan depend on natural resources (particularly forests' products) for their subsistence. The paper argues that the local communities had a strong sense of ownership based on traditional property rights attached to forests (as a category of their *dawtar*¹). New and unfamiliar statutory mechanisms suddenly turned them from owners to concessionaires and also caused property rights abnormalities that eroded traditional resource rights regimes (Khan et al. 2006 and 2007; Khan and Khan 2009).

The paper begins with a brief methodology, followed by a description of the study area. This is followed by a historical overview of forest management in the study area, focusing on three distinct eras. An analytical account of the transition from one peculiar system of management to another is given in the next section. A situational analysis of resource rights is then given, focusing on the "disjuncture between *de jure* and *de facto* rights holders and its consequences for natural resources degradation" (Khan et al. 2007) This discussion concludes with some recommendations and alternate options available to policymakers.

2. Methodology

The paper has a qualitative approach using a combination of primary and secondary sources. The focus is on the local context in a selective area in order to draw inferences for analysis. Focus group discussions and individual interviews were conducted to make the analysis reflective of the specific local situation and provide so far unrecorded facts regarding forest management and resource rights. Moreover, participatory observations were used to validate and supplement the findings. Apart from these, the researcher hails from the area and has first hand knowledge of the governance issues. This local acculturation helped the researcher to understand the issues at hand and also to validate the historical narrations.

3. Description of the Study Areas

The study areas selected have witnessed three distinct historical phases of management and rights regimes: pre-Wali² era, Wali era and lastly post-Wali era. Each era is characterized by its distinctive management and rights system that regulated the owners and users resources rights, each with its own implications for natural resource use.

¹ *Dawtar* or *Daftar*, liable to re-allotment in the traditional *wesh* system. "The owners of *Dawtar* had proportionate shares in all the categories of land of the village or locality where they had their shares in the *Dawtar* and other related privileges and obligations as well" (Sultan-i-Rome, 2005, p.12).

² The insignia or official title with which the British Indian Government recognized the rulers Mingul Adul Wadudand Miangul Jahan Zeb of Swat State in 1926.

The study areas were Lalku Valley, Sulatan, Chitkarai and Kalam Tract in the Swat district of North West Frontier Province (NWFP)³. Each of them has distinctive features regarding forest management and resources rights. The Lalku Valley consists of Bar Lalku, Koz Lalku and Lalku Gharai, whereas Ghaz Kass, Achar, Berang, Owaghoz Kuss, Buttsingga and Gujarro Khwer, are vicinities with scattered settlements.⁴ The Valley is situated on the north tip of the Matta Tehsil of the Swat District. Lalku Valley is 55 km away from the district headquarter Saidu Sharif. The valley is accessible by a sealed road up to Village Seria and has scenic pristine beauty. According to revenue records, Lalku Valley i.e Bar Lalku, Koz Lalku and Lalku Gharai has 919 acres, six *kanals* and 19 *marlas* agricultural land under mono-crops; and 8591 acres, seven *kanals* and seven *marlas* of forest land.⁵ The population is predominantly Sayyads – the downstream people are Miangan. Lalku Valley is a moist temperate forest zone and its alpine pasture receives heavy snowfall in winter. The forest in Lalku is mostly coniferous: fir / spruce and *kail*, which are in better condition than elsewhere, due to the absence of *de facto* owners and the active involvement of *de jure* owners who are living on the spot.

Sulatan and Chitkarai are two small villages with scattered settlements situated in the Northern upper reaches of Gowalarai Union Council of Matta Tehsil in the Swat District, linked by a track to the main village of Roringar. The Sulatan pass meets the area of Darraall-Saidgai, famous for its pristine and scenic natural beauty. It takes about three to four hours hiking from Sulatan to reach Darraall. The area receives heavy snowfall in winter, resulting in long cold winters. Mostly, the forest in the area is coniferous, consisting of fir / spruce and *kail*. It is a mono-crop area with potatoes as the cash crop. The population of the villages is predominantly Khttan Khel Gujars, who are now the *de facto* owners of the forest and deed holders of the cultivable agricultural land.

Kalam Tract, which consists of Utror, Ushu-Matiltan and proper Kalam area is situated in the upper reaches of the Swat River in Swat Kohistan. In the south it meets the borders of the Chitral, Dir, Swat and Kandia (Indus Kohistan) ridges of snow covered high peaks. The area is a haven for tourism due to its scenic natural beauty, but is not well developed in terms of infrastructure, civic facilities or social services. The Tract was a bone of contention between the rulers of neighboring states Chitral, Dir and Swat during the British Raj. The Government of India bound the contesting rulers through various agreements to refrain from any interference in the internal affairs of the Tract (Sultan-i-Rome 2005). The prime interest of the competing parties, which included the Colonial Government of India, was the untouched Deodar (Cedar) forests of the area, stretching for 60,000 acres. He writes that these forests are "... not only exceedingly valuable forest estate, most likely the virgin and unaffected Deodar Forest" (Ibid. p.78). The overwhelming majority of people in the area belong to *Gawri* tribes generally known as *Kohistanis*, a conservative tribal people."

³ Renamed as Khyber Pukhtoonkhawa in 2010. For ease of reference, NWFP is used in this paper.

⁴ The Lalku Valley in this study does not mean Lalku Block of Forest Department, which consists of 53 compartments. This block also consists of forest compartments of the villages: Serai, Gahrai, Landai, Sakhra, Nowkhara and Darmai, those are either cleared and have altered land use or have been reduced to spare forests with immature trees.

⁵ Revenue Record of Lalku at Matta Tehsil.

4. Forest Management: Historical Perspective

4.1 Pre-Wali Era – Traditional Regulations

During this time, the management of natural resources, particularly forests in the main Swat Valley and Swat Kohistan, remained under different management systems. The systems not only varied in terms of management techniques, but also in terms of implementation. In the pre-Wali era, the management in the main Swat Valley was entirely governed by the *Shiekh Mali Wesh* System. *Shiekh Mali*, a *Yousafzai* notable, crafted the system in the 16th century after the invasion of the Swat Valley by the *Yousafzais*. This system was locally known as *Garzinda Wesh*, literally meaning moveable or rotational re-allotment. The allotment was done at the village or locality level and the land was re-allotted by draw every five, seven or ten years as per agreement among the clans of the sub-tribe. On the expiry of the stipulated period, there was a mutual exchange of villages among up-hill and down-hill *dawtaris* to ensure equity of the resources as the land differs in terms of accessibility, fertility, and water availability (Barth 1995; Sultan-i-Rome 2005; Khan et. al. 2006 and 2007).

Agricultural land was the prime unit held individually, while other land uses, such as pastures, rangeland, wasteland and forests were put in a common pool known as *shamilat* (communal land). In the scheme of things, the size of the primary unit (agricultural land) determined the share of the landholder in other land use categories. These included forests, range land, non-irrigated land marked as residential areas and land on the brink of the River Swat or streams vulnerable to floods. The owners were known as *dawtaris* and the holding as *dawtar*, who on the basis of agriculture land, had a share of all other categories of *shamilat*. It was an ethnic based system: only the *Yousafzai Pukhtoons* were *dawtaris* and they could confer the title on non- *yousafzais*, either by granting or selling. However, for such a sale, purchase or grant, the consensus of the respective clan members or *khan / malik* was mandatory (Barth 1995).

By any definition, it was a community management system (Barth 1995; Shaheen et al. 2006 and 2007; Hasan 2001), wherein resource rights were well defined. The users could use the resources, such as land and pastures, for grazing and collecting fodder and forest resources on specific terms and conditions set out by the owners, mostly in lieu of *begar* (labor tax) and *qalang* (rent). The nomad non-local grazers had to pay higher tax or rent than their local counterparts. The members of respective clans were responsible to provide artisans (barbers, blacksmiths etc) with shelter and a specific amount of grain in lieu of their services. Similarly, they were also allowed to use forest resources for their subsistence use. (Khan et al. 2006 and 2007) Although the forest was a common resource, the shares were determined in the common pool without demarcation of its boundaries. Rights of use were defined, which maintained a balanced use of the resource.

4.2 The Wali Era – Emergence of the State

The Swat State emerged in 1917, when the *Jirga*⁶ selected Mian Gul Abdul Wadud ‘the first Wali’ (commonly known as Badshah Sahib) as the ruler of Swat State. Under the new leadership the previous system changed. The Wali abolished the rotational re-allotment

⁶ Informal council of tribal elders.

system, declared the forests as State Property and appointed designated officials to manage forest affairs under his direct supervision. The owners' rights were recognized in the form of 10 percent royalty from the sale proceeds of timber, which was increased to 15 percent in 1969, a few months before the merger of Swat State with Pakistan (Barth 1995; Sultan-i-Rome 2005; Khan et al. 2006 and 2007)⁷. Thus, the former owners of the forests became concessionaires, but only with respect to forests. The Wali clapped a total ban on felling for any purpose without the prior permission of the concerned authorities. Moreover, construction of residential houses inside the forest area was prohibited. For subsistence use, the local communities were required to submit an application with nominal fee for timber. However, chopping for fuel wood and fodder, and to extract other forest resources was allowed (Barth 1995; Sultan-i-Rome 2005; Khan et al. 2006 and 2007).

The British India Government also played an indirect role through its Political Agent at Malakand regarding forest management – as Swat State was not under direct colonial rule. The colonial authorities drew up the Agreement of Recognition in 1926, binding the Ruler of Swat State to collaborate with the Wali in preparing a plan for forest conservation and harvesting (Sultan-i-Rome 2005; Khan et al. 2006 and 2007).

4.3 Post-Wali Era – the Modern Nation State

In 1969, Swat State was merged into Pakistan and in 1975 the Forest Act of 1927 was extended to Swat. The Act declared forests in Swat as Protected Forests under the control of the provincial government of NWFP. In 1977, royalty was increased to 60 percent from 15 percent. The Forest Department of NWFP accommodated the forest staff working under the State. In 1985, the revenue department carried out land settlement in the Main Swat Valley. By and large, other users' rights remained the same.

In contrast, the area of Kalam Tract in Swat-Kohistan had a different management system for its natural resources. Unlike the Main Swat Valley, in Kalam Tract (sub-*tehsil*), agricultural land and pastures had been permanently distributed among the seven Gahwri tribes. Similarly, cultivable land was distributed on the basis of individual holdings, while forests and pastures were put into a common pool as *shamilat*. However, *shamilat* were further distributed at the village level. Every male member of the Gahwri tribes in the village had a proportionate share in the *shamilat*. The area of Kalam Tract remained out of the jurisdiction of Swat State until 1947, as the British India Government had declared it a protected area to keep away the claimants from adjoining states such as Nawab of Dir State, Mehtar of Chitral State and the Wali of Swat State (Sultan-i-Rome 2005).

The colonial authorities intervened in the forest management for the first time in 1928, by entering in an agreement with the *Jirga* of Kalam. The *Jirga* agreed that in future, they would not enter into any negotiation or deal regarding felling operation for commercial timber extraction without the prior permission of the colonial authorities (Sultan-i-Rome 2005). Moreover, the *Jirga* also agreed to cooperate with the authorities for carrying out forest settlements. Later however, the local communities did not allow the settlement and the staff

⁷ This information was also collected through Focus Group Discussions and individual interviews. One focus group discussion was conducted in each study area with the stakeholders – de-jure as well as de-facto owners, while the individual interviews were held with elders of the area and District Forest Officer Swat in April – May 2005.

deputed by the colonial Political Agent to complete the assignment retreated from Kalam after two years (Ibid).

At midnight on 14 August 1947 (the independence day of Pakistan), the Wali of Swat occupied Kalam and declared its forests as State Forests (Ibid). The owners' rights were recognized similarly to their counterparts in the main Swat Valley by awarding 10 percent royalty (which was increased in 1969 to 15 percent) from timber sales. No felling operation was allowed for any purpose without the prior permission of the State authorities (Ibid). However, collecting of fodder, fuel wood and grazing was allowed in the pastures. Deodar (Cedar) was declared a state tree and its felling was prohibited in the forest and even on private land. Plowable land was in individual holdings, but no land settlement was carried out by the state.⁸

The Government of Pakistan contested the occupation of Kalam. Finally, in 1954 by virtue of the Supplementary Instrument of Accession signed by the last Wali of Swat, the Government of Pakistan appointed him (the Wali) as the Administrator of Kalam. The Wali received an honorarium of Rs. 2000 per month (approx. 20-23\$) for the administration of the area (Sultan-i-Rome 2005).

The Wali was required to make a management or operational plan regarding the forests in collaboration with the Government of Pakistan and the forest staff (Ibid). However, since the Wali had immense political leverage and influence in the area, his interference in forest affairs continued. The resource and users' rights remained the same even after the merger of Swat state with Pakistan in 1969. The Forest Act of 1927 was also extended to Kalam in 1975, which ultimately put an end to the dual management system of the forest (Ibid).

⁸ This information was collected through FGDs and individual interviews.

Table 1.

Era	Nature of Management System (Transition)	Effects
Pre-wali Era (16 th century- 1917)	Community management governed by <i>Shiekh Mali's</i> rotational distribution <i>wesh</i> system	<ul style="list-style-type: none"> - Well defined resource and users' rights. - Abundance of forest resources that enjoyed natural protection.
Wali Era (1917- 1930)	Joint forest management by communities and state. Community was represented by elders (<i>Khan, Malik</i>) and State by <i>Hakims</i> , (administrative officers)	<ul style="list-style-type: none"> - The rotational distribution <i>Shiekh Mali wesh</i> system was abolished at the regional level but not on the village level. - Forests were declared as "state owned." - State began the exploitation of forest timber for commercial purposes to generate revenue.
Wali Era (1930- 1969)	State management	<ul style="list-style-type: none"> - Community was excluded from forest management. - Designated forest officers were appointed. - Strict implementation of state forest rules. - Owners were recognized as concessionaires in lieu of 10%, which was later increased to 15%, royalty from the sale proceeds. - Beginning of mistrust.
Post Wali Era (1969- 1974)	The period of confusion	The beginning of deforestation and changing of land use due to fear of state reoccupation.
Post Wali Era (1975 onward)	Forest Act 1927 was extended to the area that declared forests in Swat as protected.	<ul style="list-style-type: none"> - The <i>de jure</i> owners were declared concessionaires. - Royalty increased to 60%. - The emergence of <i>de facto</i> owners. - Land settlement carried out. Rotational land distribution on village level abolished completely. - The role of forest department as stakeholder not arbitrator. - Opaque resource rights regime. - Predatory attitude by de-jure, de-facto owners and the forest department. - More than 60% forest degradation.

Source: Author's compilation from Sultan-i-Rome 2005 and Khan et al. 2006 and 2007.

5. Analysis

5.1 Transition from Community Management to State Control

As mentioned in Section 4.1, community management of natural resources was the characteristic of pre Swat State era. Natural resources were in abundance and not under pressure, so they enjoyed natural protection from degradation and unsustainable use.

State management replaced the community management system in 1920s. However, the First Wali of Swat State was not naïve to the local situation and he involved the local influential tribal elders, the *Khans, Maliks*, even at the village level, to protect the forests in tandem with the state officials. Thus, the Wali did not offset the community system (customary law), although he signed over the forests into state control. In the matter of resource rights, he always followed the customary arrangements. The declaration of forests as State Property

was not a unilateral decision on the part of the Wali. Consultations were held with the elders and their consensus was obtained (Sultan-i-Rome 2005).

Hypothetically, two factors were responsible for the acceptance of the Wali's act in declaring forests as State Property: 1) The owners, represented by the elders, were still involved in the management, and were responsible for forest protection. 2) At that time, only the state had the capacity to exploit forest resources for commercial purposes (Khan et al 2006 and 2007).

In fact, in the pre State era, the local communities could utilize the forest only for subsistence/domestic rather than commercial use due to lack of accessibility to markets, transportation and non-availability of local markets for timber (Ibid). Therefore, the 10 percent royalty from timber sales was an incentive for the community. Apart from timber extraction that was subject to the prior permission of state authorities, the remaining customary rights were continued (Ibid).

Moreover, the Wali firmly established the writ of the state, which not only protected forest resources, but also checked the emergence of conflicting interests and predatory attitudes toward natural resources. But gradually, as the Wali (particularly the last Wali) consolidated his authority, he began to rely more on state officials than the community for forest protection.

5.2 Transition from Swat State to the (Modern State of) Pakistan

In 1969, Swat State was merged with Pakistan. The former Swat State became Swat District. The Provincial Government took control of the forests. In 1975, all forests in Swat District (formerly Swat State) were declared as "protected forests". The period between 1969 and 1975 was marked by confusion and uncertainty. This situation coincided with the emergence of ZA Bhutto's government (Pakistan Peoples' Party-PPP) in the early seventies. On one hand, the people, particularly the lower social strata and small landholders, enjoyed release from the authoritarian rule of the Wali and on the other hand ventured into illicit cutting and forest encroachment, emboldened by the land reforms and a directionless policy of tenants' patronage of the Peoples' Party government (Khan and Khan 2009). Most of the tropical bushes and shrub forests in the lower Swat were cleared in the decade of the seventies, due to fear that the new government might take control of the land in the name of forests.⁹

Therefore, in the last two decades, the Wali as head of Swat State excessively relied on state authorities instead of community (*Jirga*) and while this resulted in mistrust, he was still able to protect the natural resources from unsustainable use and degradation (Sultan-i-Rome 2005). This new socio-political situation created conflicting interests and a threat to resource rights (Khan et al 2006).

The Forest Department of NWFP is characterized by a "non-participatory command and control approach (Yusuf 2007)." This approach was unable to exercise its authority due to corruption and traditional luke warm attitude, nor was it able to forge consensus for reconciliation among the stakeholders (Ibid). Successive governments and their various forest

⁹ The author's village had a thick cover of tropical forest stretching over more than 1200 acres. It was cleared within a month of the merger.

policies failed to address this issue of conflicting interest and opaque resource rights, which took its toll on the forests (Khan et al 2006 and 2007; Khan and Khan 2009). In fact, to date the Forest Department has not succeeded in “carrying out a thorough demarcation of forestland through the masonry boundary pillars for reason best known to the department” (Shaheen et al. 2000).

5.3 Ownership, Resource Rights and Forest Degradation

5.3.1 Sulatan and Chitkarai

Bhutto’s era proved a turning point with respect to resource rights and forest degradation (Khan and Khan 2009). The tenants who were using the resources in lieu of *Qalang*¹⁰ and *Begar*¹¹ purchased the land under pressure, due to fear that the government might confiscate those lands under Land Reforms. They found political and moral support from Pakistan Peoples’ Party and its administration. The tenants (*Gujars*) united and occupied the lands of small landholders who were living in the downhill areas. So, the circumstances made the small landholders compromise and accept the price the tenants offered. Hence, the former tenants became purchased owners of the lands and de-facto owners of the forests, as a result of living on the spot (Khan et al. 2006 and 2007; Khan and Khan 2009). A written deed was made between the owners and purchasers that “tree [forest] belong to the *dawtar* owners while the plowable land for which they paid, to the purchasers.”¹²

“Therefore, when in 1975 the Provincial Government declared the forest as “protected”, the *de jure* owners lost interest in the forests” (Yusuf, 2007, p.5). Now the forests land belonged to the government, and the royalty was of not much importance being irregular income, especially for small landholders. On the other hand, the big landholders had lost their previous hold and influence over the tenants, mostly *Gujars*. Consequently, the *Gujars*, the de-facto owners resorted to ruthless felling not only for monetary gains but also to change land use. Initially, they had to recompense the concerned *dawtar* owners of the forests by providing them with timber for domestic use, because the legal procedures were lengthy and time consuming. Meanwhile, the de-facto owners had established links with the personnel of the Forest Department and timber mafia and continued felling the trees (Ibid).

This is the situation in the two villages studied, located in the upper reaches, adjacent to the alpine pastures. Both still have forests. Nevertheless, the illicit felling is visible and extensive. The only natural protection the forest enjoyed was a result of its location in the most upper reaches where land use is difficult to change. The downhill forest areas have either been cleared or reduced to spare forest of immature trees by the *de facto* owners. Mushroom growth of residential settlements is also visible. In Chitkarai village, the participants of a focus group discussion, admitted culpability for the degradation. They argued that “why should they protect the forest and for whom?” They further maintained that while living in this rough terrain under customary law, they required the owner’s permission to use forest resources. Under Statutory Law they have to seek permission of the Forest Department and follow strict rules and regulations. It is better not to follow any, as both

¹⁰ A fixed amount paid by the users for the use of land or pastures or residential house for a fixed period of time to the owners.

¹¹ Forced labor, the labor done by an individual for someone in return for a piece of land given for cultivation, grazing or collecting fodder, house for living or any other favor.

¹² The information is based on Community Group Discussion in Chitkarai in April 2005.

“marginalized us” they said. They expressed their willingness for reconciliation with *de jure* owners to settle the resource rights issue on a give and take basis (Khan et al 2006; Khan and Khan 2009).

The forest land was recorded in the working plan, divided into compartments and documented in the revenue record of 1985-86 land settlement. But in collusion with the deed holders, the personnel of the Forest Department excluded the forest zone and thus changed the use of land from forest land to agricultural or residential land. While the *Patwari*¹³ arranged for the transfer of such land to the alleged owner under a *Khasra*¹⁴ number, the Forest Act of 2002 envisaged a Joint Forest Management Committee (JFMC) to ensure participatory management of forests.

Contrary to the fact, the opaque resource rights situation is a major stumbling block in the way of JFMC’s smooth sail. The Forest Act of 2002 makes it obligatory on the District Forest Officers and Forest Development Corporation to carry out marking for harvesting under the supervision of JFMC. However, the de-facto owners - who are living on the spot having no customary and statutory ownership rights in the forests – have no or less interest in JFMC process, as it does not confer any ownership right on them. For they have no share in royalty coming from such harvestings.

The interesting aspect of the whole scenario is that the ruthless cutting of forest trees could not change the economic condition and living standard of the local communities. If a person chops a tree, he may hardly get the amount equal to a day’s wage. The lion’s share goes to the timber mafia and Forest Department personnel (Shahbaz et al. 2007; and Personal Interviews). Currently, neither customary laws nor statutory laws are effective while the *de facto* owners feel deprived and unsatisfied. Without their collaboration, forest protection is a far cry. The *de facto* owners no longer pay *Qalang* for *bandajat*¹⁵ but now receive *Qalang* from the nomad grazers coming up in summer with their herds of animals and also extract NTFPs for subsistence use free of charge. Another interesting finding is that the level of confidence in ownership among the *de facto* owners is reflected in forest protection. The *de facto* owners in Sulatan were more confident in their sense of ownership as they were more assertive than their counterparts in Chitkarai, so their forest was relatively well protected in comparison to that of Chitkarai.

5.3.2 Lalku

Lalku represents an opposite situation as compared to the above mentioned villages. Historically, this sub-valley was excluded from the rotational re-allotment system. Here the *de-jure* and *de facto* owners are the same. Since all the owners belong to the *Sayyad* family, so they distributed agricultural as well as forest in individual land holdings.¹⁶

The owners receive *Qalang* on per animal head from the non-local nomad grazers as well as from the locals. However, the local grazers are required to pay smaller amounts than the non-

¹³ Low rank revenue official

¹⁵ Open space area (blanks) inside the forest mainly used for seasonal livestock grazing with a few summer quarters. Some *bandajat* also have agricultural space.

¹⁶ The individual share in forests - as forests were part of *shamilat* (communal property) wherein the individual shares were known but not its boundaries - determines by the size of agriculture land holding. In Lalku, the owners distributed the forests on the pattern of agriculture land, the Act constitutes a repugnance to the statutory law (Forest Act) but is very much in conformity to custom.

local. The sense of ownership is very strong among the owners and resource rights are clearly defined as per the customary laws.

However, the divergence is evident between the customary and statutory law. Under the customary law, forests are the property of residents and they can use it freely, while the statutory law declared forests as state property. The owners may use forest resources as allowed by the law. The statutory law only recognized their rights to collect fodder, fuel wood and other NTFPs free of charge. As far as timber extraction for subsistence/domestic use is concerned, the people go under the tedious bureaucratic procedure of local quota. Similarly, the traditional owners do not consider *bandajat* (the blanks inside the forests) as part of the forest but a category of their *dawtari*. Currently, there are nine *bandas* or *bandajat* in Lalku Valley, out of which six belong to Upper Lalku and Lalku Gharai namely, Piazakai, Jabba, Karr Khwar, Sarkhoona, Jabbagai and Gabina Jabba while three i.e. Landa Dara, Shaheed Bella and Skha Charai to Lower Lalku. The owners draw *qalang* worth Rs. 4000 to Rs. 12000 from a single *banda*, which depends upon the size of the *banda*. The proceeds of *qalang* are mutually distributed among the owners on the basis of their share in the landholding (Focus Group Discussion, April 2005).

Land use change in the hilly area has led to the worst form of degradation and resulted in the preventing or halting the process of forest regeneration. Though land use change is visible in the surrounding villages, surprisingly, the incidence of *Kareen* or *Noutor* (the practice of converting forest or range land in agriculture land) is not so wide spread in Lalku as compared to the other areas of Matta Forest Range where the *de facto* owners are in control. The obvious reason is the distribution of forests to private holdings by the owners. The Forest Act does not recognize such private holdings of the Protected Forests. As a result, they equally claim the ownership of forests. Another reason cited by the owners is that agricultural land - mono-crop - in the area is less valuable and productive than forest land. One can infer that value addition to forest resources can play a vital role in forest conservation.

The forests of Lalku are in relatively good shape and well protected as compared to other parts in Matta due to the absence of conflicting interests over resource rights. Though, the owners cooperate with the Forest Department, they still resent the government Forest Policy of Protected Forests. Under this statutory arrangement, they are no longer owners but concessionaires having users' rights on forests' resources (Khan et al. 2006 and 2007; Khan and Khan 2009; Yusuf 2007 and 2009).

The Forest Act of 2002 envisaged the formation of Joint Forest Management Committees comprised of stakeholders and forest officials. The forest officials formed JFMC in Lalku in 2004 and it is the only example of a success story in the Matta range. In the areas with *de facto* owners, the Forest Department did not succeed in constituting functional JFMCs. Sensing the conducive environment in Lalku, the Forest Department has selected the area for development initiatives that include plantation, construction of bridges and tracks and also released Trout fish (Nursery) into Lalku Khuwar (stream) in March 2006.¹⁷

5.3.3 Kalam

¹⁷ This is based on Focus Group Discussions and individual interviews conducted by the author in April-May 2009.

The management of forests in the post *Walis* era changed diametrically with respect to administration, control and enforcement of rules and regulations. Due to the autocratic and authoritarian nature of the *Wali's* regime, the rules and regulations were strictly enforced (Sultan-i-Rome 1999). However, the *Wali* never neglected the views of owners, as he used to take the local *Jirga* of elders in confidence regarding forest management. While in the Post *Wali* era, management under the Forest Department totally excluded the local communities from forests' affairs. The government expected the fiercely independent natured *Kohistanis* to be content with the status of being concessionaires with users' rights instead of owners rights. Even they did not accept the *Wali* control and interference in their forests as evidenced from the letter they wrote on 26 March 1948, as a complaint against the *Wali's* interference in their forest affairs. The letter was directed to the *Nawab* of Dir State, seeking his support against the *Wali* of Swat. The letter states:

“Mian Gul [the ruler of Swat] has now cut 300 trees and he has been cutting even more. We therefore, inform you that forest trees are our food and clothing (source of life). It would be useless for us to live in Kalam after they have been cut. All of us will come down to Dir and take ready-made food here as trees are our life and soul and when all of them are removed we would have no other remedy but to migrate from Kalam” (Sultan-i-Rome 2005, pp.94-95).

The *Wali* of Swat was well aware of the locals' nature and socio-cultural delicacies, so he adopted the policy of carrot and stick in combination with the policy of divide and rule. With the indigenous nature of the system and local management, the *Wali* had enjoyed immense influence and regard being the ruler of Swat. He was able to control the *Kohistanis* (Sultan-i-Rome 2005a). Moreover, after the merger of Swat State, the civil and political rights system was extended to the area.

Coupled with exposure to the media, growing awareness, particularly about the worth of forests, and the increasing prices of timber, the local community has become more conscious and assertive about their resources. Trust deficits exist between the community and government. They do not even allow the forest department staff to move freely in patrolling some areas and consider the Forest Department as a usurper.¹⁸ The owners resist the policy of Protected Forests and the mode of royalty payment through political agitations and civil suits in the courts of law. A case regarding the mode of royalty against Forest Development Corporation is pending in the Supreme Court of Pakistan (Shah 2007)

The provincial government in 1985-86 made attempts to carry out land settlement in Kalam Tract but received resistance due to the perception of the local community that the Revenue Department would take away their land or would subject them to taxes. Thus, as a last resort the Revenue Department recorded the lands on an aggregate basis without carrying out a physical survey (Personal Interviews).

In the post *Wali* era, the pace of deforestation has increased due to various factors. Some factors have arisen from institutional failure, mismanagement, and corruption, while others

¹⁸ The author bases this information on Focus Group Discussions, individual interviews and participatory observation which he conducted in the area.

are natural i.e. population pressure, the climatic nature of the area, and the lack of alternate sources of energy except wood. Besides, the area has Deodar (Cedar) forests which is a precious species [Green Gold] and profitable in the market.

But the most important factor is the promotion of tourism and its related infrastructure, especially hotels. The area attracts thousands of tourists every year in summer boosting the hotel businesses. In 1980, there was only one hotel in Kalam, but today Kalam town has about 300 large and small hotels, all dependent on the forest for construction as well as wood fuel. Similarly in 1980s, the Kalam Integrated Development Program introduced off-season vegetables in the area as a cash crop to improve the income level of the community. These cash crops, being more profitable than the traditional farming, led to encroachment and conversion of forests land into agricultural land.

When this situation became alarming in the 1990s, the community undertook measures to arrest the increasing pace of deforestation and scot-free smuggling of timber with the establishment of community check posts. The community shouldered the salaries of the private guards on the posts, which was to some extent helpful in checking timber smuggling on a large scale. Community endeavor has provided fire protection and control without any help or assistance from the Forest Department. However, the ban on marking for timber harvesting by the government in 1992 backfired, as it stopped the royalty. As a result, the local community resorted to unscientific and unsustainable timber extraction. The reason they cited is that forest is the major source of income for this high altitude community, and the ban had restricted their income opportunities.¹⁹

The Forest Act of 2002 emphasized participatory management and envisaged the formation of the Joint Forest Management Committees (JFMCs). The presence of the JFMC is mandatory for carrying out marking for felling (Forest Act, 2002). Therefore, the JFMC in Utror was formed in August 2005. It is note worthy that in Swat-Kohistan, the forests are being managed by the traditional representative (*Jirgas*) of the community. However, keeping in mind the level of mistrust between the community and Forest Department, a viable system of JFMCs looks like a faint hope. As the community pointed out, under JFMCs, the personnel of Forest Department seek to shift responsibility (rather than authority) to the community, without capacity building and awareness about the system. The Forest Act of 2002 bares contradictions that on one hand, place emphasis on participatory management, while on the other hand, authorize the District Forest Officer (DFO) for revocation of JFMC unilaterally. Another deviation from the spirit of joint management and participation is the granting of police power to the personnel of Forest Department (Suleri 2002; Ali et al. 2006).

6. Conclusion

The management of natural resources and the resource rights system was framed by *Sheik Mali* known as '*Garzinda wesh*' (rotational re-allotment) after the occupation of Swat by the *Yousafzai* Pukhtoons. The community managed the resources under their customary laws (*Riwaj*) for centuries but these laws were biased in favor of ethnic Pukhtoons, for centuries. The management was characterized by the absence of divergence and conflicting interests.

¹⁹ The author bases this information on Focus Group Discussions, individual interviews and participatory observation which he conducted in the area.

Natural resources, particularly forests, had enjoyed natural protection as the resources were in abundance in proportion to the population. The community could use them for subsistence / domestic use only.

With the emergence of Swat State in 1917, the Wali introduced reforms and replaced the rotational re-allotment system with permanent settlement, and consequently, put the forests under state control. The Wali succeeded in bringing such drastic changes through his reforms by thoroughly indulging himself in negotiation with the communities (mostly *Jirgas*) until he won their confidence (Barth 1995). The Wali recognized residents' ownership rights in forests by awarding a one-tenth share from the sale proceeds of timbers as royalty and the remaining rights remained unchanged. Though the Wali made full use of forests resources for commercial purposes, he was also mindful of its conservancy and sustainable use.

The merger of Swat State in 1969 in Pakistan entailed a new institutional framework, which off set both the customary as well as the state management of resources, particularly forests. The Government of NWFP declared the forests as Protected Forests in 1975 and the share of royalty to owners was increased to 60 percent. However, the government failed to take stock of the contemporary regulations of the society. The nature of socio-economic relations was changed diametrically with the dawn of a new political era. A new more assertive class of stakeholders emerged with conflicting interests and stake regarding resource rights and their use. As Ostrom (1990, p.33) explains "without a fair, orderly, and efficient method of allocating resource units, local appropriators have little motivation to contribute to the continued provision of the resource system." However, the degradation of the forests in Swat is primarily the function of the state's institutional failure. The state could not provide a workable institutional framework better than the locally constituted community system. This exposed the limits of the exogenous management. It was neither susceptible to adaptability nor could establish its writ, coupled with inbuilt institutional shortcomings, to overcome the challenging situation. These circumstances gave birth to the conflicting interest situation regarding resource rights.

The outcome of opaque resource rights was an anarchic situation where everybody claimed and tried to extract as much as possible but nobody was ready to accept responsibility. The managers themselves became predators oblivious of the consequences, which resulted in the colossal degradation of forest resources.

7. Recommendations

7.1 Redefinition of resource rights

It is recommended that the Forest Department should convene *Jirgas*, of all stakeholders, particularly customary *de jure* and *de facto* owners, in collaboration with the local government to settle the resource rights issue. Such *Jirgas* should be held at grass root level, even, on union council level. A grand *Jirga* on district level may not settle an issue involving property rights at the village level. The new resource right mechanism should include initiatives for reforestation and its sustainable use. Therefore, it is suggested that the Forest Department should initiate a process of dialogue and negotiation for a new social contract to redefine the resource rights regime in the light of realities on the ground. The objective of this process should be the sustainable use of natural resources beneficial for the local

communities and best practices of conservation, not through command and control system but participation and joint action (Ali et al. 2006).

7.2 *Alternate energy sources*

The communities living in the upper reaches have no alternate energy option except the use of wood for cooking and heating. They excessively rely on forest wood to meet their energy requirements particularly in the tourist attractive areas like Kalam. Here the precious Deodar (Cedar) wood worth millions of rupees is being used for cooking and heating not only by the households but also by the mushrooming hotels in the town. The region has enormous hydro energy potentials that should be explored in consultation with local communities to provide cheap alternate energy to them.

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