# Forest Management in Pakistan: A Legal and Institutional Analysis

Moeed Yusuf

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Mailing Address: PO Box 2342, Islamabad, Pakistan.
Telephone ++ (92-51) 278134, 278136, 277146, 270674-76
Fax ++(92-51) 278135, URL: www.sdpi.org

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1 As of 28 May 08.

## Acronyms

| | |
|---|---|
| AKPBS | Aga Khan Planning and Building Services |
| BACIP | Building and Construction Improvement Program |
| CBO | Community Based Organizations |
| DFFW | Department of Forest, Fisheries and Wildlife |
| DFO | District Forest Officer |
| FATA | Federally Administered Tribal Areas |
| FD | Forest Department |
| FDC | Forest Development Corporation |
| FSMP | Forest Sector Master Plan |
| FUG | Forest User Groups |
| JFM | Joint Forest Management |
| JFMC | Joint Forest Management Committees |
| KIDP | Kalam Integrated Development Project |
| NCS | National Conservation Strategy |
| NWFP | North West Frontier Province |
| NTFP | Non-Timber Forest Products |
| OCAP | Oda-Kotoamso Community Agroforestry |
| PPP | Public Private Partnership |
| PFRI | Provincial Forest Resource Inventory |
| PTC | Pakistan Tobacco Company |
| SAFI | Sarhad Awami Forestry Ittehad |
| SFM | Sustainable Forest Management |
| SFW | Social Forestry Wing |
| SPCS | Sarhad Provincial Conservation Strategy |
| SFDP | Siran Forestry Development Project |
| USAID | United States Agency for International Development |

# Forest Management in Pakistan: A Legal and Institutional Analysis

Moeed Yusuf

## 1. Introduction

Pakistan has witnessed excessive degradation of its already meager forest resources over the past few decades. A number of factors lie behind this development whose understanding is essential in order to identify a viable solution to the seemingly unstoppable decrease in forest cover. This paper seeks to provide an overview of forestry management in Pakistan, highlighting the major initiatives undertaken by the authorities to arrest forest degradation. Pointing to the major strengths and shortcomings in the initiatives and analyzing their impact could provide clues for improving the state of forest management in the country.

Before we begin our analysis however, it is essential to define 'degradation'. This is important since changes within forests can take a number of forms, each one of which might require varying policy interventions. Degradation could result from depletion of mature timber trees, encroachment of loggers into protected areas, land use changes, lack of investment in regeneration activities, illegal fuel wood extraction, conversion of native forests to plantations of exotic species, among others. Within the Pakistani context, and more importantly the North West Frontier Province, which is our geographical focus (see section 3), three of these forms of degradation hold primary importance. These are excessively rapid depletion of mature timber trees, conversion of forestland for agriculture and illegal cutting of fuelwood in timber production forests. All three can be directly linked to the various institutional and legal underpinnings of the country's forest management system.

The paper begins by providing an overview of current global debate on various aspects of forest management. It then gives a brief overview of the current state of forests in Pakistan. Subsequently, it discusses forest management in a historical perspective before highlighting the major government interventions as part of the forestry sector reform process. The discussion finally points to key lessons from the interventions and briefly suggests an alternate option available to policymakers.

## 2. Global Debate on Forest Management

Before discussing forest management in Pakistan, it would be worthwhile to highlight the current international discourse on management of forests. Literature broadly points to two systems for management of forest resources: a command and control approach and an incentive based approach. Till some time back, environmental regulations were solely based on command and control structures and relied on robust enforcement mechanisms. These mechanisms proved unimplementable case after case largely because of the number of conflicting interests, which political processes always cater towards when formulating policy that impacts environmental concerns (Congleton, 1996). As Oates and Portney (2001) highlight, economists are more and more inclined to use incentive-based instruments, flowing out of a cost-benefit analysis of adopting any regulations to protect the environment. The gradual move towards market-based forces to achieve environmental protection is a result of the long history of government failures to implement command and control mechanisms (Kay, 1998).

Traditionally, Pakistan has taken a 'command and control' approach to forest conservation, which can be traced back to its colonial history. Coupled with other impediments, this strategy has created legal and institutional constraints, which provide resource dependent communities little incentive to assist in forest conservation efforts (Ahmed and Mahmood, 1998). It is for this reason Ahmed and Mahmood (1998) call for an incentive based approach. This is re-asserted by Naqvi and Khan (2000). They point to the presence of perverse incentives in the forestry sector as a major impediment to forest conservation. Examples of perverse incentives include rising timber and fuel wood prices, lack of transparency, and failure of fines and penalties to keep up with rising timber prices (Naqvi and Khan, 2000). Incentives to promote sustainable forest management (SFM) can involve either directly empowering locals to take responsibility or restructuring the system of indirect incentives to replace perverse incentives with more user empowering ones (Howard et al., 1997).

A recent phenomenon in forest management is an emphasis on co-management between public functionaries and resource dependent communities as active members of the policy formulation and implementation process. Co-management is an example of an incentive based system. In Pakistan, legal changes have been made to allow communities to play an active role in forest management. This could facilitate a transition from the government's traditional command and control approach to one where community mechanisms reign supreme. In this regard, the role of local governments is also being encouraged (Ahmed and Mahmood, 1998). However, Mogaka, et al. (2001) caution in their study based in Eastern and Southern Africa that for the local communities to play a successful role in sustainable forest management, "they must receive greater economic benefits from conserving forests than from degrading them". For example, in order for a joint forest management program to be successful, the program must devolve authority to forest dwellers in a sincere manner and empower all members of a community ("Implications for joint", 2004). Adhikari et al. (2003) highlight how most marginalized sections of society are not represented in the FUG (forest user group) committees in Nepal. Also, for JFM to work in the long run, Gutman (2001) points towards the need to make significant income transfers from the rich urban population to the rural poor for their contribution towards JFM.

Another co-management approach is a public private partnership. The past decade has seen a growing number of successful PPPs across the globe. Based on the principles of sustainable development, these PPP have made significant progress in improving the environment, addressing key social objectives and reaping commercial success for their private partners ("Governance in Public Private Partnerships", 2004). While traditionally a PPP involves the transfer of a public service to a private sector entity, Khan et al (forthcoming) point towards how PPP can take numerous forms. Examples of successful PPPs in the forestry sector are the Oda-Kotoamso Community Agro forestry Project (OCAP) in Western Ghana and the partnership between numerous private and public organizations designed to protect and improve wild coffee production in Ethiopia ("Rural Development", 2005; "International Trade", 2005).

Clearly defined property rights play an important role in the success of any incentive based forest management technique. Without clear and enforceable property rights, no investment from businesses or communities is likely in sustainable forest management (SFM) (Reifsnyder, 2006). Property rights do not simply imply titles of ownership. Rather, they refer to a wide range of rules that determine access to and use of resources (Dick et al., 1997). Reifsnyder (2006) makes the same argument by pointing out that there are many kinds, degrees and modes of property rights

that vary from region to region. Of specific interest to us are local community rights, which are often limited in their scope, and restricted to small patches of degraded land and applicable to only a limited range of natural resources ("Conference on Global Perspectives", 2002). This results in inadequate incentives for SFM and leads to unsustainable use of the available natural resources. Often, even when property rights are well-defined governments fail to implement them properly. This can result from gaps and inconsistencies in policy and legal provisions, distortions in policy implementation, inadequate research, study and technical assistance to local communities, difficult community characteristics and settings, lack of awareness, and unjust social structures, among others ("Conference on Global Perspectives", 2002).

A more traditional strategy employed to arrest forest degradation is imposition of a ban on timber harvesting. While several countries in the Asia-Pacific region (Thailand and Philippines being just two examples) have employed this strategy, it has created numerous complications ("Efficacy", 2000). For instance, it has placed additional burden on the forestry department with regard to effective implementation and led to a rise in illegal trade and accentuated other market disruptions ("Efficacy", 2000).

Due to the failure of majority of the command and control structures and the lengthy institutional reforms required for participatory approaches to work, in recent years market rationalization is being increasingly cited as an effective means to sidetrack bureaucratic hurdles while reversing degradation. Ahmed and Mahmood (1998) have suggested that the poor integration of import policies with forest sector policies is one of the reasons for relentless forest degradation in Pakistan. Pakistan's current import policies place increased pressure on domestic timber stocks (Ahmed and Mahmood, 1998). In Eastern and Southern Africa, Mogaka et al. (2001) have underscored positive influence of market rationalization on SFM. They point out that economic liberalization has dismantled many price and market distortions that discriminated forests as a land use (Mogaka et al., 2001). Garcia et al. (1994) have also advocated the role for open markets, stating that deviations from it will only impose higher costs on consumers and a large number of processors, hampering forest conservation efforts.

Forest degradation has direct relevance to poverty levels of resource dependant communties. While many claim poverty to be a major cause of forest degradation, Gutman (2001) suggests that there is a much more complex poverty-environment linkage. While the rural poor may be the immediate cause for forest degradation, they are often driven by other 'intermediate and root causes' such as an economic crisis or natural disasters (Gutman, 2001). He points towards forest services as an important source of livelihood for the rural poor and suggests that it is in the interest of the poor to protect forests and the services they provide. This is also highlighted by Ali et al. (2006) who state that rural dwellers in NWFP, Pakistan rely on forests for numerous commodities: fodder for livestock, timber for houses and fuel wood and non-timber forest products for household use and cash income. Their study indicates that forest degradation is caused by the inefficiencies within the forest department functioning and not due to pressure on resources from poor resource dependant communities. The study advocates a revised pro-poor approach that identifies constraints for the poor and assists in equitable distribution of resources. Gutman (2001), in his study goes further by singling out specific factors that need to be addressed if poverty alleviation and conservation are to complement each other.

## 3. State of Pakistan's Forests

Pakistan is a country poorly endowed with forest resources. The current state of forests in Pakistan suggests extreme apathy. Woody biomass is disappearing at a rate of 4-6 percent per annum, making it the second highest rate in the world (Biodiversity Action Plan, 1998). The cost of deforestation in Pakistan is estimated between USD 28-36 million per year while the remediation cost for forests is suggested to be about USD 157.40 million (Ahmed and Mahmood, 1998). If forest degradation continues at the current pace, the entire woody biomass stock of the country is likely to be consumed between 2015-2020 (Biodiversity Action Plan, 1998).

In 1992, at the start of the forest reform process in the country, the total area under forest cover was to be 4.8 percent of total land area (Forest Master Plan, 1992). The Forest Sector Master Plan's (FSMP) aim of doubling forest cover in 25 years notwithstanding, forest stands have decreased significantly since 1992. Between 1990-2005, Pakistan lost 625,000 hectares, which constitutes 24. 7 percent of its total forest cover ("Pakistan Deforestation Rates", 2000). Pakistan's per capita forest area at 0.03 hectare is well below the world average. Good quality "tall tree' forests - defined as canopy cover of 50 percent or more- only cover 400,000 hectares, constituting less than 0.5 percent of total land area of the country (Biodiversity Action Plan, 1998). Out of the entire forest stock only 27.6 percent is used for commercial timber extraction. (Ahmed and Mahmood, 1998).

Majority of the country's productive (natural timber) forests are situated in the North West Frontier Province (NWFP). Given the extremely high economic value attached to NWFP forests, bulk of the strain on institutional and legal framework for forest management directly relates to NWFP. In other words, the incentive to circumvent forest preservation regulations of the province is tremendous. Consequently, almost all major forest sector management interventions have been initiated in the NWFP. It is therefore pertinent to focus our attention on the state of forest management in this province alone.

Within NWFP, the total forest cover constitutes roughly 6.8 percent of the entire NWFP/FATA area ("Provincial Forest Resource", 2000). Moreover, forest quality is poor with almost half of the crown area having canopy cover of less than 25 percent ("Provincial Forest Resource", 2000). Interestingly, 75 percent of the dense forests in the province are located above 2000 meters, while majority of the ones below this altitude are severely degraded ("Provincial Forest Resource", 2000). Finally, vast majority of mature forests are growing in steep zones. Only 12 percent of forest stands are situated on flat to 'fairly' steep terrain ("Provincial Forest Resource", 2000). In terms of accessibility, these are the only ones viable for intensive or social forest management.

## 4. Forest Management in Pakistan: A Historical Perspective

### *4.1 Traditional forest legislation and the existence of parallel de jure institutions*

Since independence of Pakistan in 1947 till the 2002 NWFP Forest Ordinance, forest rules and regulations were governed by the Forest Act 1927. The Act extended across the country except Hazara where the NWFP Hazara Forest Act 1936 applied, and northern Balochistan where the Balochistan Forest Regulation 1890 was in force (Hamid, 2002). Forestry has remained a

provincial subject throughout Pakistan's history. The Provincial government is solely in charge of forest management and the Provincial Assembly has the powers to amend forestry laws.[2]

Statutory law provided by the 1927 Act divided public forests into three classes: reserved forests, protected forests and 'community' forests (*guzara*). Reserved forests are ones where no individual and community rights were recognized, except those accepted by the designated authority. Some public forests not considered reserved forests fall in the protected forests category. The government could prohibit extraction of natural resources from protected forests or limit access to such a forest. The provincial FDs administer all village forests, *guzara* forests and lands placed under the control of the Forest Officers. Although *guzara* forests are not owned by the State, communities still need permission to gain access to resources within these forests and are liable to pay seigniorage for any proceeds generated through sales of forest products (Hamid, 2002).

The colonial forestry laws were designed to maintain centralized control over forest resources and reflected the perception of the British authorities who viewed communities as the principal threat to sustainability of forest resources. Consequently, the laws were rigid, lacked flexibility and were based on tight command and control stipulations. Effective control was ensured courtesy of the highly punitive nature of the stipulations, which included high level of fines and penalties for transgressors. The forest acts provided huge discretionary enforcement powers to authorized personnel, the Forest Officer in the case of the 1927 Act, the Governor in the case of the 1890 regulation, and the Deputy Commissioner in the case of the 1936 Act (Hamid, 2002). The outright focus of the regulations on command and control procedures meant that incentive based structures were largely ignored. In fact, none of the regulations required any substantial stakeholder participation or community involvement in either designing or implementing the regulations. There was no mention of social forestry or private sector initiatives.

While the forestry acts constituted statutory law governing forest resources, Pakistan (even in British India) has always had two de jure institutions governing rights in parallel: statutory law and customary law. While seemingly complementary to each other, they actually contain inherent contradictions and lead to lack of clarity in property and resource rights regimes. The co-existence of these two institutions implied that while statutory law clearly stipulated forest governance rules, each of the different ethnic groups who inhabit the forested areas of NWFP and the northern territories had their own set of institutions governing natural resource use (Khan, et al., "Institutions", forthcoming). Unlike statutory law, the institutions embedded in customary law are adaptive to changing biophysical and socio-economic circumstances, although this obviously occurs with some time-lag.

Box 1: The Forest Management Dilemma: The case of Sulatan in Swat District

The village of Sulatan is situated in the Swat District in the North West Frontier Province. Traditionally, the management and resource rights regime in the village was guided by customary law. However, the 1970s proved to be a turning point with respect to ownership rights. The government at the time went on a land reform drive, which prompted owners to sell their lands under the threat of confiscation at a compromised price. Hence, statutory law overrode the traditional ownership patterns and facilitated the former tenants to become purchased owners of the lands.

2 Forests were included in the Provincial Legislative List in the 1956 Constitution. It was not mentioned in the Central Legislative List of the 1962 and 1973 Constitutions (Hamid,2002).

Interestingly however, while the owners sold their land, they did not forfeit their rights to the natural resources. In fact, a written deed was concluded. It stated that the tree forest would belong to the original owners, while the plowable land would now become the ownership of those who had purchased it.

Therefore, when in 1974, the Provincial Government declared all forests as 'protected', the de jure owners were dealt another blow and resultantly over time, they lost interest in their forest rights. Consequently, the tenants-turned-owners, who by virtue of the close proximity of the lands to forests had taken de-facto control, found an incentive to clear forests at an accelerated pace. This was done not only to gain monetarily, but also to clear the land of standing trees, a move that according to the deed could easily be termed 'non-forest' and thus considered the ownership of the tenants-turned-owners. Meanwhile, the de facto owners also managed to form informal alliances with the Forest Department and the timber mafia, which facilitated their perpetual, hold on the forests and allowed wholesale clearing. De jure owners were completely sidelined and resisted the move, leading to tensions. Notwithstanding, the process continues with the de jure owners having little recourse but to claim ownership. Degradation rates in Sulatan therefore are extremely high.

Source: Case study conducted by Talimand Khan, Research Assistant, SDPI, 2005

Under the provincial government management system, statutory law dictates any customary rights, including those related to subsistence. Statutory forest laws have restricted subsistence access to forest resources (fuel wood, timber, fodder and other non-timber forest products (NTFPs) (Khan et al., "Institutions", forthcoming). Therefore, communities resist the supremacy of statutory law and continue to claim ownership on the basis of customary rights, a contention the government does not uphold. In essence, lack of participatory approaches to forest management has denied communities any voice in the management of forests.

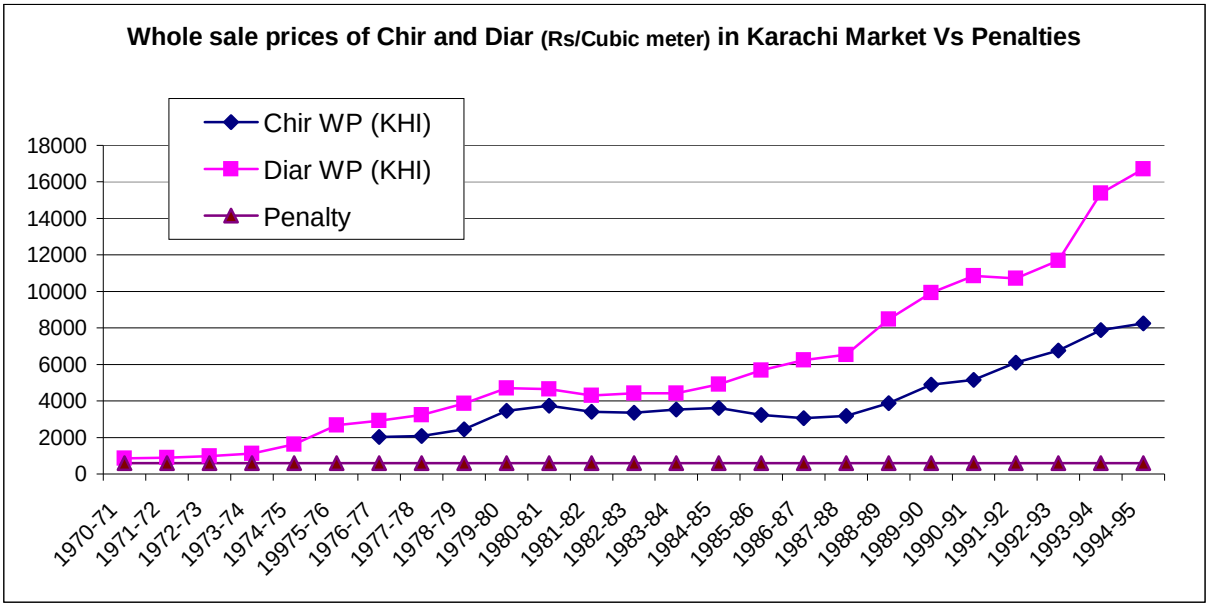
Moreover, the government's continuous bureaucratic interference in *guzara* forests has led to resentment among communities. A classic example of the government-community tensions was the armed agitation against government declaration of forests as 'protected' in the Dir-Kohistan region of NWFP in 1976. The authorities had to call out the para-military forces and use air support to subdue communities. In Swat, a forest rich district in NWFP, community claims were pacified by providing a 60 percent share in royalties from timber sale proceeds (Khan and Yusuf, 2004). Disparate claims over ownership rights have often been contested between the government and communities in traditional and statutory courts and many remain unresolved to date. Annex 2 highlights the disconnect between the legal stipulations and on ground situation by elaborating the de jure and de facto situation with regard to forest ownership.

### *4.2 Putting forest degradation in perspective*

Much of the degradation that has taken place in the past three decades can be attributed to institutional failure. The conflict of interest among loggers, private developers, government, and resource dependent communities place the management system under extreme pressure. Moreover, the Forest Department (FD) has a loose writ and has thus been unable to enforce rules and regulations enacted to preserve natural resources. Discretionary powers attributed to individual posts have led to rampant corruption. One example of such a post is the forest magistrate who is the sole authority responsible for implementing any penalties against transgressors. This combined with the astronomical increase in timber prices, stagnant salaries of forest officials, and a fines and penalties mechanism that is not current with today's realities have undermined the cause of forest preservation in general and timber exploitation in particular (see

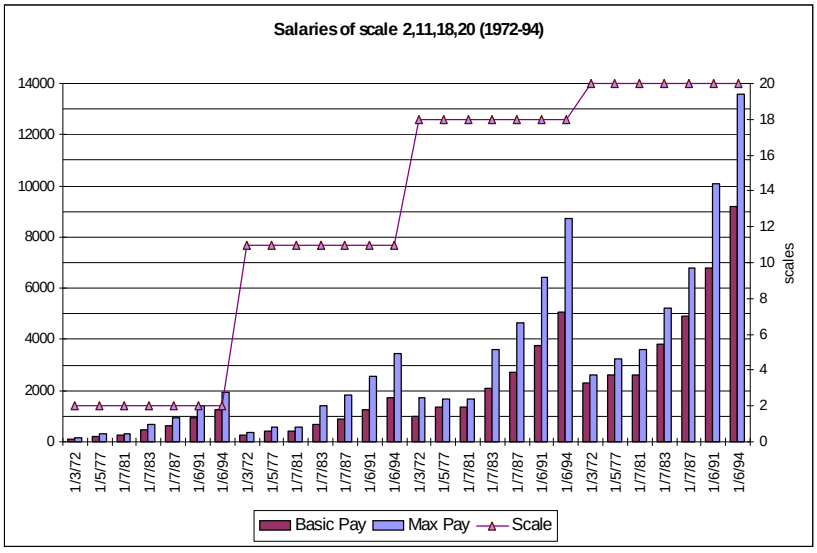
figures 1 and 2 below). Moreover, relevant public authorities have been unable to provide alternate livelihood opportunities to impoverished communities (Khan and Yusuf, 2004). Other institutional factors that have contributed to natural resource degradation are the perpetual delays in release of royalty shares of the communities. The latter removes any incentive for the communities to play a constructive role in preservation of natural resources since on the one hand their ownership rights are not recognized, and on the other, the compensation for forgoing these rights is not being provided.

Figure 1




Source: Khan and Pervaiz, 2001.

Figure 2




Source: Khan and Pervaiz, 2001

The FD, rather than ensuring a balanced approach, uses a heavy-handed approach against communities as a yardstick of its effectiveness. Communities are presented as predators, while at the same time those commercial interests that are actually causing relentless harm to forest resources are given a free hand in exchange for rents or other benefits. This *de facto* forest management system based on current political and economic power constitutes the actual institutional setting faced by poor forest dependant households, in which their role is marginalized. What is more, official development policy targets local resource dependent communities. In almost all forest sector documents highlighting problems in the forest sector, communities are targeted as part of the problem and much of the forest depletion is blamed on their activities. This is unfortunate as the local poor could actually become potential collaborators with the authorities in the sustainable management of forest resources if their resource rights are honored.

Interesting to note is the fact that while degradation during colonial times and even in the early years of Pakistan's existence was largely a result of demographic pressure and increasing community subsistence needs, majority of the recent degradation can be blamed on institutional failure and within that the collusion of the public functionaries with the 'timber mafia' who have played havoc with forest resources for commercial gains. Commercial timber exploitation remains the biggest factor behind forest degradation despite the fact that community pressures on forest resources have also risen sharply in the past two decades.[3]

The colonial forestry management system satisfied colonial objectives of forest preservation through a tight fisted control over the forests with little or no regard for community participation. However, existence of such a system is absurd in the present context, where the idea supposedly is to complement SFM with poverty alleviation of resource dependant communities. Unfortunately, till the 1990s, Pakistan persisted with the colonial forestry laws, entrenching a top-down command and control approach in the working of the public functionaries relevant to the forest department.

# 5 The Forestry Reform Process

## *5.1 Policy and legal interventions*

Given the overall apathy of the forestry management system and partially as a result of disastrous floods in the north of the country in 1992, there was significant push to institute a comprehensive reform process in the forest sector. Since then a number of major initiatives have been undertaken, all aiming to depart from the failures of the inherited colonial system and bringing it up to speed with the currently existing local context. The key measures, which bear relevance to the reform process, are discussed briefly below:

### I. Forestry Sector Master Plan (1992)[4]

The 25-year Forestry Sector Master Plan was prepared in 1992 by the Government of Pakistan with financial and technical donor assistance. The plan is an overarching document

3 While some official documents contest that fuel wood use is the biggest factor, a number of survey-based studies have pointed otherwise. The author has found convincing results confirming this in a study of natural resource dependence based in Swat, NWFP.

4 *Forestry Sector Master Plan,* Government of Pakistan, 1992.

that provides the general vision for the forestry sector and identifies priorities over the plan period in order to streamline support for the sector in the future. The broad goals identified are to protect, manage and rehabilitate forests, increase fuel wood production in upland watersheds and lowland farms, as well as improve land use and productivity to cater to rising poverty. The plan, by its very nature, does not deal with specific issues with the aim of providing solutions to the problems in the sector. It does, however, provide for a significant expansion in government capacity to manage forests.

### II. National Conservation Strategy (1992)[5]

The National Conservation Strategy (NCS) seeks to approach the entire set of economic concerns through the sustainable development framework. The document is not limited to forestry. In fact, it is considered the landmark document on incorporating environmental concerns into all national policies. Recommendations of the NCS remain extremely relevant to government policy making even today.

### III. Sarhad Provincial Conservation Strategy (1996)[6]

The Sarhad Provincial Conservation Strategy was a direct result of consultations that followed the NCS. The SPCS is a NWFP specific document, which like the NCS, seeks to bring sustainable development into mainstream provincial policy formulation and implementation. The SPCS provided the impetus for much of the reform options presented for the forest sector in the past decade.

### IV. Balochistan Conservation Strategy (2000)[7]

The Balochistan Conservation Strategy is the counterpart of the SPCS in Balochistan. It highlights the province's priorities for conservation through the sustainable development ambit, mentioning forests as one of the focus areas.

### V. Provincial Forest Resource Inventory[8]

The NWFP government for the first time sought to compile real time information on the state of NWFP forests in the early-1990s. The PFRI was conducted utilizing GIS imagery and data collected from across the province. The PFRI proved to be a major revelation in the sense that it contradicted all earlier survey findings, which had painted a much rosier picture about the state of forests than the Inventory. It was the result of the PFRI that signaled the urgency of implementing a reform process, lest all forests be lost over the short to medium term.

### VI. Hazara Community Participation Rules (1996-97)[9]

The Hazara Community Participation Rules were enacted for protected forests in 1996 and extended to reserved forests in 1997. The Participation rules were the first upgradation of the 1936 Hazara Forest Act. The Rules were designed to bring community participation in the management of protected and reserved forests through the joint forest management approach.

5 *The Pakistan National Conservation Strategy*, Government of Pakistan, 1992.
6 *Sarhad Provincial Conservation Strategy 1996*, Government of NWFP, 1996
7 *Balochistan Conservation Strategy 2000*, Government of Balochistan, 2000.
8 "Provincial Forest Resource Inventory (PFRI) NWFP, Pakistan (draft final report)", Department of Forestry, Fisheries and Wildlife, Government of NWFP, 2000.
9 Hamid, 2002.

### VII. The NWFP Forestry Commission Act (1999)[10]

As part of the reform process, in 1999, the NWFP Forestry Commission Act was designed to establish an independent commission to oversee the work of the provincial FD, as well as to ensure proper implementation of various reforms suggested in the reform process. A Forestry Roundtable was also to be established under the Act in order to ensure stakeholder participation.

### VIII. NWFP Forest Policy (1999)[11]

The Provincial Forest Policy detailed, in line with the FSMP, various objectives to ensure that the revised forestry management vision is channeled through an official policy. The policy by and large reiterates all objectives already laid down in previous policy documents.

### IX. Punjab Forest Policy Statement (1999)[12]

In 1999, the Punjab Forest Policy Statement was prepared which outlined the priorities of the province's forest policy. The stipulations included in the statement and its general direction resembled the priorities of the NWFP reform process.

### X. Draft National Forest Policy (2001)[13]

A draft National Forest Policy was floated in line with the forest reforms spearheaded by initiatives in NWFP. The Policy outlines the broad set of objectives, casting the net wider than simply forest preservation. It highlights poverty alleviation as a major objective and details an action plan for sustainable management of all types of forests. It is an open-ended document, which needs further channeling to be readily implementable. A final national forest policy has still not been promulgated.

### XI. NWFP Forest Ordinance (2002)[14]

The entire set of policy documents and initiatives under the NWFP reform process needed a legal basis for their effective implementation. For this purpose, the NWFP Forest Ordinance 2002 was promulgated. Initially a draft ordinance[15] was floated in 2001 which was later revised and promulgated in its current form. The Ordinance replaced the Forest Act 1927 and the Hazara Forest Act 1936. In 2003-04 detailed forest management "rules" were established under the Ordinance which provided for a specific regulatory framework to implement the reform process.

Other significant policy interventions undertaken as part of the reform process include:

- Pakistan Biodiversity Action Plan 1999
- Ten-year national perspective plan 2001-2011
- Sindh Forest Sector Management Plan
- Azad Jammu and Kashmir Forest Sector Management Plan
- Punjab Forest Sector Management Plan

10 *The NWFP Forestry Commission Act 1998*, Government of NWFP, 1999.
11 *NWFP Forest Policy 1999*, Government of NWFP, 1999.
12 *Punjab Forest Policy Statement 1999*, Government of Punjab, 1999.
13 *Draft National Policy 2001,* Government of Pakistan, 2001.
14 *NWFP Forest Ordinance*, Government of NWFP, 2002.
15 *NWFP Forest Ordinance* 2001 (draft), Government of NWFP, 2001.

## *5.2 Salient features of the interventions*

The forestry reform process marked the first major initiative designed to overhaul forest management in the country. The process promised much in terms of sustainable use of natural resources. Indeed, almost all of the reform documents mentioned stress changes, which have the potential of nudging forestry sector management in the right direction. A positive change is marked by the fact that the two guiding principles of the reform process are the need for active community participation in planning and implementation of the reforms, and the need to involve the private sector in management of forest resources. Virtually every document released in the reform period stressed upon these two elements.

The NCS emphasizes the need for peoples' participation across every sector relevant to environmental concerns. It specifically underscores the need for FDs to involve communities as principal stakeholders ("National Conservation Strategy", 1992). The SPCS was a landmark development in the sense that its formulation was based on extensive stakeholder consultations following the NCS ("Sarhad Provincial", 1996). The FSMP also echoes this sentiment pointing to the need for stakeholder involvement in policy formulation, as well as management of forest rangelands and watersheds. It also highlights the potential role for the private sector in management of forest resources (Forestry Master Plan, 1992). The Draft National Forest Policy, which in its final form is supposed to provide broad direction to the provincial policies stresses upon community participation through devolution of authority ("Draft National Forest", 2001). The Punjab Forest Policy Statement singles out the potential role for communities in forest and watershed management (Punjab Policy Statement, 1999). The NWFP Forest Policy also contains stipulations to this effect. The Forest Ordinance and the management rules provide for community participation and private sector involvement (NWFP Ordinance, 2002; "Forest Rules", 2002).

The emphasis on these two elements suggests a welcome shift from the traditional command and control approach to one of co-management. As Khan et al. (Khan et al., "Quest for Sustainable", forthcoming) point out, ultimately a public service of a high quality needs to be delivered predictably and efficiently. Guided by market forces, involvement of the private sector ensures such delivery while generating profits for the private sector and revenues for the government. The importance of community participation has also been stressed time and again, as has already been mentioned in the overview of existing literature.

## *5.3 Policy versus reality: The disconnect*

### 5.3.1 Divergence between policy vision and implementation framework

As is clear from the above, the forest sector reform process, at least in principal, marks a significant change in the broad vision and priorities for the forest sector. All policy reform documents provide for exemplary guidelines at the macro level. They signal towards a realization among policymakers of the need to move away from purely command and control structures to enhance the effectiveness of forest management. Notwithstanding, there are still serious bottlenecks as far as micro level guidelines for policy implementation are concerned. The specific stipulations and plans for action that would be needed to institute the vision on ground are either missing or continue to be guided by traditional mindsets.

Interestingly, in the forestry reform process, which was designed with the specific purpose of moving away from the stringent top-down punishment oriented command and control structure of the traditional forestry laws, much of the thrust (implementation level) of the old legal ordinances has been retained. The argument is that all stakeholders are familiar with the traditional system, which has by and large managed to fulfill its objectives of protecting *public* forests (Hamid, 2002). It would, therefore, be unwise to completely overhaul the system and expect an entirely new initiative to be understood and adopted. The fact that the very rationale of the process was to dispense with the colonial mindsets would have suggested a substantial move away from the old laws. Maintaining these for the most part implies sufficient loopholes available for vested interests to force the management process to resemble the traditional system. In essence, what the reform process has ended up doing is providing well-meaning designs on the macro level without sufficient attention to the implementation tools for these to be achieved.

On the one hand, in line with reform priorities, a number of community initiatives have been undertaken to provide resource dependant communities with a voice in forest management. Example of these are the formation of forestry commissions and forestry roundtables in line with the Forestry Commission Act 1999 and a number of joint forest management committees (JFMCs). However, in reality, even these community organizations, for the most part, have been co-opted by the influential and wealthy members of the villages who already have vested interests in maintaining the traditional system of functioning (Suleri, 2002). Moreover, concepts such as social forestry or public private partnerships require a set of conditions on ground to make them successful. If these are not provided, mere priority listing does not make a difference. Unfortunately, the Pakistani case reflects a stark absence of such conducive conditions. Given that the co-management plan remains open ended at the macro-policy level and the specific initiatives and conditions to implement these are largely lacking, on the whole, the reform process has had minimal impact on the ground.

Moreover, while the co-management approach has been adopted, much of the perverse incentive structure present in the traditional management system still remains unaltered. The reform process has not been able to address rising timber prices, low salary structures of public officials, and the dated penalties, fines, and incentive payment levels. In a study based in Swat, Pakistan, Khan et al. (Khan at al., "Institutions," forthcoming) find that a number of communities consider the forest penalties as "not important" at all. Moreover, lack of implementation of penalties takes away any importance. In the few cases that they are implemented, communities have reported enforcement to be biased against them and in favor of the politically connected timber mafia.

Another major contradiction is apparent from the fact that despite stressing on stakeholder participation and ensuring this in the formulation of a few strategies, other initiatives were formulated following an extremely opaque, closed-door approach. The 2002 Forest Ordinance is a case in point. The positive aspects of the Ordinance have been highlighted above. Interestingly, the very same document provides for additional discretionary powers to the Forest Department officials for policing, and enforcement and revocation powers for some major community based initiatives envisioned under the reform process (Suleri, 2002).

These and other such undemocratic stipulations in the Ordinance led the civil society stakeholders, who had initially supported the Ordinance, to reject it.[16]

### 5.3.2 Institutional bottlenecks

By its very nature, the reform process is an ambitious design that requires an overhaul of the institutional and legal framework. It has experienced major institutional hurdles largely due to lack of implementation capacity, and more importantly due to an obvious lack of political will to carry the reform agenda to the ground. Perhaps the biggest impediment in implementing the reform process in letter and spirit is the intractable stance of the FD, which is unwilling to delegate authority and involve communities as 'full participants' in the management process. Barring a few success stories that are discussed later, the FD has maintained its heavy-handed approach granting only token status to the principal of community participation. As Hamid (2002) points out, what is actually needed is a change in the mindset of public functionaries responsible for forest management and generation of political will at the highest level to push these reforms through. Unfortunately, the lack of such will due to the omnipresent vested interests has always proved fatal in Pakistan's policy implementation. The forestry reform process has also fallen victim to this vicious political influence-mafia-community exclusion nexus.

A measure of the performance of the supposedly 'reformed' FD is provided by Khan et al., (Khan at al., "Institutions, forthcoming) in a study based in Swat, Pakistan. Communities interviewed held an extremely negative perception of the FD. Interestingly, the problem pointed to was not the nature of the government policies. From the primary data collected in the study, an extreme minority of respondents cited inconsistency in policies as an issue that contributes to the FD's negative perception. Where the communities seem to be overly concerned is the lack of community participation in decisions made by the Department. Needless to mention that with continued discrimination against communities, the goal of poverty alleviation of resource dependant communities continues to escape authorities. Lack of a genuine voice for the marginalized stakeholders despite the reforms also contributes to added resentment among resource dependant communities across the country.

Another major shortcoming of the reform agenda is that it has not been able to tackle the problem of property rights. As already discussed, a major reason for excessive forest degradation in the country is the lack of clearly defined property and resource rights and ongoing tensions between communities and the government regarding ownership of forest resources. Again, while the reform process documents lay immense importance to this aspect, improvement on this front requires an overhaul of the current institutional framework governing rights issues. Such a change has not been forthcoming. Until such rights are clearly stipulated, communities, especially those who feel aggrieved at government claims of ownership will have no incentive to utilize forest resources sustainably.

The failure of the reform process to meet expectations is clear from the fact that donor support to the process was halted in 2004 citing slow uptake and high institutional inertia (Suleri, 2002) as the major reasons. This was a major setback to the reform process as even

16 The SUNGI Development Foundation was the most important civil society actor that had initially supported the Ordinance but eventually withdrew its support for fear of use of punitive powers against communities.

aspects, which had made some progress were stalled. In a move that reinstates the command and control approach to the glee of vested interests, the NWFP FD's capacity is now being increased to 500-armed men who will be tasked to patrol NWFP forests. This is in contrast to the 3,000 men the FD itself suggests it needs to ensure proper monitoring.[17] Needless to say, this idea will allow for further collusion between the FD and the timber mafia and would potentially lead to more leakages on the plea that the monitoring capacity provided was inadequate. In any case, the latest move represents a step backwards in the reform process.

In essence, the reform process has suffered from lack of transparency and diluted emphasis on community participation. The reforms have done little to alter the heavy-handed, 'command and control' approach of forest officials. In fact, failure of the reforms to achieve their objectives despite the fact that on paper, steps have been taken in the right direction, brings another extremely important point home: to alter institutional functioning is a near-impossible task in the short to medium term. The timber mafia is politically well-connected and can successfully thwart any initiative designed to remove the existing biases in the forestry management system. Naturally, since such reforms amount to a loss of economic and political clout, efforts inevitably would be made to resist them. Also, often, the officials who set out to alter the existing institutional mechanisms eventually develop a stake in opposing the envisioned change for personal gains (Khan, et al. "Institutions", forthcoming). The forestry reform process has proved to be no exception.

Having discussed the broad direction and major strengths and weaknesses of the reform process, we now turn our attention to an analysis of specific initiatives undertaken in line with the vision of the reforms. The above dismal picture notwithstanding, a number of efforts were in fact made to institute innovative techniques for SFM.

### 5.3.3 Specific Initiatives under the Reform Process

#### *5.3.3.1 Joint Forest Management*[18]

One major development in the forest reform process was the institutionalization of joint forest management (JFM) through the NWFP Forest Policy 1999. The Forest Ordinance also lays heavy emphasis on the concept of JFM as a principal means of ensuring sustainability through community participation. According to these stipulations, JFMCs are to be introduced to develop and implement the SFM cycle, including protection, harvesting and regeneration (NWFP Ordinance, 2002). The Forest rules promulgated under the Ordinance provide further details of the criteria for selection and functioning of JFMCs.[19]

The JFMC concept was initially introduced as part of the German funded 'Siran Forest Development Project' in NWFP. Under the project JFMCs were set up with all relevant stakeholders and interest groups involved in the management and harvesting of selected state forests (Suleri, 2002). The JFMCs were formed after a thorough needs assessment of the

17 This will entail an estimated cost of 60 million PKR (Suleri, 2002).

18 Owing to the lack of literature on the functioning and impact of JFMCs in Pakistan, the discussion in this section largely draws upon personal visits to Swat, NWFP and discussions with forest sector specialists having expertise in the area.

19 For details of the guidelines, see "Forest Rules made under NWFP Forest Ordinance 2002", Government of NWFP, 2002.

entire village community. The FD and social forestry staff were part of the process from the very beginning. The project was a major success and actually provided the impetus for the modification of the 1927 Forestry Act as the Hazara Protected Forest Rules 1996 (Suleri, 2002).

Admittedly, in terms of numbers, JFMCs do provide an example of the government policy being implemented on ground. There are hundreds of JFMCs working in various parts of NWFP guzara and protected forests, most notably Malakand and Hazara.[20] However, as is the case with almost every forest sector initiative in Pakistan, an analysis of their functioning reveals a perverted adaptation of the concept. Two factors lead to this. First, despite the overall policy giving detailed guidelines on how to make JFMCs as objective and participatory as possible, the Ordinance 2002 provides excessive discretionary powers to the District Forest Officer (DFO) to institute and dissolve JFMCs:

> *"…the forest officer may enter into agreements for joint management of the forests mentioned therein, which may provide, among other matters for establishment of Joint Forest Management Committees comprising representatives of the concerned organizations and staff of the Forest Department."*
>
> *"Forest Officer may revoke any such management or agreement, as the case may be, if he is of the opinion that such revocation is in the interest of forest conservancy."*
>
> *"No revocation shall be ordered unless the concerned organization is given an opportunity to be heard, and in case of disagreement the Forest Officer shall record his reasons for revocation."* [21]

A large number of cases have actually been recorded where JFMCs have either been dissolved or the FD has resisted their establishment.[22] In fact, even the JFMCs established under the Siran Forest Development Project were abolished once donor support for the project ceased (Suleri, 2002).

Second, reflective of the overall disconnect, which has been detailed earlier, there remains a discrepancy between the spirit of JFM policies and its implementation on ground. The balance of power in the JFMCs remains highly skewed towards timber contractors and the politically influential rather than direct community stakeholders (owners and non-owners). Despite policy guidelines to the contrary, an overwhelming majority of the JFMCs have been established through a non-transparent process at the sole discretion of the DFO or the chairman of the JFMC, which in a number of JFMCs are the timber contractors themselves.

The preeminence of the timber contractors in JFMCs links the issue directly to the debate on property and resource rights. In usual practice, poor 'owners' from the community sell their

20 JFMCs were only envisioned as part of the NWFP reform process and remain confined to the province. The rest of the country has seen development of village development committees and village boards, which have a broader development mandate and do not necessarily focus on forest issues.

21 Emphasis in the quotes has been added by the author.

22 Personal interview with Riaz Ahmed, forestry sector activist, SUNGI Development Foundation.

royalty rights to timber contractors well in advance of the timber harvesting, and are thus disempowered. Consequently, they cannot afford to challenge preeminence of contractors in JFMCs. This is a major drawback as in international experience, JFMCs are seen to be working best in cases where clearly defined property and resource rights exist. Khan et al. (Khan et al., "Quest for Sustainable", forthcoming) suggest that this holds true for Pakistan as well. A case study of the Lalku Valley in Swat, NWFP presents itself as one of the few examples where ownership is relatively egalitarian and de jure and de facto rights converge (Khan, unpublished). The community predominant in the valley lives in close proximity to their land and has a vested interest in protection of forests. The JFMC established in the Valley in 2003 has been a successful endeavor. Lack of FD-community tensions owing to the clearly defined property rights allowed the FD to play a constructive role in assisting the JFMC in its functioning. Unfortunately, the Lalku case is an exception. Given that at least 40 percent of forest rich areas in the country have outstanding claims over ownership, by and large a non-conducive environment exists for JFMCs. In such a situation it is no surprise that timber contractors have managed to maintain a central role and have hijacked JFMCs to extract maximum monetary gains. In essence, the very contractors that the JFM system sought to sideline have taken charge of the JFM process and used it to their own advantage.

Perhaps the biggest operational shortcoming of the JFMC initiative is that the entire process has been driven with the aim of revenue generation in mind. In the final outcome, JFMCs simply seem to have been used to provide legitimacy to a process for which the forest harvesting cooperative societies, its predecessor responsible for commercial harvesting had been severely discredited. While conceiving the policy, formulators had the objective of having JFMCs take responsibility for the entire SFM cycle, i.e. protection, harvesting, and regeneration. As it stands today, the entire JFMC initiative can more or less be termed a 'commercial harvesting initiative'. An overwhelming majority of the JFMCs are only dealing with the harvesting phase. The encouragement to move in this direction of course came from the vested interests, the FD, owners and contractors all of whom are most concerned with revenues. Add to this the fact that the primacy of the contractors, many of whom constitute the mafia, has not disappeared. Consequently, there is an obvious lack ownership in the process for other stakeholders.

As part of the SFM cycle, the JFMCs were also supposed to ensure regeneration through plantations. A 'forest development fund' was set up to provide resources for the regeneration activity in lieu of the harvesting that would take place (NWFP Ordinance, 2002). While the fund exists, it is not fully operational and has certainly not contributed in any significant manner to the JFMC regeneration activities. Moreover, a major constraint remains the absence of recycling of resources towards the fund. While revenues are generated from harvesting, their flow back into the forest fund is not ensured. Therefore, the regeneration component remains extremely weak, while harvesting continues unabated, thus leading to an overall decline in forest cover.

Admittedly, some exceptions to the above mentioned 'harvesting focus' do exist. A number of JFMCs have sprung up with a complete management plan and have acquired sufficient resources to cover the entire SFM cycle. However, all the success stories are pilot projects, mainly run by donor support. Only a handful are instituted by the DFO under the reform process and these too are in villages where ownership and rights issues are not contended. The case of Lalku Valley is an example. Although the impetus for creation of the JFMC in

Lalku was also harvesting, it subsequently incorporated protection and regeneration as major components of its mandate. Notwithstanding these exceptions, the Ministry of Environment acknowledges that the overall performance of the JFMC initiative has been "far below the level of expectations" ("Prospects of PPP", 2002).

#### *5.3.3.2. Private Sector Participation*

As already mentioned, one pillar of the forest reform process was the involvement of the private sector in SFM. Unlike most other priorities, even the policy on the issue of private sector involvement is contradictory. The NWFP Forest Policy 1999 and the Ordinance 2002 prioritize private sector involvement in the forest sector. The Forest Policy stresses upon the need to encourage the private sector to invest in "raising, managing and sustainably utilizing forest resources". The Ordinance specifically mentions the power to lease out forestland. It allows for this to take place in reserved and protected forests as well as wastelands for plantations, agro-forestry, social forestry, breeding of wildlife and conservation of biodiversity (NWFP Ordinance, 2002). Quite to the contrary, the Ministry of Environment in its guidelines on public-private partnerships in Pakistan provides no provision for leasing out, sharing, or selling of state land to the private sector ("Prospects of PPP", 2002).

Moreover, as in the case of JFMC policy guidelines, the Ordinance contains stipulations, which provide discretionary powers to the FD, a fact that by itself is a deterrent to private sector investment. The FD is given powers to cancel or modify any leases if such an action "is in the interest of forest conservancy" (NWFP Ordinance, 2002). Given such an investment averse outlook coupled with the inherent contradiction in provincial policy versus Ministry of Environment guidelines, it is no surprise that private sector involvement in the forest sector has not taken off.

Theoretically, a major entry point for the private sector in forestry is through public-private partnerships. PPPs are considered valuable as they can assist in conservation efforts and help provide sustainable livelihoods to resource dependent communities (Khan et al., "Quest for Sustainable", forthcoming.). Good governance, accountability and transparency are all crucial to the successful creation and smooth functioning of PPPs ("Governance in Public Private Partnerships", 2004). Furthermore, since PPPs are often unusually complex legal and economic arrangements that generate difficult accounting decisions, strong legal and regulatory frameworks must be in place ("Governance in Public Private Partnerships", 2004; Creuzer and Kjellson, 2006). These frameworks relate to well-defined, enforceable laws pertaining to property rights, contracts and liabilities as well as more specific and detailed descriptions on PPPs themselves ("Governance in Public Private Partnerships", 2004; Creuzer and Kjellson, 2006).

Pakistan lacks most of the above-mentioned pre-requisites. The country's institutional framework is marked by a lack of transparency. All significant negotiations and contracts of such a nature are finalized behind closed doors. Lack of accountability in the forest sector is also a major constraint. Consequently, while Pakistan's forest policies implicitly support PPPs by discussing incentives for private sector involvement as a priority, they do not specifically elaborate on the options envisioned for PPPs. Currently, there are only limited guidelines available that specify a set of formal and informal legal stipulations for private

firms as the sole thrust of the PPP initiative.[23] Beyond covering definitional issues and giving an extremely vague direction, the document does little to promote this aspect of SFM.

The above factors have combined to ensure that PPPs have not experienced much success. The only examples of PPPs one can cite are private sector initiatives mainly falling under the rubric of 'corporate social responsibility' rather than SFM. Even these initiatives are limited in scope. Examples include the Pakistan Tobacco Company's (PTC) program to provide saplings to tree farmers, Pakistan Petroleum Limited's tree plantations along the Ravi River in the Lahore-Shahdara forests, and The National Fertilizer Company's initiative to regenerate and protect 15 acres of forestland in Murree. Shell is under contract with the Environment Ministry to promote alternate energy uses among communities in Ayubia's (NWFP) coniferous forests but have only conducted a small pilot project thus far (Khan et al., "Quest for Sustainable", forthcoming; Hasan, undated; "Participatory approaches", 1998; Suleri, 2002"). These are all initiatives undertaken by private sector corporations in urban centers in a bid to catch the public eye. While commendable, they do not contribute to institutionalization of PPPs in SFM. Personal discussions with the involved firms rightly point to the lack of any government direction and incentives for broad based private sector involvement. One important point to note is that these small scale initiatives have been undertaken with only participation 'in principal' from the public sector. Before using these initiatives as models for large-scale interventions, one must question if meaningful involvement with active participation from the public sector would induce all the negativities attached to public sector functioning and lead to the initiatives' failure, as has been the case with most other efforts of the sort.

#### *5.3.3.3. Provision for alterative energy sources*

Fuel wood collection is one of the two major factors contributing to excessive forest degradation. At least 60 percent of the urban population and 90 percent of the rural population use fuel wood as the principal source for cooking and heating (Fakhar and Chaudry, 2001). Data from the Northern Areas reveals that up to 86 percent of the households use biomass as fuel. On average, each household burns 5.5 tons of fuel wood in winter season (6 months in the north) (Fakhar and Chaudry, 2001). For 10,000 households this brings the amount of fuel wood used in winters to 55,000 tons.

The government has highlighted excessive use of fuel wood as a major concern in its policy documents. The 2001 draft National Forest Policy contains recommendations for providing cost-effective substitutes to firewood. It also highlights the need to give high priority to research on viable alternatives (Draft National Policy, 2001). Other reform documents also mention the need to make alternate energy sources available. Notwithstanding, national level energy policies do not encourage a move in this direction, exposing the disconnect between inter-departmental priorities.

On the ground, all one has witnessed in this regard is a few pilot projects. Even these have failed due to the inability of the poor communities to afford the options. One example is the

23 The only public document available is a three-page guideline issued by the Ministry of Environment, Local Government and Rural Development. See "Prospects of Public-Private Partnership in the Development of the Forestry Sector: Guiding principles and General Strategy," Ministry of Environment, Local Government and Rural Development, 2002.

'Bhurban Watershed Project', which provided for kerosene oil stoves (Ahmed and Mahmood, 1998). However, the communities could not afford kerosene. Some emphasis has been laid on extending natural gas supply to remote forest rich areas (Ahmed and Mahmood, 1998). Again, concerns about affordability of such provisions remain. The end result is that majority of the population continues to depend on fuel wood which is largely extracted in an unsustainable manner.

Moreover, it must be highlighted that a policy to provide alternate energy sources has the advantage of sidetracking from a large portion of the institutional framework, which as explained, renders well meaning initiatives futile. Such a policy thus has a greater probability of attaining its objectives. However, the excessive cost associated with such projects and the extremely long time frame required to reach a substantial proportion of forest dependant communities across the country makes such a policy relevant only in the long run. This is especially true for options still being researched or mega projects requiring extensive infrastructure development (e.g. solar energy, provision for gas supply). Moreover, there are few existing energy alternatives that could be employed on a long-term basis without permanent donor support.

An innovative approach to reducing use of forest resources as fuel wood and even construction has been used by the Aga Khan Planning and Building Services (AKPBS). Through the Building and Construction Improvement Program (BACIP), new construction techniques have been used which decrease the need for timber use in construction at the same time reducing heating requirements. Again, while such an initiative could be expanded, sustainability without constant donor support is a major constraint. The program is discussed briefly in Box 2.

Box 2: Aga Khan Building and Construction Improvement Program (AKPBS)

"Under the AKPBS Building and Construction Improvement Program (BACIP), which is a research and extension initiative, program managers have developed, tested and applied over 40 different interventions related to improving energy efficient housing and improvement in living conditions. The program directly impacts energy conservation through energy efficiency. The project is based in the Northern Areas and Chitral. BACIP's products include: energy efficient low-cost housing insulation, thermal efficient house construction techniques, solar products, bow string and composite beams for reducing timber use for roof constructions, double glazed windows, roof hatch window, water warming facility, and HDGI wire wall reinforcement (earthquake resistant) as direct replacement for timber wall reinforcement, among other features.

Since 1997, 12,500 BACIP products have been installed in 5,000 households across 100 villages. BACIP's products that are properly implemented have shown to reduce, on average, biomass consumption by 60 percent (3.3 tons per month) at the domestic household level ("BACIP impact assessment study", 2001-2002).

Total BACIP investment from all donors over the last 7 years has amounted to approximately USD 1.5 million. On the other hand, environmental and economic savings from interventions are estimated to be over USD 7.5 million. Of this, approximately USD 6.5 million comes from a lessened demand on natural resources to meet daily heating, cooking and construction needs."

Source: Fakhar and Chaudry, 2001

### 5.3.3. Ban of commercial exploitation of forests

In 1993, following the devastating floods in the northern part of the country in 1992, the government introduced a complete ban on commercial exploitation of natural forests in order to provide time for forest managers to correct causes for deforestation and adopt a regeneration strategy. The ban, which was initially implemented for two years, lasted much longer. It was eventually relaxed in 2001 (Khan et al., "Reforming Forest Management", 2001). While the ban was supposed to ensure preservation of forests against commercial exploitation and thus decrease pressure on the already degraded resources, at the same time devising a plan for regeneration, in retrospect, its imposition proved to be counterproductive.

The ban adversely impacted forest owners who depended on income from commercial timber proceeds for their livelihood. This coupled with the extremely weak management of forest resources prompted interest groups to conduct illegal felling and smuggle timber to the markets. Throughout the ban period, owners colluded with the timber contractors, resulting in a substantial amount of timber being harvested illegally. Moreover, due to the ban, timber prices skyrocketed, thus increasing the profit margins from illegal harvesting. Interestingly however, given that the owners were forced to sell timber in the black market, they did not manage to capture market prices. It was the mafia (smugglers) that ended up receiving bulk of the timber profits (Khan et al., "Reforming Forest Management", 2001). Also, since marking for legal cutting ceased, communities did not receive royalties from timber proceeds, which further removed any incentive for forest protection. The government also lost billions of rupees worth of revenue from commercial sales of timber products.

The timber ban had a cross-border impact as well. It led to extensive forest degradation in neighboring Afghanistan. As timber supply from within Pakistan reduced and prices saw an upward revision, the incentive to smuggle timber across the porous Pakistan-Afghanistan border increased substantially (Khan et al., "Reforming Forest Management", 2001). In light of the above, a 2001 report by the NWFP FD strongly urged the government not to contemplate a long-term ban as a viable control mechanism for the management of forests in the future (Khan et al., "Reforming Forest Management", 2001).

## 6. Stand alone Pilot Projects with Successful Community Participation

It is clear from the above discussion that hardly any management intervention in the forestry sector has produced desired results. However, one must point to the relatively small number of successful community based pilot projects. These projects aimed to achieve much of the principles outlined in the reform process. As a matter of fact, the community and private sector oriented focus of the reform process in part is a result of the successes of some of these pilot projects that were initiated before or during the early phase of the reform process. One commonality among all these projects is that they depended solely on donor support. Therefore, technically they are independent of the government's reform process and are thus being discussed separately.

It is useful to briefly mention some of the major projects. The Kalam Integrated Development Project (KIDP) was a Swiss-funded program, which ended in 1998 (Suleri, 2002). The Program sought to improve the socioeconomic condition of the communities by "participation in forestry, agriculture and village development…". The project undertook

afforestation activities in protected forests. The KIDP's major contribution was to build community-based organizations (CBOs) that prepared communities for collective action. The establishment of community check posts to curtail illegal timber smuggling is a legacy of the project. Such check posts now exist in a number of villages across the country.

Another project of note is the Malakand /Dir Social Forestry Project, which was a Dutch-funded initiative that ended in 1997 (Suleri, 2002). The project sought to establish a village land-use planning process through active community participation. It was the first major initiative that exhibited the possibility of introducing social forestry into forest policy. A number of watershed planning and management projects have been undertaken as well. One such Balochistan based project implemented a participatory approach to rehabilitate degraded watersheds in northern Balochistan (Ahmed and Mahmood, 1998). A number of village organizations and local institutions were formed as part of this project. The idea was to allow communities to identify priorities, develop their agenda, and set up their own management institutions. The Sindh province has also initiated a major program, the 'Sindh Forestry Sector Development Project' in order to tackle shortage of fuel wood and timber and ensure added afforestation (Ahmed and Mahmood, 1998). The provincial FD has taken the lead in the project. The project has included social forestry as one of its major interventions and is supporting community forestry, albeit by using the top-down targeting approach. Moreover, the project has not provisioned for the establishment of village organizations, though farmer groups are envisioned. The project also seeks to build capacity of both the FD, as well as the communities involved. Finally, the USAID funded Forestry Planning and Development Project is an initiative that seeks to enhance the capacity of public functionaries to design and implement policies to increase timber and fuelwood supply (Ahmed and Mahmood, 1998). The project was involved in capacity building through training. It also ensured public participation in resource management. The project can be credited for raising awareness about farm forestry within the FDs. Essential ingredients of the landmark Siran Forest Development Project in introducing JFM and various PPP initiatives have already been discussed.

The above are but a few examples of successful initiatives that point to the potential for successes in innovative approaches to SFM. Perhaps the most valuable commonality in all these projects was extensive community participation and involvement of FD officials under a common umbrella. The latter ensured that public functionaries saw empirical demonstration of the new approaches as well as managed to build preliminary capacity. However, given the outright reliance on donor support, these initiatives have remained localized pilot projects with no real prospects of being mainstreamed.

Admittedly, the forest reform process did incorporate some of the positive aspects in these projects as part of the policy documents. The stress on community participation in the reform documents can be attributed to lessons from some of these projects. Similarly, it was as a result of these projects that the FDs suggested, at least in principal, options such as social and farm forestry and watershed management. The uptake from the government in terms of policy implementation is another story. Interestingly, the few implementation related changes that were prompted by the success of these initiatives were limited to reshuffling of public functionary structures. New units were established within provincial FDs to deal with the proposed techniques. A Social Forestry Wing (SFW) was set up in the NWFP FD and the Department decided to take up the Siran Forestry Development Project (SFDP) once donor

assistance to the project had ended. However, the SFW was abolished soon thereafter (Suleri, 2002). A watershed planning and management unit was also established in provincial FDs (Ahmed and Mahmood, 1998). However, no provincial FD had the human capacity and technical expertise to ensure proper implementation of these policies. This is one of the reasons that uptake from these success stories has remained limited to policy documents.

Ahmed and Mahmood (1998) point to the major constraints in mainstreaming the lessons from these projects. The list of hurdles is identical to those we have highlighted as reasons for the failures of the reform process in the preceding discussion. Another interesting point Ahmed and Mahmood (1998) raise is that the success of pilot projects which had negligible government role, and the failure (lack of effective implementation) of those where FDs were actively involved suggests that such initiatives may work better informally, without government involvement. Although attractive, this suggestion is unworkable in the long run. Public participation is essential in order to give long-term direction to any national policy and to maintain a rule-based structure with legal provisions applicable across the country. Donor support without government ownership is unsustainable over the long run.

## 7. The Forestry Reform Process: A Summary

The above discussion about the forestry reform process can be summed up by highlighting two major issues. To begin with, one cannot but complement policy makers for producing exemplary macro-level guidelines to ensure SFM. On the macro level, policy documents present a community oriented and private sector friendly approach. The failure of the reform agenda lies in the disconnect between the policy vision and the tools provided for implementation of the well-meaning policy direction. A deeper look into the reform process suggests that much of the implementation tools remain entrenched in the traditional command and control mindset and have thus not allowed for any major positive developments to take place in reality. Even the detailed action plans for innovative community based approaches provide for discretionary powers, defying the entire premise of participatory forestry. In the final outcome, approaches such as JFM and PPP have not produced desired results. Moreover, options such as providing alternate energy sources to poor communities have ended up being cost prohibitive. Other initiatives like the ban on commercial exploitation have proved to be counterproductive. Majority of the bottlenecks pointed out in the discussion of the reform process are empirically visible in a case study of the Utror village in Swat, NWFP. The case study is included in Annex 4.

Notwithstanding the above, Pakistan's forestry sector does contain a number of success stories in the form of donor supported pilot projects. Unfortunately, there seems to be an inverse link between public sector involvement and project success, a fact that has led many to shed pessimism on the possibility of mainstreaming lessons from such pilot initiatives. In essence, despite well-meaning intentions, the objective of overhauling the institutional and legal framework governing the forest sector has persistently eluded Pakistani policymakers. One cannot but help suggest a need to explore alternatives that could be workable despite the failings of the management system.

## 8. Community Pressure from Below: The Case of the Sarhad Awami Forestry Ittehad (SAFI)

Although not a way to sidetrack the management system, a peoples' movement seeks to alter any status quo situation by building pressure from below. In the context of the forest sector, such a movement could at the very least induce some checks and balances on the excesses committed by the vested interests, be they contractors, politicians, or the FD. Such initiatives hold great importance especially in a context where all management initiatives are necessarily top-down. In the face of persistent failure to reform the top-down management system, the only other option is to attempt to build enough pressure through a bottom-up approach so as to institute meaningful checks on the excesses committed by public functionaries and those they collude with.

Pakistan's forest sector has recently witnessed community initiatives completely independent of any public role. The impetus for such movements came from the continued lack of willingness on the part of the public functionaries to provide meaningful participation to relevant stakeholders.

The Sarhad Awami Forestry Ittehad (SAFI) is the first formal peoples' movement in the forest sector (Khan et al., "Anatomy", 2006). Formalized in 2000 and active in parts of the NWFP province, it was primarily designed to mobilize community resistance against the excesses committed by the large forest owners, the timber mafia, and the FD (Khan et al., "Anatomy", 2006). SAFI has managed a number of successes within its relatively short period of existence and made progress in terms of policy advocacy, organized resistance, and management interventions. Through its efforts, SAFI has managed to create awareness about the forestry reform process. It also conducted organized resistance in Hazara and Dir-Kohistan in support for the cause of neglected resource dependent communities. Perhaps its biggest success lies in the fact that it has managed to prove, through its various programs, that *meaningful* community participation can actually enhance prospects of SFM (Khan et al., "Anatomy", 2006).

Despite some success, SAFI continues to face major hurdles in sustaining such an effort without compromising on its principled stances. SAFI has been largely unsuccessful in convincing the FD of its desire to find win-win solutions (for the FD and communities) with regard to SFM. By its very nature, SAFI is critical of the sort of excesses committed in the forest sector, a fact that the influential contractors and FD do not welcome. Moreover, like all such initiatives, SAFI is not financially self-reliant and thus depends on permanent donor support for its existence.[24] This again induces the sustainability problem with regard to mainstreaming such initiatives. Given SAFI's short existence, it is too early to suggest whether peoples' movements in the forest sector can influence functioning of the forest sector. Unfortunately, many of the problems faced by other successful pilot projects also seem to be sticking points for SAFI's future. This would suggest that such movements may also end up being limited to pilot initiatives.

24 SAFI is supported by the SUNGI Development Foundation, which is having difficulties in making SAFI self-reliant, given its virtually non-existent income sources.

## 9. A Potentially Workable Market Based Option: Timber Import Tariff Rationalization

It must be pointed out at the outset that robust and efficiently functioning institutions are a necessity for any nation's development. Abstracting from the inefficiencies in any management regime is only likely to provide temporary relief. However, given the state of forest management in Pakistan, it is contended that over the short run, the only workable solution would be one that manages to sidetrack, to some extent, the bottlenecks in the management system. One way could be to explore market based options.

While a number of market based approaches could be considered to arrest forest degradation, we only discuss one approach dealing with import duties rationalization, and that too with a specific objective of reducing domestic timber's use for commercial purposes in mind. The market-based option introduced must be cost effective, readily implementable, and one that could demonstrate economic, conservation and livelihood benefits. It is contended that one such option could be rationalization of timber imports, which could ensure timber supply primarily from foreign sources.

The government is cognizant of the option to rationalize timber import tariffs and has initiated steps to this effect in recent years. However, much of the reductions have taken place to conform to the overall downward trend in tariffs driven by multilateral reduction commitments. Moreover, the reduction in duties has been narrowly focused on timber tariffs alone, while the wider duty structured has been largely ignored, a fact that is manifested by the absence of any consistent increase in timber imports. Even though tariff imports on some categories of timber imports have been completely eliminated, the cumulative duties remain fairly high (see Annex 5).

The October 2005 earthquake that devastated northern Pakistan has helped to refocus attention of relevant public functionaries on this option. According to Forest Development Corporation (FDC) estimates, the demand for timber for reconstruction in the aftermath of the earthquake is 13 times higher than the cumulative allowable annual cut.[25] The FDC has strongly urged the Ministry of Environment to consider recommending immediate imports of at least 0.5 million cft. of Keruing, Red Meranti (hard wood species) and Red Wood (soft wood specie) timber in order to ease the relentless pressure on forests in the wake of the earthquake.[26] While the government is sure to take this suggestion seriously, such import would likely take place as a one-off activity under the present tariff structure or as a federal exemption. The need is to conduct a thorough feasibility of permanent duty rationalization and suggest the benefits of such a move with regard to economic, conservation, and social gains.

Such an analysis would not only have to focus on import tariffs but also on the transaction costs and the institutional underpinnings impacting timber demand. Broadly, transaction costs have three aspects: i) procedural costs; ii) transport related costs; and iii) rent seeking. Examples of transaction costs include, bribes, middlemen' fees, agents' fees, loading/unloading (handling) costs, inter-provincial taxes, withholding taxes, and the like. Since some of these

25 Forest Development Corporation, classified document.
26 Ibid.

costs vary by market, there is a need to analyze the price competitiveness of imported timber in each major retail market, at various tariff rates. The institutional analysis would focus on issues that perpetuate demand for domestic timber and those that deter increased substitution with imported timber.

Finally, it must be noted that the precise impact of a market rationalization drive would depend on the form of degradation it is looking to tackle. The table below suggests that in some cases, lower log prices of domestic timber, which could be a consequence of added competition from imported substitutes, could lead to higher degradation levels.

Table 1: Impact of Lower Log Prices by Type of Degradation

| Problem | Impact of Lower Log Prices |
|---|---|
| Excessively rapid depletion of mature timber stocks | Decreases problem |
| Encroachment by loggers into protected areas | Decreases problem |
| Conversion of forests to other land uses (e.g., agriculture) | Increases problem |
| Insufficient investment in forest management (e.g., regeneration, thinning) | Increases problem |
| Logging damage | Increases problem |
| Illegal cutting of fuel wood in timber production forests | Increases problem |
| Conversion of native forests to plantations of exotic species | Ambiguous; increases problem if prices of native timber fall more than prices of exotic species |

Source: Table prepared by Dr. Jeff Vincent, Resource person, SANDEE

As is clear from the above, the forms of degradation most pertinent to Pakistan may well be impacted negatively if domestic log prices fall due to increased competition. Therefore, any market-based approach would have to determine whether a major reduction in domestic prices is likely, and if so, mitigation measures will also have to be looked into.

Notwithstanding, the bottom line is that unless a complete institutional overhaul is achieved, there is little hope of arresting degradation patterns while working within the existing forest management regime. A market based alternative seems to be the only viable solution, although as stated it will have to be studied in a holistic manner before one could determine the most suitable form of employing such a market based instrument.[27]

27 The author plans to undertake this task in phase II of this research project.

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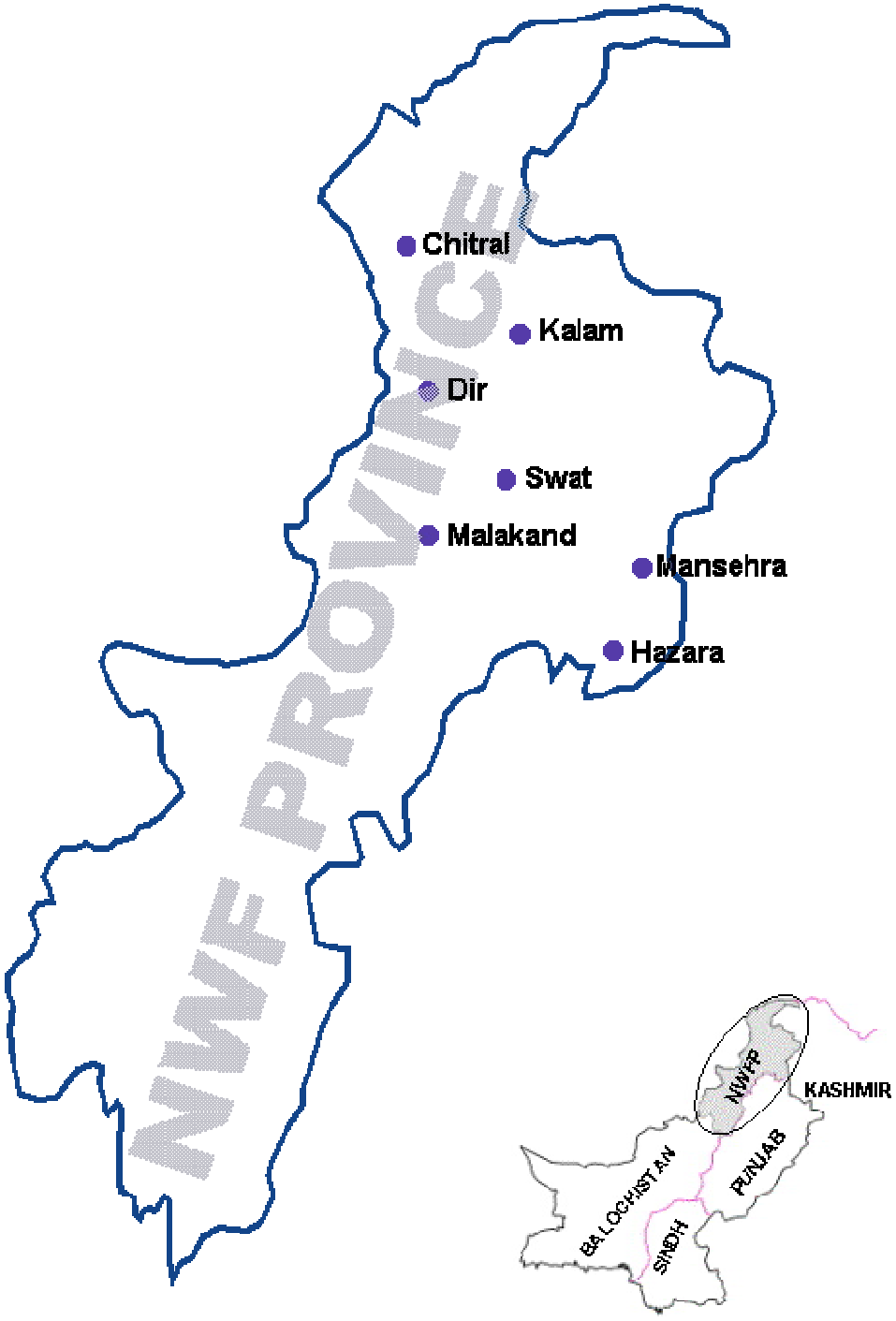
**Annex 1**

**Map of NWFP**



**Annex 2**

## De jure and de facto ownership positions: Exposing the disconnect

Reserved Forests

| De Jure Position | De Facto Position |
|---|---|
| Reserved Forests are public forests, free of all rights except those admitted in the settlement process which must precede the declaration of an area as Reserved Forest. Such rights are limited. This forest land is state owned. | All Reserved Forests are used for unrestricted grazing, except small areas which might have been fenced and/or guarded by special watches for regenerating trees; there is no involvement of the people living in or around the forest with forest departments. Illicit removal of trees and encroachment of forest land is quite common. |

Protected Forests

| De Jure Position | De Facto Position |
|---|---|
| *Prohibitions.* The protected forests are open to all users by people residing around them, except those uses which may have been prohibited by special government notifications. Such prohibition usually applies to harvesting of trees (except under management plans), setting fire to the forests, and cultivation in the forest. The land on which these forests exist is state land. | The forests are not demarcated on the ground, and the local people generally resist the process of demarcation and official settlement of rights. This commonly results in encroachment for agriculture. Illicit felling of timber is also quite common. |
| *Share of revenue*. People having customary rights in the Protected Forests are entitled to 60 percent share in net sale proceeds of timber in Malakand Civil Division and 80 percent share in Hazara Civil Division from areas which are harvested according to the management plan under the supervision of the Forest Department. Such payments are made by the Forest Department to the revenue authorities, who have detailed records of the heads of communities entitled to the payments and are conversant with the system of distributing the amounts among the various households. | Some local communities claim ownership of protected forests. In some cases, the government has agreed to pay 60-80 percent of the proceeds from the sale of timber to locals as royalty, signifying government acknowledgement of such ownership. The distribution of the proceeds from commercial sale of timber is generally fair but very time consuming. Local people frequently cultivate any large opening which may be made in the forest canopy as a result of timber harvesting. |
| *Domestic use:* Under its rule-making powers, the Forest Department prescribes a certain quantity of timber to be issued to right holders for their domestic use, but not for sale, following a lengthy procedure of departmental assessment of need and actual utilization.<br><br>*Grazing:* People owning cultivated lands in villages with customary rights in a particular forest can graze their livestock in the forest. People who do not own such land but reside in these villages are also allowed the privilege of grazing in the forests. People not belonging to such villages must obtain the permission of the right holders (on payment) before they can graze their livestock in such areas. | There are no arrangements for meeting the domestic needs of the non-right holders. So they frequently either buy timber issued to the right holders for their domestic needs (which is illegal) or obtain it themselves by illicit means. The right holders complain about low quotas prescribed by the forest department for meeting their domestic needs. |

Guzara Forests

| De jure position | De facto position |
|---|---|
| *Dry wood* may be used without restriction for meeting domestic needs by the owners and right holders and also by non-right holders residing in the village so long as the owners and right holders do not raise any objection to this practice. | The management and use regulations concerning *guzara* forests are generally carried out according to the de jure position. However, beside *Guzara* owners and right holders, resident non-right holders have traditionally been collecting firewood from *guzara* forest. |
| *Green trees* may only be cut by the owners and right holders for domestic purposes with the permission of the Conservator of Forests, in accordance with prescribed rules. Non-right holders are not allowed to cut green trees. *Guzara* Forests which are dense enough to be capable of sustaining timber harvesting are harvested in accordance with management plans prepared by the Forest Department. The owners of these forests are entitled to 80 percent share in the sale proceeds and the government retains 20 percent as departmental charges. | Illicit felling in *guzara* forest is quite common. |
| *Torch wood:* No person is allowed to lop, debark or remove torch wood from coniferous trees. | All these practices are common. |
| *Medicinal plants* collection and removal is prohibited except as authorized sales. 80 percent of the sale proceeds go to the owners and 20 percent to the Forest Department.<br><br>*Grazing*: Beside owners, right holders as well as resident non-right holders may graze their livestock in the *Guzara* Forests. Non-resident, non-right holders must obtain permission to graze from *Guzara* owners, on payment of the agreed amount. | The Forest Department cannot rigorously enforce these legal provisions without undue harassment.<br><br>Grazing pressures adversely affect tree regeneration and the hydrological cycle. |

Communal and Private Forests

| De Jure Position | De Facto Position |
|---|---|
| According to local tradition, only the owners of cultivated land have the right to any income that might accrue from sale of timbers from the adjacent mountains.<br>All people resident in a village, whether land owners or landless, may graze their livestock and collect firewood from communal forest land belonging to the village. No outsiders are allowed these privileges except with the permission of the village elders, on payment of an agreed sum. | Large land owners in the mountains have generally moved to cities or towns, with the result that communal and private forest lands are now being used for grazing and collection of firewood by small land owners and the landless. Yet large land owners, even though they no longer reside in the villages, will still consider communal forest land as their property. This introduces a major complication in the advance of social forestry: the communities residing in the mountains have little incentive to plant and/or manage timber trees because on maturity they may be claimed by the non-resident large land owners. |

Source: Quoted from Ahmed and Mahmood, 1998

**Annex 3**

## Policy and Legal Interventions in the Forest Reform Process

| Year | Policy Intervention | Principal Objectives |
|---|---|---|
| 1992 | Forestry Sector Master Plan | a. Provides the overall vision and identifies priorities for protection, management and rehabilitation |
| 1992 | National Conservation Strategy | a. Covers the whole gummite of sustainable development by incorporating these concerns into all national policies. |
| 1996 | Sarhad Provincial Conservation Strategy | a. Incorporates sustainable development in mainstream provincial policy formulation and implementation. |
| 1996-97 | Hazara Community Participation Rules | a. Seeks to inject community participation in the management of Protected and Reserved Forests of Hazara. |
| 1999 | The NWFP Forest Commission Act | a. Seeks to oversee proper implementation of proposed forests reforms process<br>b. Aims to establish a Roundtable for stakeholders' participation |
| 1999 | NWFP Forest Policy | a. The policy by and large reiterates all objectives already laid down in previous policy documents<br>b. Reinforces the forest management vision and policy objectives |
| 1999<br>2002 | Punjab Forest Policy Statement<br>Balochistan Conservation Strategy | a. Outlines the priorities for the province's forest management<br>b. Resembles the NWFP reform process<br>c. Declares forests as one of the priority areas<br>d. Highlights the need for conservation of forests through the sustainable development ambit |
| 2001 | Draft National Forest Policy | a. Develops an action plan for sustainable management of all types of forests. |
| 2002 | NWFP Forest Ordinance | a. Mandates institutionalized community participation in forest conservation, management and harvesting through Joint Forest management committees (JFMCs)<br>b. Incorporates sustainable development in forest conservation and management as an integral part of the policy |

Source: Prepared by the author

## Annex 4

### Resource Rights and Forest Management in Utror: A Case Study[28]

The village of Utror is sandwiched between Gabral and Kalam in NWFP. Utror presents an interesting case of a set-up solely based on customary law with regard to resource rights, with statutory law playing virtually no role. The forest management system in the village is also dictated by customary law. All forest resources remain communal property. The communal land is clearly demarcated from the adjacent agricultural land, which is privately owned. The latter's ownership was settled centuries ago in line with the customary law at the time.

There is virtually no check on the use of forest resources by subsistence users. There are "village bachao committees" in place, part of whose mandate is to ensure that resource extraction is commensurate with subsistence needs. However, these committees act more as deterrents against wasteful extraction than as active monitors of extraction practices. A vigilant system to check illegal timber felling for commercial purposes has been instituted. The village established manned check posts on its boundaries with Kalam and Gabral as early as 1983. While these check posts have been effective in preventing timber movement across the village border on a regular basis, they have no control over timber felled and transported under instructions from village influentials.

Deforestation rates in Utror have been significant. According to one estimate, the forest stock in Utror has been reduced by half in the past three decades. The main factors responsible for the accelerated deforestation rate were change in the forest ownership in the 1970s, population pressure, and collusion between the FD and village influentials to arrange for illegal timber felling.

Forest preservation was severely impacted in the 1970s when forests were declared as "protected", and ownership rights of village residents were revoked. While traditional owners were always treated as "concessionaries" under statutory law, the 1927 Forest Act had not been operational in the area till the 1970s. The Act put a limit on the extent of extraction for subsistence use by setting a local quota for each village. This took away the incentive for local communities to preserve forests and led to an increase in the rate of degradation. Reportedly, majority of illegal timber logging in Utror has been undertaken for construction of hotels and other tourist attractions in Kalam. Those involved have reaped significant dividends in monetary terms from this activity over the years.

Fuel wood extracted by residents for subsistence use has also played a significant role in the increased degradation. The demand for fuel wood is largely a consequence of population pressure and the continuing absence of any alternate sources of fuel for village residents. Such a situation would suggest a need for decision makers in the village to enforce stricter vigilance on subsistence use. However, interview responses suggested that cultural reasons prevented any such measures. Since an overwhelming majority of Utror residents share a common tribe, tribal customs prevent any move towards putting a limit on a tribal member's use of natural resources. Villagers perceive unlimited access to fuel wood as a right, which cannot be restricted unless alternate sources of fuel are made available. This is despite the

28 This case study is entirely based on primary information collected by the author.

fact that statutory law stipulates a limit on resource use for subsistence purposes. It is imperative for the government to provide alternate sources of fuel wood for subsistence use. The fact that Utror has no mechanism for regeneration of forests and relies solely on natural regeneration adds to the urgency for introducing alternate fuel sources.

Village residents in Utror hold an extremely negative view of the FD. Respondents described the Department's role in forest preservation as negligible. The level of trust in the Department's activities and its sincerity towards preserving forests is low. The major concerns are individual rather than institution based decision-making, high level of corruption, and an acute shortage of human resources necessary to patrol forests. According to respondents, the Department's corrupt practices defeat the entire purpose of monitoring forests. While fines are issued to perpetrators, they are invariably revoked after paying a miserly bribe.

The FD is largely seen as part of government machinery that itself is not sincere towards resource dependent communities in the area. Interview responses conveyed suspicion towards intrusion from any public functionary. This lack of trust has ensured the absence of any land settlements in Utror by the provincial government. Despite repeated government efforts, which have included arrests and jail terms for dissenters, residents of Utror have managed to resist the move towards land settlements successfully. Their principal concern is that settlements would either lead to ownership rights being questioned by local authorities, or tax implications in the form of local taxes payable to the Department of Revenue.

Village residents are bitter about the absence of royalty payments by the government. Interestingly, the payment of royalties is perhaps the only sphere where residents of Utror accept the writ of the statutory law. Since 1990-91, Utror residents have not received their share of royalties as no forest marking has taken place until very recently due to the ban imposed in the wake of the 1992 floods.

Village residents highlighted the persistent top-down approach of the government manifested through the Forest Ordinance 2002. Villagers complained that they had never been consulted on the new forest policy's formulation. In fact, residents of Utror did not even know about the policy until the package had been made public. Utror and its surrounding villages have refused to acknowledge the new forest policy as a binding framework. Utror however, has seen the formation of a JFMC in July 2005. The Committee has only focused on the narrow agenda of facilitating and supervising the marking of the windfall to be harvested by FDC. Like all other JFMCs, ideally it should take up a broader range of objectives including protection of forests, regeneration, and development relevant to forest protection. While the JFMC includes villagers, the sense of ownership is low and the understanding of the concept and utility among villagers remains weak. The village has seen no private sector involvement in forest management.

## Annex 5

### Statistics on Timber

Table 3: Timber Import Statistics

| Timber Imports (coniferous) | | | | | | |
|---|---|---|---|---|---|---|
| Year | Saw Logs and Veneer Logs | | | Timber Sawn, Planed | | |
| | Quantity (CUBM) | Value (PKR Million) | Price (PKR)/CUBM | Quantity (CUBM) | Value (PKR Million) | Price (PKR)/CUBM |
| **1995-96** | 490 | 0.5 | 1,020.41 | 2,636 | 2.8 | 1,062.22 |
| **1996-97** | - | - | - | 3,835 | 5.6 | 1,460.23 |
| **1997-98** | - | - | - | 2,676 | 4.8 | 1,793.72 |
| **1998-99** | N/A | | | N/A | | |
| **1999-00** | - | - | - | 6,623 | 13.2 | 1,993.05 |
| **2000-01** | - | - | - | 263 | 0.8 | 3,041.83 |
| **2001-02** | - | - | - | 230 | 0.7 | 3,043.48 |
| **2002-03** | 15,205 | 74.7 | 4,912.86 | 334 | 1.5 | 4,491.02 |
| **2003-04** | 52,798 | 290.4 | 5,500.21 | 28 | 0.2 | 7,142.86 |

Table 4: Import Tariff on Timber (Coniferous)

| Type of import | Customs Duty (%) | Sales Tax (%) | Total (%) | Withholding Tax (%) |
|---|---|---|---|---|
| Coniferous wood in the rough | 0 | 15 | 15 | 6 |
| Coniferous hoopwood (tool handles, stakes) | 5 | 15 | 21 | 1 |
| Coniferous wood sawn, chipped lengthwise | 0 | 15 | 15 | 6 |
| Coniferous sheets for veneering | 20 | 15 | 44 | 5 |
| Coniferous strips and friezes | 20 | 15 | 44 | 6 |