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Indigenous Rights and Biodiversity Conservation A Case Study of Ayubia National Park

Shaheen Rafi Khan and Asad Naqvi

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Mailing Address: PO Box 2342, Islamabad, Pakistan.
Telephone ++ (92-51) 2278134, 2278136, 2277146, 2270674-76
Fax ++(92-51) 2278135, URL:www.sdpi.org

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Indigenous Rights and Biodiversity Conservation
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Shaheen Rafi Khan and Asad Naqvi

1. Overview

1.1 Country Profile

Pakistan consists of a rectangular mass extending northeast to southwest over about 88 million hectares. Mountains and foothills on the north and west cover about half its area. The remaining half comprises the Indus Plain towards the east, intersected by the Indus River and its tributaries. The country is largely arid, with three-fourths receiving an annual precipitation of less than 250 mm and 20% of it less than 125 mm. Only about 10% of the area in the northern Himalayas and the Karakorum mountain ranges receive rainfall between 500 mm and 1500 mm. Of the country's total area of about 88 million ha, 24% is cultivated of which about 80% is irrigated. Forests and grazing lands cover about 4%, and 34% is not fit for agricultural use - about 2% is under urban cover.

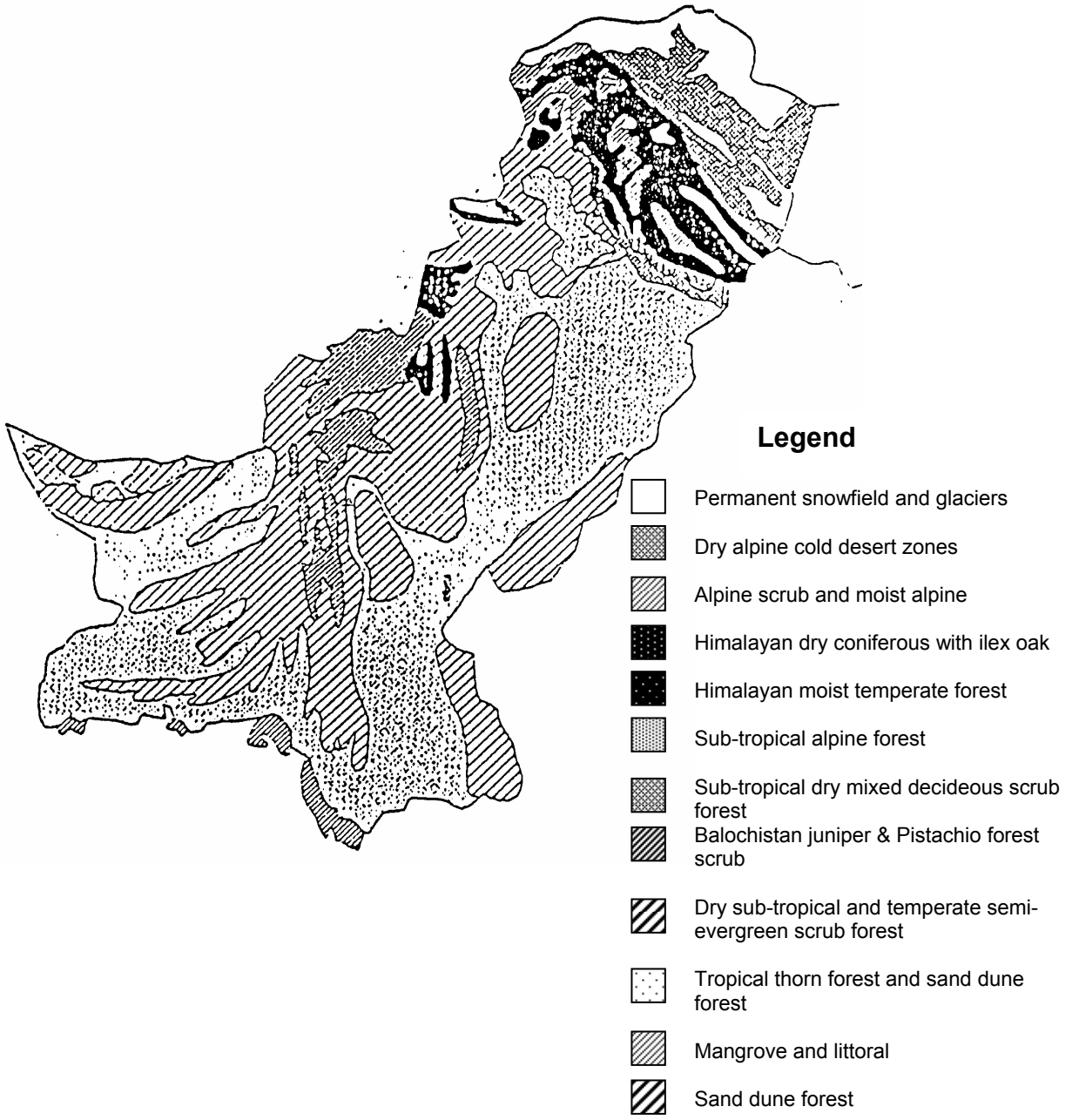
1.2 Biogeography of Pakistan

With its dramatic geological history, broad latitudinal spread and immense altitudinal range, Pakistan supports a wide array of ecosystems. However, any description of the natural ecological zones of Pakistan must be qualified by the statement that these zones have been so widely affected by human activity that very few truly natural habitats remain. Roberts (1991) has provided an initial classification of terrestrial ecosystems into 18 distinct ecological zones (see map) with nine major vegetative or agro-ecological zones. These range from the permanent snowfields and cold deserts of the mountainous north to the mangrove forests of the Indus delta and the Arabian Sea coast. Its fauna is rich and varied: affinitive to three faunal regions - the Palearctic region west of the Indus, the Oriental region east of the region and the Ethiopian region.

Because Pakistan is largely bounded by man-made borders and does not constitute an isolated entity in ecological terms, relatively few species are found only in Pakistan (Roberts, 1991). Thus Pakistan has relatively low national rates of endemism. However, the proportion of 'restricted range' species occurring in Pakistan is much higher, and for many of these species, Pakistan contains the bulk of the global population.

Upto 167 mammal species have been reported, of which three are endemic and there are a number of endemic and near-endemic sub-species. Of the 662 species of birds recorded, one-third has Indo-Malayan affinities, and the remaining Palearctic. There are 172 listed species of reptiles and amphibians, of which 40 species are endemic. Pakistan has 177 native freshwater fish, predominantly South Asian in origin. In the invertebrate category, there are about 360 butterfly species with high rates of endemism and about 2,000 species of insects.

Figure 1: Major Vegetative Zones of Pakistan



Over 5,600 species of vascular plants have been described, including both native and introduced species. There is high species diversity and the flora includes elements of six phytogeographic regions. Four monotypic genera and 400 species are endemic to Pakistan. In the category of fungi, there are 847 genera and 3,383 species.

1.3 Threats to Biodiversity

The ecological trend of greatest concern in Pakistan today is the continuing loss, fragmentation and degradation of natural and modified habitats. This includes forest areas, freshwater and marine ecosystems and the continuing decline in many native species of plants and animals; some are already extinct, many are internationally threatened, and more still are of national concern.

Within the last 400 years, at least 4 mammal species are known to have disappeared from Pakistan: tiger, lion, swamp deer and one-horned rhinoceros. In recent decades, the Asiatic cheetah, the hangul and the black buck have become extinct. The latest "IUCN Red List of Threatened Animals (1996)" lists 37 species and 14 sub-species of internationally threatened or near-threatened mammals as occurring in Pakistan. In addition, there are 25 internationally threatened bird species and 10 reptile species.

The degradation of ecosystems and loss of supporting habitat is most evident in remaining upland forests, scrub forests and mangrove forests, arid and semi-arid rangelands, inland wetlands, Indus delta and coastal waters. According to the Forest Sector Master Plan (1992), forests, scrub and planted trees on farmlands cover 4.2 million hectares, or 4.8% of the country. If plantations and scrub forests are excluded, the coverage falls to 2.4 million hectares (2.7% coverage). More than nine-tenths of remaining coniferous forests has less than 50% canopy cover. Good quality (50% coverage) forests constitute less than 400,000 hectares. Woody biomass is declining at the rate of 4% - 6% per year and with consumption expected to grow in line with population growth (3% per year), this biomass could be totally consumed within the next ten years.

Other direct causes of biodiversity loss are grazing and fodder collection, soil erosion (water and wind), exacerbated by a reduction in vegetation cover, resulting from agricultural activities and overstocking, hunting and trapping and over-collection of plants,

The root (indirect) sources of degradation are two-fold in nature. The first relates to increasing demand for natural resources, the result of a growing population, economic growth and low primary productivity. Economic factors are the second source, with the most prominent being market failure, intervention failure, weak ownership, high discount rates and globalization of the world economy (international trade competition, international financial flows). Economic development has weakened reliance on local biodiversity resources, eroding the need and concern for sustainable use of these resources. Communities have been disempowered by state intervention in the management of community forests. And the free market, with its associated economic incentives, encourages a competitive race for natural resources at the expense of traditional sharing.

2. The Context

2.1 The Historical Precedent

Pakistan's record of natural resource conservation is linked with its history of conquest and colonization. Over the past millennia, successive waves of invaders poured through its northern passes into the fertile plains of the subcontinent to the southeast. Indigenous populations were forced into the mountains and foothills to eke out a bare subsistence which, among other things, entailed clearing of forests for agriculture and grazing. They eventually settled down as small scale farmers in the perennial stream-fed mid-elevations and as semi-transhumants in the higher altitudes (Khattak:

Communities and Conservation, 1998). Living in close proximity to the forests, they foraged for fodder and extracted timber, fuelwood and other forest products. An equilibrium of sorts was restored, with the viability of such patterns of dependence and extraction being underpinned by subsistence needs and low population pressure.

More deliberate attempts at conservation during this early period can be traced to the establishment of game reserves by the rulers, amongst whom hunting was a recognized passion. The riverain forests of Sindh were raised by the local rulers for this purpose (Stebbing, 1921). Although exclusionist in nature, the creation and enclosure of hunting tracts ensured the preservation of many of the extant species, most notable among them being the one horned rhino, the lion, tiger, black buck, red deer and the black bear (Biodiversity Action Plan, 1997). Thus, the available records are of an essentially unsettled period, characterized by displacement, relocation and resettlement which, by definition, is synonymous with resource degradation. However, the extent of damage was mitigated by the subsistence needs of a relatively sparse population, and conscious efforts at conservation of species.

Events in the past 400 years of subcontinental history were particularly turbulent. This period witnessed degradation on a large scale, instigated by new forms of imperialist domination and associated commercialization of the economy. This was the era of British colonial rule, of large-scale infrastructure construction (railroads, canal networks, cantonments, bridges). Such developments were fuelled by depredations on a massive scale, namely, the commercial exploitation of coniferous forests, extensive land clearance and the alteration of river ecosystems, resulting in their fragmentation and the disappearance of riverain thorn forests. Shrinking habitats caused many animal species to become extinct (the one horned rhino, the lion, tiger, Asiatic wild dog, cheetah and chau-singa) and endangered others (leopard, gavial, marsh crocodile, black buck, black bear, lynx, caracal, and red deer) [Khattak: Communities and Conservation, 1998]. Feudal hunting privileges, initially a factor in conservation acquired pernicious dimensions with daily game bags running into the hundreds.

The legal and administrative precedents for protected areas management was first laid down in forestry acts, introduced by the British in the mid-nineteenth century. Driven by the need to protect their commercial interests, these acts, namely the Hazara Forest Conservancy Rules in 1857 and the Forest Act of 1865 declared all forests the property of the government. As a result, existing community rights to forest resources became proscribed. Initially, all forests were declared reserve forests. Right holders were allowed to cut trees, collect fuelwood and clear land with the permission of the deputy commissioner, while grazing was freely allowed. Non-right holders had to pay a tax for similar privileges. Recognizing that communities would not take easily to their free access being circumscribed in this fashion, the concessions were increased. The amended Hazara Forest Regulation Act was enacted in 1873, creating a new category, the 'guzara (community)' forest. Although, ostensibly, returning large tracts of forest, grazing and waste land back to the communities, the management of 'guzara' lands continued to reside with the forest department which, furthermore, extracted seigniorage for any proceeds generated through sales of forest products.[1]

This form of colonial governance was effective only in so far as the administration did not misuse its powers and community needs were relatively limited. In a more fundamental sense, it was flawed.

1 A hybrid category, the ‘protected’ forest also emerged. Communities were allowed open access to resources in these forests, except for specific uses proscribed by the government. This was essentially intended to arrest the growing trend towards encroachments.

The top down, non-participatory approach drove a wedge between communities and their birthright by denying them say in its management and subjecting them to legal process, which was often, arbitrary. The unprecedented levels of degradation that the country is experiencing currently, partly has its roots in this. It has engendered conflict and a predatory mindset. Alienated from their resource base, communities are becoming profligate in its use.

The post-independence period (1947 - 1966) witnessed a further acceleration of the economic and social transformations underway in the colonial era. The commercialization of agriculture, industrial growth and the demographic explosion continued to exert relentless pressure on the stock of natural capital. Land use changes occurred on a large scale across the country, in the form of irrigation engineering, large dam construction, draining of wetlands, clearing of land for agriculture, industry, mining, roads and settlements. Forest and river ecosystems, already under threat during the colonial period, began to lose their self-sustaining capabilities. The physical threats to the environment were further exacerbated by the collapse of traditional social structures, as people moved in search of better economic opportunities, losing touch with their roots and traditions. A combination of poverty, diversified economic opportunities and the increased commercial value of natural resources (timber, fuelwood, medicinal plants, and edibles) encouraged resource overuse rather than conservation.

The management system, designed for a specific purpose, was unable to cope with these changes. The multiple, and often conflicting interests of commercial loggers, private developers, government and military agencies, hunters and impoverished communities placed it under relentless strain. The administration tended to choose the path of least resistance, coming down with a heavy hand on the disempowered communities and colluding for personal gain and profit with vested interests. Rising prices of timber, fuelwood and forest products, an erosion in the standard of living of the forest custodians, fines and penalties that were selectively applied and failed to match the nature of the transgression, and royalties that were appropriated by the rich and powerful, combined to create a complex of perverse incentives antithetical to conservation. The irony is that the key inroads into forest resources began to be made by commercial and development groups which management was not in a position to oppose and -- in fact, cooperated with. On the other hand, it targeted communities, whose needs were of an essentially subsistence nature and who -- had their rights and traditions been honored -- could have collaborated with the authorities in the sustainable management of forest resources.

2.2 Protected Area Management Initiatives

The forestry acts set the context for the conservation movement that started in the late sixties. Its aim was to arrest further depletion of the dwindling stock of natural capital. The movement originated in two WWF expeditions, led by Guy Montfort (1966, 1967) and an FAO study in 1968. The findings were not surprising. While both studies confirmed high levels of degradation and threats to wildlife, they also observed that the extant game laws were ineffective against transgressors belonging to the higher social strata, “there was difficulty in preventing shooting by military and civil officers.” Shrinking habitats were identified as the other key threat to species survival. The weakness of the investigations lay in their failure to follow through with an exhaustive study of the socio-political dimensions of the problem. The resulting recommendations to the government were essentially extensions of the forestry acts, in that they prescribed bans, demarcations and controls in a manner reminiscent of the earlier forestry laws. The failure to acknowledge the role of communities has led to violations of the protected area provisions and to open conflict with the authorities.

Specifically, the recommendations led to the creation of national parks, wildlife sanctuaries and game reserves across the country; the enactment of wildlife laws and; the establishment of the National Council for the Conservation of Wildlife, entrusted with policy planning, provincial coordination and promotion of linkages with international conservation bodies. Wildlife legislation consisted of provincial wildlife acts and an ordinance (Environmental Protection Ordinance, 1983).[2] Their three main objectives were to increase protection of species, improve safeguards against degradation and destruction of habitats, and strengthen enforcement of the law.

Through 1970 – 1995, Pakistan also signed a number of international conventions governing biodiversity conservation. These are:

- The Convention on Biodiversity, signed in 1992 and ratified it in 1994.
- CITES
- RAMSAR Convention (Pakistan was Chairman of the Standing Committee for the period, 1987 - 90)
- World Heritage Convention
- Convention on the Conservation of Migratory Species
- International Waterfowl and Wetland Bureau

Over the last three decades, a total of 14 national parks, 99 wildlife sanctuaries and 96 game reserves have been established, covering 9.17 million ha, or 10.40% of the total land area (see map).[3] In this respect, Pakistan lags behind many other Asian countries (including Nepal, Sri Lanka and Bhutan) in terms of the national land area that has been designated for conservation.

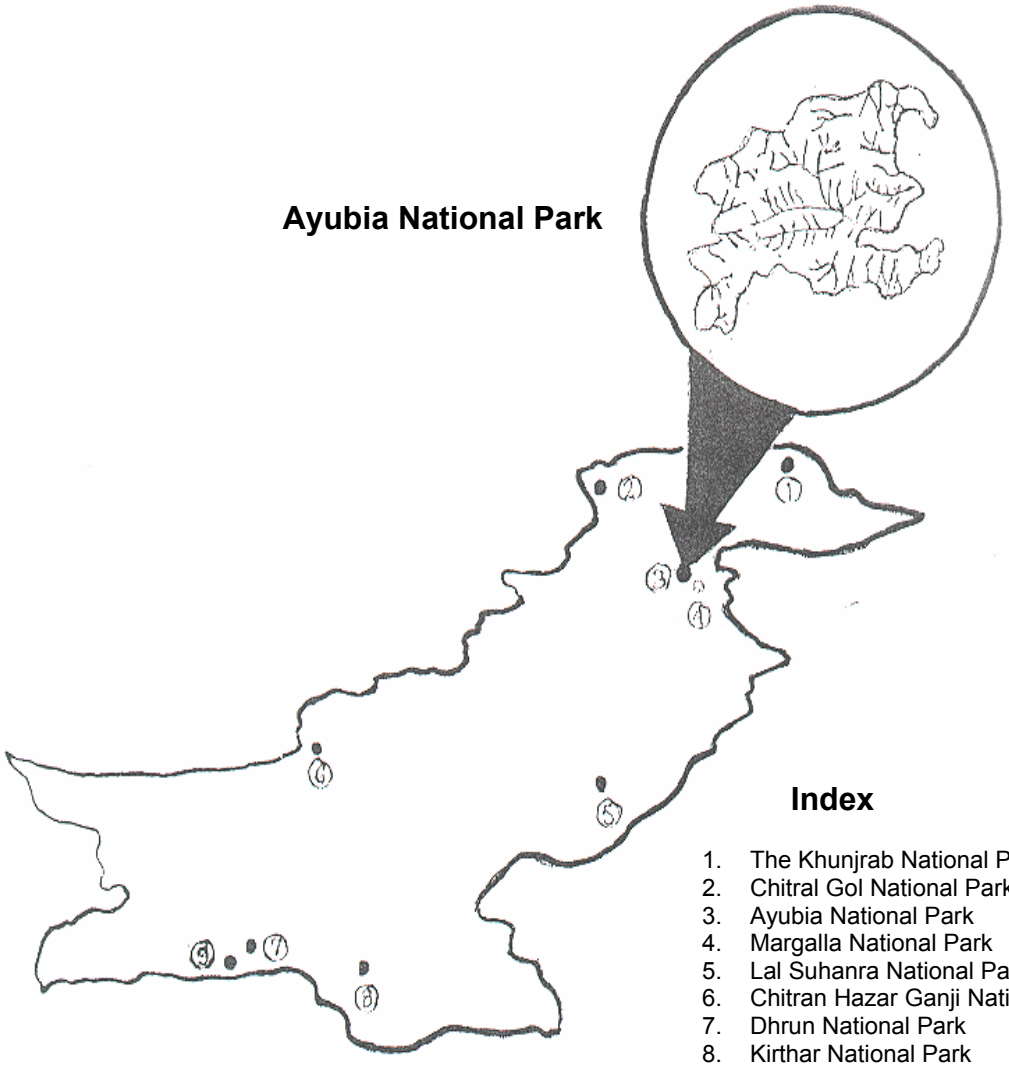
The mix of measures stemming from domestic and international efforts did achieve results in terms of reducing threats to species, as well as increasing awareness. But the efforts expended have fallen short of desired outcomes, as habitats continue to shrink and species diversity and numbers remain under pressure. Among other things, this is attributed, both implicitly and explicitly, to a failure to acknowledge the rights of communities, as well as their potential role in biodiversity conservation.

The failure of implementation has three inter-related strands. Physically, the majority of the protected areas have been demarcated with scant attention to ecological criteria. Small in size, the boundaries do not enclose essential components of the ecosystem, or even of the habitat for its survival. Also, they are widely dispersed with no provision for migration corridors. While, the concept of biosphere reserves has gained increasing currency, the existing wildlife laws do not provide an adequate framework for management to address its complex implications (involving the core, buffer and development zones). The wildlife department has jurisdiction over the protected areas, while surrounding zones fall within the remit of the forestry department. Alternatively, there can be multiple entities in the same area, which triples as a reserve forest, a protected area and as a biosphere reserve. Thus, overlapping authority and interdepartmental conflicts tend to occur. The communities are viewed as the common enemy, which, of course, is self-defeating, as they could so easily become a part of the solution, rather than being perceived as the problem.

2 In the case study area the operative act is the North-West Frontier Province WildLife (Protection, Preservation, Conservation and Management) Act, 1975.

3 A wildlife sanctuary offers greater protection than a national park, while a game sanctuary offers no protection to habitat but merely regulates hunting.

Figure 2: Map Showing Network of National Parks in Pakistan



From the management point of view, the provincial wildlife departments are hamstrung by a shortage of suitably trained personnel, meager resource allocation, the absence of a resource inventory, inadequate ecological research etc. With biodiversity conservation traditionally figuring low in the government's priorities, the obvious solution would be to enlist the key stakeholders, namely the communities and other emerging players in the private sector. However, that would mean conceding control and rights, which the government is not prepared to do. This frozen mindset is best encapsulated in the observation "that [post-colonial] nation-states, [feel they have] the capacity, the internal legitimacy and the will to manage all resources falling within their territorial boundaries". Thus, there is no change in the substantive status quo, irrespective of the changing socio-economic dynamics, the limited competence of the self-appointed wildlife custodians and the resulting acceleration in resource degradation.

The centrality of communities to biodiversity conservation and the risk of ignoring this are self-evident. Few efforts have been directed at raising public awareness and education in areas adjacent to protected areas,

providing environmentally sound and sustainable development assistance to local communities, or formulating appropriate packages of incentives and disincentives. More fundamentally, awareness raising and incentives are part of a process, which entails recognition of community rights to own and control their territories. This means many things; "[it means] involving communities in planning from inception, the recognition of indigenous representative institutions, the involvement of all stakeholders, including marginalized groups and unambiguous contracts to establish mutual obligations". Given such rights, collaborative responses to changing internal and external influences, associated with development, are possible. In their absence, local communities are prone to become intransigent, to either disregard protected area provisions leading to degradation of the protected area or, where these provisions are enforced against their interests, indulge in incendiarism.

2.3 The Donor Dimension

Global initiatives framed as various international conventions spurred the efforts of donors as well as international NGOs, such as the WWF and the IUCN, to initiate national programs and projects. In the initial stages, the thrust of these programs was exclusively on conservation, which was best achieved by the physical demarcation and isolation of areas deemed appropriate for protection. This approach tended to reinforce divisions between the local people and the government, thus increasing alienation and conflict rather than resolving them. It also ensured a convergence of interest whereby foreigners were able to get legitimacy and authority for their activities through a like minded government. Conversely, national governments tended to "manipulate an internationally sanctioned ethic to perpetrate oppression and human rights abuses." The evidence tends to confirm this. In most of the designated national parks and wildlife reserves, the official attitude towards affected communities has been one of extreme arrogance and disrespect for their rights, the Ayubia National Park, the subject of our case study, being one such example. Furthermore, violation of park mandates to accommodate mineral, oil and gas and other resource exploration activities – both by foreigners and nationals – is a common occurrence, the Kirthar National Park being the most celebrated case.

In 1975 and 1982, the IUCN passed successive resolutions: while avoiding a recognition of indigenous peoples' rights to own and control their territories, the resolutions advocated the implementation of joint management arrangements between societies which have traditionally managed resources and protected area authorities.

Accordingly there has been a proliferation of experiments with conflict management, biosphere reserves, buffer zones, eco-development and benefit sharing. The aim has been to ensure that local communities have both an economic and a political stake in controlled management. Most have been failures. IUCN determined that most of the participatory projects have been initiated and directed by outsiders, have been of short duration and have focussed on ambitious but untried technologies to secure increased economic benefits for local people. Notwithstanding their characterization participatory, they have frequently pursued objectives, which were inconsistent with the aspirations of the very people they were trying to help. A World Bank study showed that attempts to involve local people in the process of change and development were largely rhetorical and most treated local people as passive beneficiaries. Conservation agencies have been very reluctant to recognize the rights of indigenous peoples to control decision-making.

This cosmetic aspect of these programs is vividly demonstrated in the area of planning. Article 6 of the Convention on Biodiversity calls for parties to, 'Develop national strategies, plans or programs to address the provisions of the CBD.' Pursuant to this, Pakistan developed a National Conservation Strategy (1992) which was adopted as a national policy in 1993 and accepted by the World Bank as the National Environment Action Plan. Spin-offs at the provincial level in the shape of provincial conservation strategies are being prepared. In

addition, a number of sectoral plans for biological resources, such as the Forest Sector Master Plan (1992) have also been completed. The Biodiversity Action Plan (1997), which meets the planning requirement of the Convention, is primarily a strategic framework which offers guidance on key directions for the future. The prevailing view is that such plans are essentially shelf documents. Also, at the decentralized level, protected areas lack comprehensive management plans, and where these plans exist, they are not fully implemented. There is also a tendency to regard management plans as blueprints, rather than adaptive strategies requiring constant updating.

Following the directions set by the United Nations Draft Declaration on the Rights of Indigenous Peoples, the IUCN and the WWF approved guidelines (1996) on Indigenous Peoples and Protected Areas, which recognize that, "indigenous peoples have the right to participate effectively in the management of the protected areas established on their lands or territories", and that agreements should be reached with them "prior to the establishment of new protected areas in their lands or territories." While this is a recent and welcome development, its implementation is contingent upon legal, regulatory and institutional reform.

3. Case Study of Ayubia National Park

3.1 Backdrop

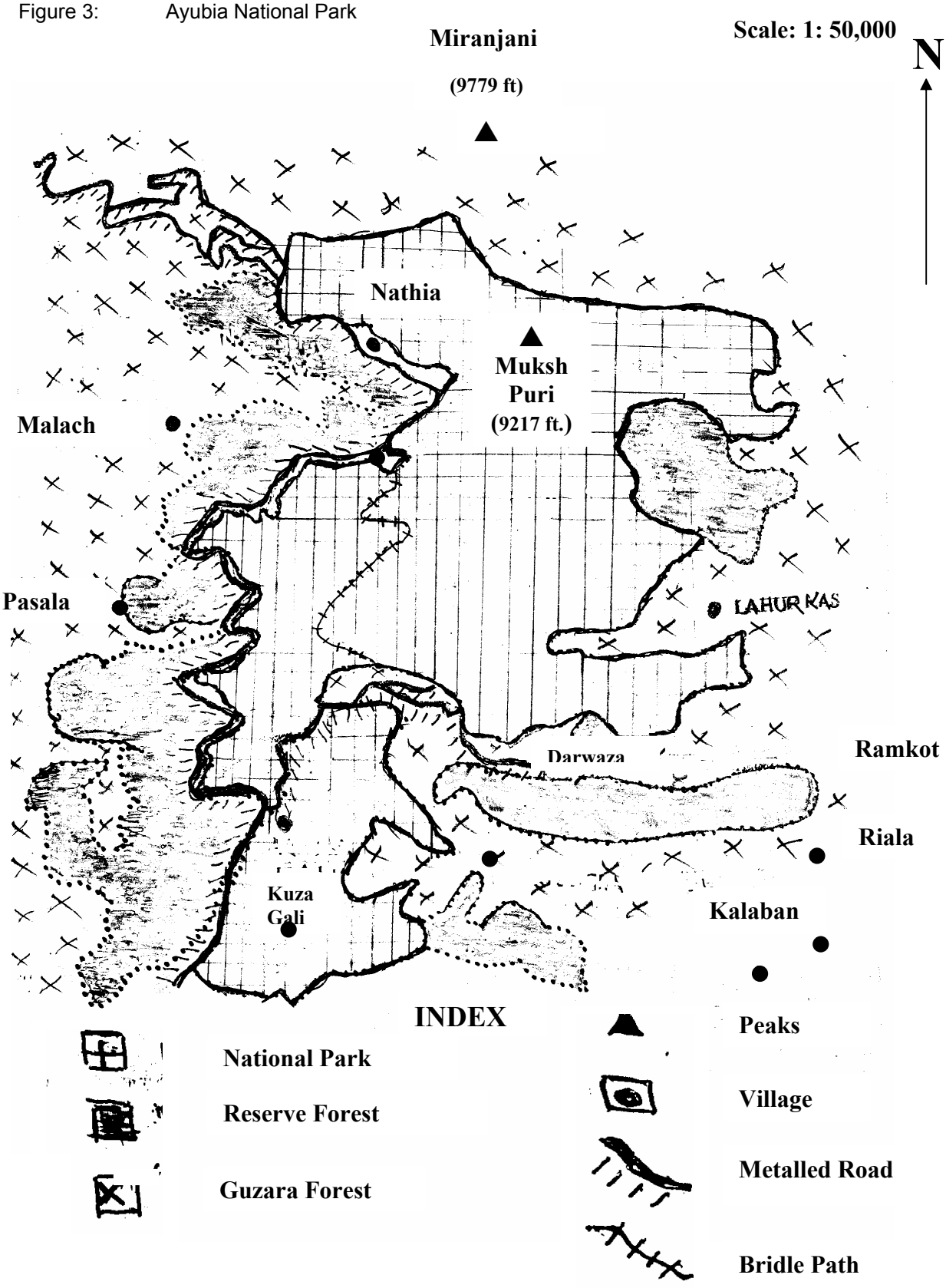
Ayubia National Park is situated in the Gallis Forest Division of Abbotabad District, North West Frontier Province. As originally designated in 1984, it lay between 34*-1' to 34*-3.8' north latitude and 73*-22.8' to 73*-27.1 east longitude, over an area of 1684 hectares. In March 1998, the park area was more than doubled to 3,312 hectares under the NWFP Wildlife Act of 1975. The forests of the park represent one of the best moist temperate forests in Pakistan, with a wide diversity of plant and animal species. The national park was established to preserve the ecosystem and its biodiversity for scientific research, education and recreation.

The national park consists entirely of reserve forests, which spill out of the park area on the west and south sides. Beyond the reserve forests are 'guzara' forests and waste land which is the communal or private property of the people. With increasing population, the pressure on land and its resources is enormous. The forests are a source of fuelwood, timber, fodder, medicinal plants and wild vegetables for the surrounding communities. As guzara lands become increasingly denuded the pressure on reserve forests is increasing.

As evident in the map, the park is surrounded by dense population, with seven major villages consisting of a larger number of linked settlements. The total population in and adjoining the national park is about 50,000 and, in line with national statistics, is growing at the rate of 3% per year. Social services (schools, dispensaries, water supply schemes, roads etc.) are far below the national average, which, in turn, is below the South Asian norm. The high rate of illiteracy is a major constraint in spreading conservation awareness.

The NWFP Wildlife Department is responsible for the management of the park. As indicated earlier, its mandate is essentially an extension of the Forestry Department laws and regulations. While ostensibly aimed at protecting wildlife, the community claims such restrictions are selectively applied and manipulated for personal profit. Mismanagement is evident in the rising incidence of conflicts over use of reserve forest resources and in the degradation of the guzara forests. Community rights have become increasingly tenuous. Absent institutional arrangments and legal recourse, communities have no incentive to use these resources in a sustainable manner. The dependence and awareness of the value of forests is more than offset by the alienation from their environment.

Figure 3: Ayubia National Park



3.2 Case Study

A group questionnaire was implemented in six villages surrounding the national park. The number of respondents in each group varied from 10 to 25 people. The groups consisted of influential community members (political representatives, retired officials, large property owners), teachers, CBO representatives and community members. On average, it took about three hours to implement the questionnaire. The following villages were selected:

Malach: (2000 households)
Khen: (800 households)
Kuza Gali: (1300 households)
Khanaspur: (Variable population)
Donga Gali: (2500 households)
Tauheedabad: (800 households)

The average household has 8 members. The variability of Khanaspur's population is the result of migration, with the young men moving down to the plains in the summer months in search of employment.

3.3 Summary

The decision to establish the Ayubia National Park was not a consultative one, involving only influential members from the community and eliciting their consent on the basis of undelivered promises. The communities felt that the degradation of forest resources is primarily the outcome of Forest Department malpractices. The department colludes with the local timber mafia in extracting timber and extorts bribes from the communities to allow them the exercise of their subsistence rights.

The communities are fully aware of the nature and extent of degradation, citing in detail flora and fauna which are extinct or threatened. The primary source of degradation is the reduction in densification of forests, as opposed to reduction in area. This is less true of guzara (community owned) forests where the denudation is clearly visible.

There are no permanent settlements in the national park, but temporary settlements were allowed in the British days, a right which has now been rescinded. Community rights to fuelwood, fodder, timber for house construction and grazing of livestock have eroded steadily, partly through the reduction of such rights and partly through the increased difficulty in exercising them – entailing bribes to the forest department staff. By the same token, the right connections are enough to obtain all sorts of concessions, even in the absence of legal entitlements.

Population growth has manifested itself mainly through the expansion of existing villages. To a limited extent, this pressure is being dissipated through people migrating in search of jobs, though most migrants return to their ancestral villages during the summer months. With a few exceptions, there is no substantive tradition of caste-defined jobs. Economic activities cut across ethnic and caste (biradari) boundaries. The traditional occupations are farming and livestock raising, activities closely linked with the land and the forests. Both are now under pressure due to population pressure, farm fragmentation, disappearing forests and growing forest and wildlife department restrictions. As a result, off-farm employment has become more prevalent.

There is political representation at the national and provincial level and a local bodies system, which is sporadically active. Votes are cast along ethnic and caste lines, with influential members of the community selecting the candidate. The system is, basically, unrepresentative, as reflected in the outcomes. Social, infrastructure services and jobs tend to be concentrated in the representative's constituency, or serve tourists and wealthy residents of the area.

The establishment of the national park has exacerbated the problems for the community, promoted conflict and done very little to promote biodiversity conservation. The mandate, approach and activities of the Wildlife Department substantively replicate those of the Forest Department. Communities now have to deal with two departments for their subsistence rights, which is financially onerous. The continuing absence of accountability also affects the conservation mandate. Inter-departmental rivalries are strong, with the malpractices increasing, as each department shifts blame on the other for forest violations. While protection of wildlife has ostensibly increased with a clearly framed mandate and assignment of more staff, the department, evidently, is violating its own rules by participating in and guiding hunting expeditions of influential persons. On average, twenty cases are registered monthly against community members since the park was established, mostly involving women which has led to many open confrontations.

The existing community based organisations are primarily geared towards providing social services, resolving conflicts among communities and intermediating with the authorities for development works. Communities tend to keep their distance from the few organisations and individuals involved in conservation, mostly, for fear of upsetting the status quo. The communities expressed no interest in being involved in natural resource management. The older people expressed a desire for the restoration of rights instituted by the British and that they should be implemented honestly – in other words, they wanted good governance.

As expected, gender biases in these conservative cultures are deeply entrenched. While active, both within the household and in support of their menfolk when it comes to work, women have few decision-making powers – these being restricted to matrimonial issues. Girl literacy levels are too low for them to be able to make inroads in this traditionally male domain. The establishment of the national park has been particularly onerous for women. They feel threatened by wild animals and are being subjected to offensive behavior by the culturally insensitive wildlife staff. This has led to a rising incidence of violence. Compared to the compelling need for fuelwood and fodder, biodiversity conservation pales into insignificance.

3.4 Case Study Details

Demographic and Socioeconomic Dynamics

Population growth has manifested itself mainly through the expansion of existing villages. Most of the new settlements take the form of houses and hotels along the metalled roads. To a limited extent, this pressure is being dissipated through people migrating in search of jobs. However, only a limited number – the more affluent and educated -- can afford the costs of migration. Most migrants tend to return to their ancestral villages during the summer months.

With a few exceptions, there is no substantive tradition of caste-defined jobs. Economic activities cut across ethnic and caste (biradari) boundaries. The predominant ethnic groups are **abbasis**, **syeds** and **karals**. With the pressure of population and limited employment opportunities, the typical

association of certain service occupations (blacksmith, tailor, masseuse, ironsmith, barber etc.) with inferior castes has disappeared.

The traditional occupations are farming and livestock raising, activities closely linked with the land and the forests. Both are now under pressure due to population pressure, farm fragmentation, disappearing forests and growing forest and wildlife department restrictions. As a result, off-farm employment has become more prevalent. In addition to migration -- both to other parts of the country and abroad, within the area, locals have taken up jobs as labourers, watchmen and gardeners in large houses, shop and stall keepers, loggers and saw men (ari kash) for the Forest Department or the timber Mafia, servants and waiters in hotels etc. At the same time, the pressure on forests for fuel and timber has increased, especially with no alternatives being provided by the government.

Political Representation

There is political representation at the national and provincial level and a local bodies system, which is sporadically active. Votes are cast along ethnic and caste lines, with influential members of the community selecting the candidate (wadera shahi). The system is, basically, unrepresentative, as reflected in the outcomes. Social, infrastructure services and jobs tend to be concentrated in the representative's constituency, or serve tourists and wealthy residents of the area. While communities have begun to identify civic-minded individuals to represent them, existing voting patterns remain strong, which tends to overcome community disaffection when the electoral cycle begins. Ironically, the communities express a preference for the old British days, and even for martial law. Quite clearly, those were days of good governance and concrete results in the shape of roads, water supply schemes, schools, hospitals and electricity.

Conservation Status

Timber and Fuelwood: With their livelihoods at risk, communities are fully aware of the extent and nature of degradation. The tabulated responses show a fairly high uniformity and incidence of degradation across areas.

Table 1: Timber by Village and Status

Species/ Village	Biar (Pinus wallichiana)	Deodar (Cedrus deodara)	Cheel (Pinus roxburghii)	Partal (Picea smithiana)	Drawiya (Quercus)	Bathli	Akhrot (Suglans regia)	Tilli
Malach	T	T		T	E			
Khen	S	T		S				
Kuza Gali	S	T		S		S	S	S
Khanas Pur		T			E			
Donga Gali	T	T		T	E			
Touheed Abad	T	S	S	T			T	T

Note: **T** = Threatened; **E** = Extinct; **S =** Slow Decline

Table 2: Fuelwood by Village and Status

Species Village	Barungi *(Quercus dilatata)*	Berhmi *(Taxus wallic-hiana)*	Kala Kath *(Prunus padus)*	Tarkan *(Acer-caesium)*	Kaeen *(Ulmus wallic-hiana)*	Ban Khor *(Aesenlusi indica)*	Guch *(Vibur-mum foetens)*	Kaneel Patri	Reeh *(Quercus incana)*	Amlok *(Diospyros lotus)*
Malach	T	T	T	T	T	T			E	
Khen										
Kuza Gali	S	S	T	T		T	S		S	
Khanas Pur	T		T			T		E	E	
Donga Gali	T		T			T			T	
Touheed Abad		T	T	T		S			T	T

Note: Note: **T** = Threatened; **E** = Extinct; **U =** Unchanged

The consensus view is that reduced density is the main cause of degradation, as opposed to reduction in forest area. Also, this is more evident in the guzara forests because of their proximity to the villages and fewer legal restrictions on cutting. However, even in the national park, some areas are denuded, largely due to encroachment. Most of the cutting in the national park occurs in winter months, when there is little or no supervision.

Non-timber Forest Products: The use of non-timber forest products from the national park (vegetables, herbals and fodder) is fairly widespread. There is some commerce in high value items (morel mushrooms) with tourists, but not in an organised way. The most common products are listed below:

Herbals

Banafsha,	*Viola serpeas*	Mushk Bala,	*Valeriona Walichii*
Patreece,	*Aconitum heterophyllum*	Heervee,	*Euphorbia wallchii*
Zakhm-e-Hayat,	*Bergenia ligulata*	Bankakri	*Podophyllum emodi*
Nair,	*Slimmia laureola*	Charayta,	*Swertia Chorata*
Sumbal,	*Berbris lycium*	Mumeera,	*Coptis teeta*
Ratti Booti,	*Ajuga bracteosa*	Rattan Joot,	*Geranium wallichianum*
Mumeekh,	*Paeonia emali*	Kundoor,	*Dryopteris blondfordi*
Gul Khaira,	*Althaea officinalis*	Bhaikar	*Adhatoda vasica*
Kala Sumru,	*Berberis jaeschkeana*	Hula,	*Rumex nepalensis*
Masloon	*Polygonum amplexicaulis*		

Vegetables

Guchchi (morel mushroom),	Saag (wild spinach)
Khunbi (wild mushroom),	Kunchee (strawberry),
Gul Khaira	*Althaea officinalis*

Fodder

Tara Meera (mustard)	Masloon	Polygonum amplexicaulis

These non-timber forest products are not under threat – in fact, their growth has increased with restrictions on grazing.

Wildlife: The wildlife status in the national park and surrounding villages is shown below.

Table 3: Status of Wildlife

Status/ Species	Animals			Birds		
	Extinct	Threatened	Slow Decline	Extinct	Threatened	Slow Decline
Scorpio		✓				
Magpia			✓			
Leopard		✓				
Monkey			✓			
Jackal		✓				
Fox		✓				
Porcupine			✓			
Snake		✓				
Wild Sheep	✓					
Flying Fox	✓					
Chukar				✓		
Deer	✓					
Hare		✓				
Bear		✓				
Pheasant						✓
Raven						✓
Partridge					✓	
Parrot					✓	
Vulture					✓	
Falcon					✓	
Wild Pigeon					✓	
Cuckoo					✓	
Wild Fowl					✓	

The Consultation Process

The communities questioned the stated rationale for establishing the national park, which is to protect the forests and indigenous wildlife. They felt the real reason was to provide breeding space for animals brought in from other areas, to expand the park, relocate indigenous people and to encourage rich people to buy up their lands

These suspicions are rooted in the non-consultative manner in which the national park was designated. The people consulted tended to be influential members of the communities and local political representatives. The government elicited the consent of these individuals by promising facilities/incentives (right to cut grass, collect dry wood, provide income and employment opportunities for locals and undertake development projects), promises which, subsequently, were never fulfilled.

Threat Perceptions

The degradation of forest resources is primarily the outcome of forest department malpractices. The forest department is perceived as corrupt, colluding with timber contractors (the timber mafia), and taking bribes from the communities in return for allowing them to meet their subsistence needs for fuelwood, fodder and timber for house construction. At the same time, the system is workable because the bribes are pitched at levels the community can afford. The substantive source of income for the forest department officials is from sale of timber, through arrangements with the timber contractors.

The timber mafia is a powerful lobby, consisting of influential people residing in the area. Its activities are quite pervasive. In some areas, there is extensive logging, with even forest guards and watchers not being allowed in the area. Development activities are also a major source of degradation. For the construction of one road (7 km near Dunga Gali), about 25,000 cu.ft of timber was extracted and its sales proceeds accrued to the forest department. Rich people and hotel owners, residing in close proximity to the national park also obtained their requirements for timber cheaply from the timber mafia.

Community violations of forest department regulations are also acknowledged but are justified on the grounds that such regulations are unreasonable. The commercial sale of fuel wood and fodder by communities gives added impetus for illegal cutting.

Community Rights

During the British era, communities had clearly defined rights of access to the reserved forest; to cut grass, graze livestock, collect fuel wood, cut timber for house construction and establish summer settlements. After independence, these rights have steadily eroded. Some of the earlier concessions were discontinued, while other rights of access to resources can now only be obtained through bribes. There were cases where permits and rights of way through the forest were flatly refused. By the same token, the right connections are enough to obtain all sorts of concessions, even in the absence of legal entitlements.

There are no permanent settlements in the park. However, communities used to have rights to stay in the reserve forests during the summer months (dharajaat), with about 500 households residing there at any time. With the establishment of the national park, they are now forbidden entry and their summer hutments have been burnt down. Alternative accommodation was promised by the authorities but never delivered.

National Park Management

There were no traditional, community-based systems of forest management. As far as memory goes, the Forest Department managed the forests.

The establishment of the national park has exacerbated the problems for the community, promoted conflict and done very little to promote biodiversity conservation. The mandate, approach and activities of the Wildlife Department substantively replicate those of the Forest Department. In the first place, entitlements have been reduced further and cost more to avail. Communities now have to deal with two departments for their subsistence rights, which is financially onerous. While jurisdiction of the national park has shifted mainly to the Wildlife Department, the Forest Department continues to exercise its prerogatives informally.

The continuing absence of accountability also affects the conservation mandate. Inter-departmental rivalries are strong, with the malpractices increasing, as each department shifts blame on the other for forest violations. While protection of wildlife has ostensibly increased with a clearly framed mandate and assignment of more staff, the department, evidently, is violating its own rules by participating in and guiding hunting expeditions of influential persons. Also, livestock continue to be seen grazing in the national park. Generically, the problem is one of shrinking habitats; partly caused by degradation to which both the Forest and Wildlife are accessory; partly due to external developments, such as the densification of settlements, construction of resorts and the assorted infrastructure to support it.

On average, twenty cases have been registered against communities since the park was established. Most of these cases involve encroachments by women to cut grass. In blatant disregard of cultural sensibilities,

the wildlife personnel have manhandled women, resulting in open confrontations. The communities have filed a number of cases against the national park and its extension, which has remained sub judice over the past six years or so.

Community Based Organizations

The existing community based organisations are mostly geared towards providing social services, resolving conflicts among communities and intermediating with the authorities for development works. Communities tend keep their distance from the few organisations and individuals involved in conservation, mostly, for fear of upsetting the status quo; the premise being, better the devil you know than one you don't. These organisations/individuals do advocacy work, mainly to spread awareness about conservation, publicise the activities of the timber Mafia and, in rare cases, institute court cases against it.

Community Participation

The communities expressed no interest in being involved in natural resource management. The older people expressed a desire for the restoration of rights instituted by the British and that they should be implemented honestly – in other words, they wanted good governance. The extent of their potential involvement was limited to oversight in the issue of permits and enforcement of fines and penalties. They asked for government support in promoting cottage industry, silkworm production, poultry farming, dairy farming and bee keeping in the area. A critical need was subsidised fuelwood and gas cylinders at subsidised rates.

Wildlife Department Perspective

Relations between the Wildlife Department the Forest Department are extremely confrontational on matters of jurisdiction (registration of cases for cutting trees) and on giving communities their subsistence rights (Forest Department is in favour while the Wildlife Department resists it). Such hostility extends to their relations and perceptions of communities as well. The instance of cases against communities (mostly against women for fuel and fodder collection) was cited. In addition, department staff is averse to involving communities, citing ethnic and caste affiliations which would make transparent governance difficult. They are in favor of making the restrictions even more stringent provided alternative sources of fuel and fodder can be ensured.

Gender Issues

Women take care of the children, cook, clean, washing, stitch clothes, collect fuelwood, cut grass, fetch water, care for the livestock and assist their menfolk in farmingactivities. They have few decision making powers, being consulted mostly on matrimonial issues. A girl has to accept her parents' decision in the choice of a marriage partner. This traditional male domination can only be countered with education, but this is an area with extremely high illiteracy levels.

Women realize their activities are a threat to the forests but in the absence of fuel and fodder substitutes, there is not much they can do. However, they feel the establishment of the national park has aggravated matters. They feel increasingly threatened by wild animals – both personally and to their livestock. Their access to fuelwood and grass is being increasingly restricted, which gives rise to open confrontations. Wildlife staff are prone to excessive use of authority, with incidents of verbal abuse and physical manhandling on the rise. This lack of sensitivity is partly due to the staff being recruited externally. In general, women are not -- or choose not to be – conversant with park rules. In any case, the need for fuel and fodder is much too vital for such rules to matter. By the same token, biodiversity and its management has no meaning for them.

Women are well disposed towards tourists, are in infrequent contact with them and perceive them as a welcome source of income

4. Conclusion

The experience in Ayubia National Park is characteristic of the non-participatory management systems prevailing in most protected areas in Pakistan. These systems are rooted in colonial traditions of governance, which effectively created a divide between communities and their natural heritage. The British appropriated large tracts of forests. Where they permitted private or communal ownership (guzaras), the control and management of such lands continued to reside with them. A precedence was thus created for lack of community involvement. Post independence, the hitherto efficient management systems began to disintegrate, as institutional and financial incentives became increasingly perverse.

Interest in conservation surfaced in the mid-sixties, instigated through global efforts and endorsed in various international conventions. However, the management of protected areas continued to follow traditional principles, reflecting their convergence with a conservative and exclusionist global ethic. The outcome is that communities have become increasingly alienated. As the pressure of population increases, development continues apace and people lose their roots, this alienation is likely to manifest itself in accelerated degradation. All the evidence points in this direction, designation of protected areas notwithstanding.

The solution lies in policy, institutional and regulatory reform which first gives people well defined entitlements to their heritage and then makes them active players in its planning and management. Essentially, the issue is one of recognizing peoples' rights, dignity and culture and giving them the requisite space to exercise these rights. It is only in this sense that participatory and sustainable conservation of natural resources has any meaning.

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Annex - 1

Group Questionnaire

(The groups should be from contiguous, non-overlapping areas)

1. Designation of protected area/national park

1.1 Why was the area designated as a protected area (valuable species, trees and plants and generally high biodiversity, ecotourism, others)

1.2 Were the communities consulted in this decision.

1.3 What are the management implications (induction of the Wildlife Department, donor agencies, NGOs)

2. Conservation value and threats

2.1 What are the different category of forests within and adjacent to the protected area/national park (reserve, protected, guzara)

- 2.1.1 Distribution of forests within these three categories
- 2.1.2 Within guzara forests, the distribution of malkiyat and shamlaat lands

2.2 Who benefits from the forests (communities, loggers (timber mafia), tourists, forest/wildlife department, any others)

2.3 List species of timber products used for production and consumption (timber, fuelwood)

- 2.3.1 How many of these species are threatened or extinct.
- 2.3.2 Have you observed any change in the composition, size and density of forest stands
  - Inside the protected area/national park
  - Outside the protected area/national park

2.4 List species of non-timber products used for production and consumption (fodder, honey, herbals etc.)

- 2.4.1 How many of these species are threatened or extinct

2.5 List species of wildlife and plants that have amenity value (for ecotourism)

- 2.5.1 How many of these species are threatened or extinct

2.6 Which group has caused most harm to the environment (timber and non-timber products, plants and animals)

- 2.6.1 Communities. How (household needs, prices, land clearance)
- 2.6.2 Timber Mafia. How (prices)
- 2.6.3 Tourists. How (pollution, consumption of fuelwood)
- 2.6.4 Forest Department (collusion with the mafia and communities)
- 2.6.5 Private Sector (Hotels, other infrastructure)
- 2.6.6 Returning migrants with resources (household construction, land purchase)
- 2.6.7 Others (development – roads, infrastructure)

3. Indigenous people

Demographic Characteristics

3.1 How many settlements are there within the national park
- 3.1.1 How many households are there in each settlement
- 3.1.2 Have these settlements increased over time. How?
  - Expansion of existing villages
  - Establishment of new villages

3.2 How many settlements are there adjoining the national park
- 3.2.1 How many households are there in each settlement
- 3.2.2 Have these settlements increased over time. How?
  - Expansion of existing villages
  - Establishment of new villages

Ethnic Features

3.3 What are the various ethnic groups/castes in the area
- 3.3.1 What is their numerical distribution
- 3.3.2 Are such groups/castes defined by occupation. If so, explain

Economic Aspects

3.4 What are the major occupations of the communities (farming, livestock raising, tourism related services, down-country employment)
- 3.4.1 Has there been any change in occupational patterns over time? If so, what has caused them?

3.5 Has dependence on forest resources (timber, fuelwood, non-timber products, fodder) increased over time. If so, why? (growing population, resource depletion on own lands, fragmentation of own lands, inability of government to provide alternatives)

Tenure Rights

3.6 What are the rights of communities to forest resources within the protected area (owners, rightholders, concessionists, non-owners, graziers).
- 3.6.1 Has there been any change in the nature of these rights over time (distinction between indigenous residents and new settlers). Please explain.

Political Representation

3.7 What is the prevailing political system. Have there been any changes in this system over time. What are they?
- 3.7.1 How well have political representatives served the communities? (extracting concessions, securing rights, facilities, ensuring local development)

Gender Considerations

3.8 What role do women play in the household – primary occupations.
- 3.8.1 Do they have any decision making powers. If so, please explain.
- 3.8.2 How do they interact with the environment (collecting fodder, grazing, medicinal plants)

4. Resource Management

4.1 Were there in the past traditional systems of managing forests and utilizing its resources. What are/were these systems?
- 4.1.1 Were environmental considerations a part of such management. In what way (conservation and sustainable resource use)

4.2 What has replaced the traditional systems of forest management. Since when
- 4.2.1 Does the forest department approach promote conservation and sustainable use of forest resources. Why or why not
- 4.2.2 How has FD management affected the communities (difficulties in getting entitlements/permits, fines and penalties unfairly applied, bribing of officials)
- 4.2.3 How has the FD management approach affected the forests (violation of laws, illegal cutting)

Protected Areas Management

4.3 Does the community perceive any benefits from the creation of protected areas. What are they
- 4.3.1 Has the management approach changed as a result of declaring the area a protected area/national park. How
- 4.3.2 What is the mandate of the wildlife department. How does it implement its mandate.
- 4.3.3 Is the approach effective in conserving biodiversity. Why or why not
- 4.3.4 How have the communities been affected by the activities of the wildlife department

4.4 Are there any community based organisations in the area?
- 4.4.1 What do they do
- 4.4.2 Do they have a potential role in protected areas management.
- 4.4.3 How can they implement this role most effectively
- 4.4.4 How should the forestry and wildlife laws be amended to facilitate community participation
- 4.4.5 Are there any other support measures needed from the government, from NGOs and from the private sector

SDPI is an independent non-profit research Institute
on Sustainable development

Mailing Address: PO Box 2342, Islamabad Pakistan

Street Address: 3rd Floor, Taimoor Chamber, 10-D West,
Fazal-ul-Haq Road, Blue Area, Islamabad.

Telephone: +(92-51) 2277146
2278134 2278136 2270674-6

Fax: +(92-51) 2278135

URL: www.sdpi.org e-mail: main@sdpi.org