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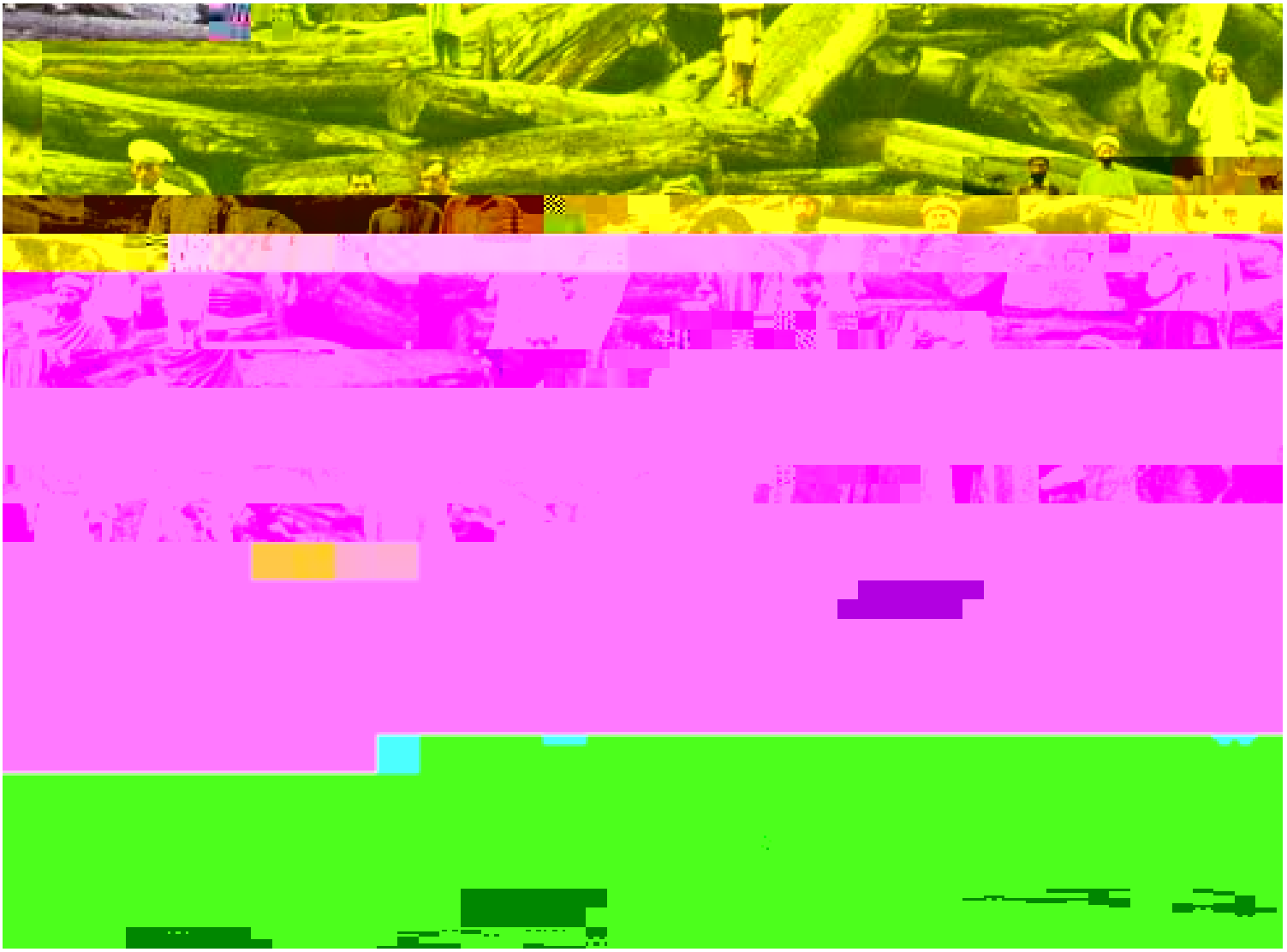

Final Report

Resource Rights, Sustainable Livelihoods, Environmental Security and Conflict Mitigation in South Asia

Contents

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The Sustainable Development Policy Institute (SDPI), an IUCN member in Islamabad, Pakistan, and an independent, public interest think tank that provides advice to public, private and voluntary organisations and undertakes policy-oriented research and advocacy. SDPI prepared the Pakistan country study;

Vasundhara, a non-governmental, not-for-profit organisation, working primarily in Orissa with natural resources management focused on sustainable rural livelihoods, particularly in the forestry sector, trying to improve community-State collaboration and facilitate policy changes to promote sustainable community-based forest management systems. Vasundhara prepared the India country study.

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Photo: North-West Frontier Province, Pakistan. Sungi Development Foundation, Abbottabad, Pakistan.

Livelihoods, Security and Conflict

OVERVIEW

Patricia Moore

LIVELIHOODS, SECURITY AND CONFLICT: AN OVERVIEW

Accepting the 2006 Nobel Peace Prize, laureate Muhammad Yunus said: “Poverty is a threat to peace. The frustrations, hostility and anger generated by abject poverty cannot sustain peace in any society.”[1]

This year’s Nobel Peace Prize afforded global recognition to a concept that has evolved over the past quarter century, focusing the definition of ‘security’ on human security rather than the security of the

instability at the state level.[9] One examination of conflict suggests that environmental degradation triggers conflict if social fault lines can be manipulated in the struggle for power, and that violence often results from the combination of a weak state, environmental discrimination and a pre-existing history of conflict.[10] This proposition is borne out by the four country studies that follow.

The late 20th century debate over the links between environment and security produced a substantial body of theoretical work and case studies, most of them from a developed world perspective. Considerable research focused on conflict as a result of competition for scarce environmental resources and on the characteristics of competing groups.[11]

The research making the links between environment and security has been thoroughly critiqued[12] and there is now theoretical and policy consensus that the links do exist.[13] A series of case studies on environment, security and sustainable development in South Asia, involving all of the countries taking part in this study and published in 2003, broadened the environment/security debate beyond the original focus on resource scarcity and degradation, linking security directly to livelihoods.[14] Drawing lessons from the case studies, the 2003 review concluded that the key to understanding the link between environment and security is not variables like scarcity or war, but more distantly related issues of institutions, institutional failure, and governance.[15] Equally important from a policy perspective is the conclusion that the ultimate effect of human insecurity and environmental degradation tends to be political instability,[16] which in turn sows the seeds for insecurity at the nation state level.

The four country studies presented here support the conclusions of the 2003 study. They indicate that for the natural resource-dependent poor, ‘scarcity’ of resources—the trigger for conflict posited in the environment and security liteTcp, ϕ(ɑ)8(d)-4 0lot ayR4 en T*-0.0015 Tc0.00EtO.8(o.mp)6.-1.1(, ‘skc15 5(r)7.-0.-0.0010.004 D

Livelihoods and Security,[18] an examination of natural and human-induced processes that lead to scarcity and vulnerability, their impact on livelihood security, and the potential for non-violent adaptation to them.

Security literature had looked at the environment/security link in basically two ways: the effects of war on the environment and natural resources; and the ways in which resource scarcity and environmental degradation lead to insecurity and violence. Both of these approaches are environment-focused rather than human-focused. *Conserving the Peace* demonstrated the human-centred links among natural resources, livelihood security and conflict, and posited that livelihoods are the "missing link between poverty, environmental degradation and conflict."[19] *Conserving the Peace* identifies five scenarios under which loss of livelihood security leads to or aggravates conflict. Four of those scenarios are characterised by inequitable access to natural resources and unsustainable or incompatible use that leads to scarcity and vulnerability.[20]

The studies presented here examine an underlying issue implicit in each of those scenarios—the existence and quality of rights to natural resources and the role of resource rights in sustaining livelihoods and mitigating conflict. What is the effect on security when communities have no rights or only 'soft' rights to the natural resources on which their livelihoods depend? *Conserving the Peace* cites the observation that natural resources are often located in areas where property rights are "undefined, unenforced, or contested."[21] The South Asian overview in the same volume notes that land tenure and poverty are clearly interrelated in north-western Pakistan and that efforts to alleviate poverty will be only marginally successful unless they address the issue of property rights.[22] A recent assessment of forests and rural livelihoods lists greater and more secure access to resources as the first of two opportunities for government action to promote livelihood security and notes that there are surprisingly few studies documenting the magnitude of the benefits (tu2ec.7e.0ht(c.[23] 80.9(t.8ec.7e.0ht(c.80)-53t)D)-4.6(r)J81TD-0.00

issue—it's broader than that. This study focuses on one element of the complexity—resource rights—at the level closest to the resources as well as to the groups and communities whose security depends on them, to contribute a rights perspective to meeting the environment/livelihood/security challenge.

THE COUNTRY STUDIES

The studies which follow address issues of resource rights, livelihood security and conflict in four South Asian countries: Bangladesh, India, Nepal and Pakistan. They focus on two ecosystem types—forests and wetlands—that are characterised by conflicted resource rights regimes the world over, not only in South Asia. The studies in Bangladesh and Nepal were carried out in wetland sites. The studies in India and Pakistan focus on forest resources.

Bangladesh

The vast majority of Bangladesh's population depends for its survival on wetlands which cover more than half of the country's geographical area. Tanguar Haor, the study area in Bangladesh, is a wetland characterised by a large, bowl-shaped tectonic depression that becomes an expansive body of water in the monsoon season, receding in the dry season. Most economic activity carried out in the area, including commercial fishing, trade in fuel wood, hunting and trapping waterfowl, the harvesting and sale of grasses ay1.15 Te ssea9ng, 1.1,9.9(a)s boda(s)-3.6( )e22ohe weaesesmec3.6( )e22ohe-3.6(e);3.4anre( )e22ohe

India

All over India, forests have been reallocated away from local communities, increasing social conflict and transforming the resource.[26] This is particularly true in the study site—Koraput District in the state of Orissa—which, under the constitution, is a Scheduled Area designated to provide protection and certain advantages for the Scheduled Tribes that make up the majority of its inhabitants.

A *zamindari* system similar to the one that operated in what is now Bangladesh functioned in the area that is Koraput today. Although a leasing system did not develop for forest resources in Koraput as it did for water and fisheries resources in Tanguar Haor, the pattern of abuses of rights is similar. Non-tribal individuals use tribal members as a front to acquire land designated exclusively for tribals. Private mortgages, which are technically illegal but are a widespread practice, effective7 93.7.4(dia)7.4(,)-183y4(4.2(an.2(e)7

time, it opened up an avenue for corruption, with villagers reported to have paid bribes to be able to continue cultivation.

The central government's policy of joint forest management (JFM), while not statutory, is intended to enable communities living in and near forests to participate in forest management and share in the benefits, through partnerships with state forest departments. Orissa is one of 22 states in which JFM is being implemented. An ongoing, 10-year village-based initiative in the study area to sustainably manage an area of adjoining reserved forest has led to a well-stocked, regenerating forest in the protected patch. Because the initiative is being carried out on government land, it is technically illegal. Nevertheless, the state forest department approached the community about converting its successful

by similar complaints related to compensation for land appropriated to create the KTWR in the 1970s and remain largely unresolved.

Estimates of the number of wetland-dependent households in the study area vary from 57 per cent to as much as 88 per cent. Whatever estimate is accepted, it is clear that households in the study area rely significantly on the wetland to sustain their livelihoods. These wetland-dependent communities suffer directly as a result of access restrictions imposed on rivers and other wetland resources within the reserve and in the barrage area, while unregulated access permitted in communal land puts heavy pressure on available resources.

Property rights in the study area include government land directly controlled by line agencies, including the KTWR and buffer zone, government land under community management, and communal land as well as land under private ownership. Although Nepal has a long, documented history of customary communal land and resource tenure and management, residents of the study area were unable to recount any customary norms for managing and using natural resources in the study area. They refer to open access to communal land and waters for grazing and fishing. Because livestock and fish do not remain in one location, it appears that individuals and communities did not need to establish rights to use resources in one particular area.

Forty years ago, before the Koshi Barrage and the KTWR were established, people living in the area enjoyed unregulated access to fish, thatch grass and other wetland resources. Forty years later, access to these resources is regulated and restricted. Although local communities and individuals

Each component of this chronic conflict that impacts the livelihoods of local inhabitants is fundamentally an issue of rights—rights to land and resources that are either denied or restricted. The structural sources of this insecurity and conflict are the legal regimes that allocate rights and determine the degree to which these rights are secure. Particularly significant for the wetland-dependent communities in the Koshi Tappu area is the fact that there is no wetlands-specific legislation and no basis for communal rights in wetlands as such. Sectoral laws do provide for communal rights to use water and forest products, and to share in the management of protected areas and the benefits derived from them. There are, however, .2(e)9m6(el,)-17(4(eEc.4(s)-117(.2.4(s)-112(t)-10.6(e)4(an)(e
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The royalty, however, is paid to administrative officials who are responsible for distributing the funds among rightsholders. Much of the tension and conflict surrounding the issue of royalties and entitlements today dates back to that era.

One of the greatest difficulties in securing the resource rights of communities is the fact that the statutory regime governing natural resources focuses on the management and control of the resource itself rather than the rights of those who depend on the resource for their livelihoods. While welcome provisions have been made in more recent legislation governing forests in the province to include communities in both management and decision-making, these rights are not guaranteed by law and are granted at the discretion of government officials.

Communities that are entitled to receive royalties are routinely manipulated and cheated by timber contractors, forest officials and in some cases even their own tribal elders all working in collusion. An even greater cause for concern is the fact that many communities with customary claims in forest

during the colonial period in a substantial percentage of the local population of the study area, they were not documented which meant that they were subsequently ignored and/or overridden and

dams in India have altered the flows of water to the downstream wetland in Bangladesh. In Nepal, property rights were appropriated, in most cases without compensation, to acquire land subsequently leased to the government of India under a bilateral agreement for construction of a barrage to divert water for irrigation downstream to India.

There is voluminous literature examining property rights issues in the developing world, particularly in Africa, with some focus on Asia. Early research and commentary looked primarily at the legal aspects of property and resource rights. Many contemporary studies focus on the economic dimensions of property and resource rights and their influence on conflict. Much of this work examines the consequences rather than the causes of open access to resources—the so-called 'tragedy of the commons'—and of how property rights regimes can degenerate into open access. A recent study proposes that understanding property right failures in the developing world must look beyond conventional legal and economic theories of the evolution of property rights to how property rights are enforced.[27] While this study looks at open access primarily in terms of land, many of its conclusions are relevant in the context of access to resources as well and largely reflect the findings of the four South Asia studies reported here. Property rights analysis, like environment and security analysis, highlights failures of governance.

Before the emergence of modern nation states, most societies evolved customary law and norms to govern property and resource rights. Erosion of customary law and of the societies which developed it has often been the result of a state decision not to recognise it, or state failure to support it where it is recognised, or both. The breakdown of customary law is at the root of many property rights failures in the developing world today.[28]

The suppression of customary resource rights norms is an important contributing factor in civil disturbance and conflict in three of the four study sites reported on here. Only in the Nepal study site does open access appear to have functioned without creating a need to establish customary property and resource rights norms. The greater the divergence between statutory and customary law, the more likely it is that attempts to enforce statutory law will lead to 'open access' in the form of encroachments and other 'illegal' actions as local people continue to engage in traditional activities in support of their livelihoods.[29] This is clearly demonstrated in the study sites in both India and Nepal, where local people endure repeated cycles of eviction and reoccupation of land where the resources their livelihoods depend on are to be found. Long-term conflict results when poor traditional occupiers are dispossessed but statutory enforcement mechanisms are incapable of maintaining consistent implementation of statutory prohibitions.[30]

In customary law systems, property rights are both a result and a cause of resource conflicts. They are not so much entitlements created by rational market forces as they are "processes and products of constant negotiation, contestation, and compromise".[31] The successful community-driven initiative to manage a patch of forest in the India study site, with its own dynamic set of rules for using forest resources, illustrates this point.

In economic terms, the process of allocating resource and property rights is likely to create its own externalities in the form of social conflict,[32] particularly where customary resource governance has

Simplistic application of the developed world's legal categories to the complex and fluctuating interrelationships that characterise resource rights in the developing world is a formula with inherent potential for conflict.[36] In a world where many developing countries are striving to reduce poverty and meet the Millennium Development Goals, the legal and economic implications of criminalising activities that support the livelihoods of a significant percentage of a country's population deserve further examination.

Livelihoods, Security and Conflict

TANGUAR HAOR, BANGLADESH

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ABBREVIATIONS

BCAS	Bangladesh Centre for Advanced Studies
IUCN	The World Conservation Union
SAT Act	East Bengal State Acquisition and Tenancy Act
MoEF	Ministry of Environment and Forests
MoL	Ministry of Land
UNDP	United Nations Development Programme

GLOSSARY

baor	oxbow lake or wetland formed when a river changes its course and a section of it is cut off by siltation. A *baor* is more stagnant than a beel and generally has water year-round.
beel	marshy, saucer-shaped depression, formed by erosion, that floods during the wet season
haor	bowl-shaped depression located behind the natural levee of a river and/or between the natural levees of rivers, comprising a number of beels that merge into a large water body during the monsoon
ijaradar	lessee or leaseholder
jalkar	water bodies attached to the zamindari estates; *jalkar* rights covered non-navigable rivers, beels, haors, ponds and tanks
jalmahal	any water body, natural or artificial, open or closed, flowing or stagnant where activities for growing fish or for conservation, development, demonstration, breeding, exploitation of fish or living aquatic organisms are undertaken; in Bangladesh, fisheries resources are administratively defined as jalmahals
kanda	raised ground; old natural levees
khas	literally, ‘special’; refers to government property, and used with reference to land
taka	Bangladeshi currency (1 US dollar = 58 taka approximately)
tank	large pond
zamindar	landowner; rent receiver

INTRODUCTION

The vast majority of Bangladesh's population depends for its survival on wetlands which cover more than half of the country's geographical area. In some parts of the country, these wetlands occur in the form of a haor, a large, bowl-shaped tectonic depression that becomes an expansive body of water in the monsoon season and recedes in the dry season (Alam and Hossain, undated). This study focuses on one such area, the Tanguar Haor, and on the communities who derive their livelihoods from the resources of this wetland.

Land and resource rights in Tanguar Haor are unclear and undocumented, with a history of conflict over resource use. The marshes here were once leased out for fisheries resource extraction, a practice that was officially discontinued when management of the Tanguar Haor was handed over to the Ministry of Environment and Forests (MoEF) by the Ministry of Land (MoL) in February 2001.

In addition to ambiguous resource rights regimes and uncertain land tenure, major issues of concern at Tanguar Haor include wetland biodiversity depletion owing to the over-exploitation of flora and fauna; the degradation of swamp forest and reed lands; ineffective management leading to poor socio-econnT3.8(o.8(r7.7(nt (c)(c)8(i)e3( )ef)01t (c)(32 Toiyn8e011 Tc0.io)7.9)-3.8(o)1.4(c)-3.8(i)4.8(t (c)(9(thn8e011 TcTa)-)

DESCRIPTION OF THE STUDY AREA

Recognised as Bangladesh's most important 'mother fishery', Tanguar Haor was selected as the study site not only because the area has a history of conflict over resource rights, but also because the wetland is both commercially important and significant for biodiversity conservation.

One of the few remaining semi-natural haors in the country—semi-natural because some degree of human intervention has taken place—Tanguar Haor is the best representative of a wetland ecosystem in Bangladesh, with immense value in terms of flood water retention as a source of irrigation water and for groundwater recharging. Home to of the last patches of freshwater swamp forest in Bangladesh, water quality at Tanguar is relatively good, allowing the area to serve as a habitat for many wetland species. By Bangladeshi standards, the haor possesses great scenic beauty and high wilderness value, despite being frequented by fishers. Local communities lead a traditional way of life, in terms of livelihood opportunities and access to modern-day amenities. There are no roads or electricity in the area.

Covering an area of 9,727 hectares, the site is located in the north-east of the country at 25 06' to 25 11' N and 91 01' to 91 06' E, within the territorial jurisdiction of the Sunamganj district of Sylhet division (Giesen and Rashid, 1997). Of the total area of Tanguar Hoar, 2,800 hectares, or approximately 29 per cent is wetland (Talukdar, undated). One third of the area falls under the jurisdiction of the Tahirpur thana (police station) and the remainder under Dharmapasha thana, both in Sunamganj district.

Bangshikunda, who retained control until 1920, when stewardship of the haor was transferred to the zamindars of Gouripur, Mymensingh.[1] In the late 19th and early 20th century, zamindars in Tanguar

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RESOURCE RIGHTS

Until recently, resource rights in Tanguar Haor were governed by a legal regime based on and rooted in colonial systems of management and control. Administrative arrangements in the area, in particular the jalmahal leasing system, were also first devised in that era. Today, the haor's rich fisheries are no longer leased out for commercial exploitation. Instead, the haor is to be managed as a protected area. The specific details of resource rights that will be allowed in this area are still under consideration by the authorities.

CUSTOMARY RIGHTS

There is evidence to suggest the existence in Tanguar Haor of customary rights in land, water and fish, pre-dating the British colonial period. A history of Bengal up to the time of Mughal rule notes that, at least as far back as the 8th century, land grants included an entitlement to the waters on that land

just tenants-at-will of the zamindars (Ahmed, undated). A series of regulations (Regulation XXXV of 1795, Regulation VII of 1799, Regulation V of 1812 and Regulation VIII of 1819) enabled zamindars to raise rents, punish those who could not pay, and lease out their land for any period (Islam, undated [b]).

Zamindars generally delegated revenue collection to middleman-leaseholders (ijaradars) who in turn collected their own rents. W08a(bi9963 -1a946dX)-10(s)r51456 TD0nI14tdX

Fisheries

During most of the colonial period, fisheries were in the hands of zamindars who exercised control over water bodies that formed part of their estates (Pokrant and Rashid, undated [b]). By the beginning of the 20th century, the government had allocated to private persons fishing rights in all but the largest rivers. This was done primarily by including fishing rights in the 'assets' on which the permanent settlement of estates was based, but in some cases the fishery itself was a separate 'estate' (Hunter et al., 1840–1900). Following Permanent Settlement, with some exceptions such as navigable rivers and certain forested regions, fishers no longer had unrestricted access to most water

In the early post-colonial period, a popular political slogan in support of the fishing poor was '*jal jar, jala tar*', meaning 'the wetland should belong to the one who uses the net'. After 1950, the MoL, through the district administration, administered leasing arrangements. Local government council members had virtually no role to play in the management and monitoring of lease agreements and were generally unaware of their terms and conditions. As a result, leaseholders allegedly became involved in activities not specified in the agreements. Because of their influence in local and regional politics as well as the economy, such activities would generally go unchallenged.

During the late 1960s, the board of revenue of the then East Pakistan provincial government attempted to encourage fishers to form and register cooperatives to enable them to bid for leases as a group. This policy, although well-intentioned, did little to protect the rights of fishers who were for the most part too poor to participate in such a system.

In the mid-1970s, the government of newly independent Bangladesh decided to restrict the auctioning of jalmahal leases to registered fishers' cooperative societies. This new restriction resulted in the formation of cooperative societies that were in fact a front for leaseholders. While fishers were nominally in charge, traditional non-fishing ijaradars retained actual control. Such sub-leases were completely unofficial and the process had to be carried out under the table.

By 1978, the government only awarded leases to fisher's cooperatives. In that year the MoL, through the district administration, awarded a three-year lease in Tanguar Haor to Joynal Abedin on behalf of Inland Fisheries Ltd., a fisher's association. On paper, Joynal Abedin, known locally as the '*haurer raja*' or 'king of the haor', was the manager of Inland Fisheries as well as a member of Parliament from the political party in power at that time. Inland Fisheries' lease for Tanguar Haor was renewed in the name of Joynal Abedin until 1996, when it was renewed in the name of Nazir Hussain, also a member of Parliament. The lease in the name of Nazir Hussain was renewed until 2001, when the system was discontinued and leases cancelled.

Under both the zamindari system and the leasing system, subsistence fishers did not own any resources and were instead either serfs or labourers, employed to harvest resources belonging to others.

STATUTORY RIGHTS SINCE 1950

The Constitution of the People's Republic of Bangladesh 1972 recognises three types of ownership rights: state, cooperative and private (article 13). Under state ownership, the government is constitutionally obliged to manage public resources on behalf of the people "through the creation of an efficient and dynamic nationalised public sector embracing the key sectors of the economy". Cooperative ownership is defined as ownership by cooperatives on behalf of their members within the limits prescribed by law, while private ownersh

As an ecologically critical area, Tanguar Haor now has a core conservation zone which encompasses primarily khas lands with small private landholdings on its fringes. The MoEF is currently managing the core conservation zone. The last lease for Tanguar Haor, granted in 2000, had allowed local people to extract natural resources from the haor for domestic use (including drawing water for cooking and washing) and to use the haor waters for navigation. The general ban on resource harvesting imposed by the MoEF means that local communities are no longer allowed to harvest haor

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Box 3: Arbitrary restrictions and levies imposed on villagers in Tanguar Haor

Surveys carried out for this study revealed that conflict in Tanguar Haor up until 2003 most commonly involved local residents and the guards employed by the leaseholder. These guards unleashed a reign of terror on local residents. Nearly every village in and around the haor reported incidents of brutal assault, shooting, illegal detention by the leaseholder's guards, and other maltreatment (field interviews, 2003). Villagers also reported that the guards snatched fishing nets and set them ablaze.

The leaseholder defended these actions by claiming that villagers engaged in unlawful activities, were 'stealing' haor resources and deserved to be punished. But many of the restrictions and levies imposed by the leaseholder were in fact illegal because a standard jalmahal lease agreement that

After the monsoon passes, water in the haor begins to recede naturally, leaving behind fertile land that is suited to paddy cultivation. Instead of allowing this to occur, the leaseholder would keep water levels high by erecting temporary earth dams in order to promote fish growth in the beels. As the dry season progressed, the beels were drained to expose the fish, thereby prolonging the period during which commercial extraction remained viable. Towards the end of the dry season, before the monsoon began in earnest, flooding was once again carried out in the beels to promote re-stocking ahead of commercial extraction activities.

For local residents depending on rice cultivation, this interfered with their planting cycle which follows the seasons. Keeping water levels high as the monsoon recedes delayed plantation, while the draining of beels in the winter months deprived rice growers of water for irrigation, and forced them to incur the additional expense of pumping water into their paddy fields. Commencing flooding of the haor before the monsoon, meanwhile, flooded land that was used for cultivation. As a result, the period available for cultivation was curtailed both at 7.3(riyt, the)8( )]T804nal-0.0017 Tc0.0038.4(*(. C93(nal-0)1.h.yt, th)6.7(

guards. Local netters and traders were also required to pay a hefty lump sum for the right to trap birds.

These restrictions enraged locals not only because they were illegal. The jalmahal lease arrangement did not award the leaseholder control over haor resources. But to add insult to injury, the leaseholder's associates and employees were permitted to use the same resources that were forbidden to local villagers. Seasonal fishermen hired by the leaseholder were free to harvest grasses and reeds in order to thatch their own temporary homes or make charcoal for their hookahs. Until the end of 2003, hunting parties were known to bag dozens and even hundreds of birds, upon payment of a fee of 3,000–10,000 taka per night to the leaseholder. Meanwhile, in the village of Rangchi, located in western Tanguar, the last remaining patch of hijal forest was decimated by the leaseholder. In 1993, the leaseholder ordered the lopping of all these trees in a single night without consulting

for the administrative authorities to enforce the leasing ban on the ground, leading to the exit of the leaseholder from the area in December 2003.

Today, Tanguar haor is to be managed and developed as a conservation area. No specific plans have yet been implemented in this connection. The MoEF has proposed the establishment of a ‘sustainable use zone’ where local fishermen will be allowed to fish on a subsistence level. At present, the authorities permit subsistence fishing in the area, and a transition from the leasing system to a community-based management system is under active consideration by the government. Until such plans are approved and implemented, the rights and entitlements of local communities remain uncertain, and the livelihoods of the people of Tanguar Haor hang in the balance.

SYNTHESIS AND CONCLUSIONS

The people of Tanguar Haor live within in a diverse ecosystem rich in natural resources and depend

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Livelihoods, Security and Conflict

ORISSA, INDIA

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ABBREVIATIONS

CSD	Campaign for Survival and Dignity
FAO	Food and Agriculture Organization of the United Nations
FCA	Forest Conservation Act
GOI	Government of India
GOO	Government of Orissa
JFM	joint forest management
MELA	Madras Estates Land Act
MoEF	Ministry of Environment and Forests
NGO	non-governmental organisation
OFA	Orissa Forest Act
OGLSA	Orissa Government Land Settlement Act
OPLE	Orissa Prevention of Land Encroachment Act
OSATIP Regulation	Orissa Scheduled Areas Transfer of Immovable Property (by Scheduled Tribes) Regulation
PESA	Panchayats (Extension to Scheduled Areas) Act
TERI	Tata Energy Research Institute

GLOSSARY

beda	category of agricultural land; used for rice cultivation
bhata	medium quality agricultural land; used for growing millets, pulses and upland paddy
block	administrative sub-unit, demarcated for the purpose of development
dongar	hills; in the study area, the term is also used to describe an area used for upland cultivation
gochar	pasture land
Gram Panchayat	local rural self-government unit, usually consisting of a few villages
Gram Sabha	general body of Gram Panchayats in rural areas of India; unit for local self-government
jhola	paddy field created in a stream bed; term used mainly in Koraput district
Palli Sabha	palli ‘village’ + sabha ‘assembly’; general body of the village, consisting of all eligible voters
Panchayat	local unit for rural self-government
patta	document of land title, denoting ownership or lease
podu	shifting cultivation
quintal	unit of weight, equivalent to 100 kilograms
revenue village	legal entity defined by revenue laws (in Orissa, primarily by the Orissa Survey and Settlement Act 1958)
ryot	

INTRODUCTION

Environmental security emerged in the 1990s as an important concern for the developed world. Comparative studies on the subject provided the theoretical building blocks for the environmental security paradigm. Homer-Dixon's argument rests on the notion that environmental scarcity is caused by three factors: degradation (supply-induced), increased demand (demand-induced) and unequal resource distribution (Homer-Dixon, 1999). Baechler develops a typology of conflict and finds that environmental degradation triggers conflict if social fault lines can be manipulated in the struggle for power, and that violence often results from the combination of a weak state, environmental discrimination and a pre-existing history of conflict (Baechler, 1998). Both studies focus on the neo-Malthusian idea of linkages between environmental degradation, environmental scarcity and conflict.

The environmental security paradigm has been the focus of criticism from a variety of perspectives. Some note that the causal link between scarcity and conflict is exaggerated (Peluso and Watts,

INDIA

DESCRIPTION OF THE STUDY AREA

Nestled in the hills of the Eastern Ghats, Koraput district is located in the south of the Indian state of Orissa. Until 1992, it was one of the largest districts in the country. In that year, it was subdivided into four new districts: Koraput, Malkangiri, Nowrangpur and Rayagada.

Today, Koraput district covers an area of 8,379 square kilometres. It is situated between 18º 10' and 20º 10' North, and 82º 10' and 83º 20' East, with altitudes ranging from 150 metres above mean sea level to 1,500 metres. The climate is warm and humid, with mean maximum and minimum temperatures of 30.6º Celsius and 17.03º Celsius, respectively. Each year, the district receives an average 1,521.8 millimetres of rain during 82 rainy days, with the monsoon occurring between the months of June and September.

The district is made up of two distinct topographical areas: (i) the hilly Koraput plateau at an average elevation of 1,000 metres, which falls in the Eastern Ghats agro-climatic zone, and (ii) the comparatively flat Jaypur area located in the South-Eastern Ghat zone. The area selected for this case study lies in the Koraput plateau, just north of Koraput town. The topography of the study area consists of low hills interspersed with valleys. The hills are mostly covered with natural vegetation and shifting cultivation fallows, much like the rest of the Koraput plateau. On average, the official net sown area covers 25 per cent of the total area of the district and is mostly concentrated in the South-Eastern Ghat zone. In the hill regions, cultivated areas cover as little as 10 per cent of the land.

Today, the district faces two major challenges: persistent and intractable poverty, especially among the Scheduled Castes and Scheduled Tribes (see annex), and large-scale ecological degradation. Solutions to both problems have been attempted by investing in development as well as ecological restoration, including programmes for horticulture and the plantation of forest species, watershed development and soil conservation.

Two large public-sector industries—Hindustan Aeronautics Limited (defence production) and the National Aluminium Company (bauxite mines and alumina factory)—operate in the district. Two railway lines, used mainly to transport minerals, cross the district. The reservoirs of two large dam projects for electricity generation and irrigation, the Kolab and the Machkund, are located in the Koraput plateau.

Despite this investment, the efforts by government agencies to mitigate poverty and reverse the degradation of natural resources have failed to have the desired effect. Almost all Scheduled Areas in central India have, or once had, good forests. These forested areas are rich in natural resources, yet the communities who reside here are among the poorest in the country. Koraput district represents the plight of Scheduled Areas throughout Orissa and, to a great extent, central India.

REVENUE VILLAGE OF MANGARA

In the heart of Koraput district, north of Koraput town, lies theh

joined by one Scheduled Caste family, Archita Domb. Over the next 50 years, the hamlets of

DEMOGRAPHICS

Koraput district, located in a Schedule V Area, is home to a population of 1,030,000, of whom nearly

Á Jhola

A paddy field that is created by diverting a stream and using the stream bed for cultivation is known as a jhola. These narrow fields are gradually extended sideways by cutting into the steep banks of a stream and constructing terraces. Existing gullies and ravines are also converted into terraced paddy fields by channelling streams, building bunds (including stone bunds) and levelling land. This terraced land is highly fertile and has the additional advantage of plentiful water supply.

Jholas are the most productive of all agricultural land in the study area. In jhola cultivation, flowing water passes through the fields. The run-off from perennial streams is often used to irrigate these narrow terraces during the summer and late winter, allowing more than one crop to be grown. Fertilised by the run-off from vegetated slopes, jholas are used to grow early and late varieties of rice.

Á *Beda*

Flat land used for the most common type of rice cultivation is known as beda. Such land is normally bunded. The average yield in beda land is normally half that of jhola land. Although not as productive as jholas, beda land has good fertility, soil moisture retention and water availability.

Á Bhata

Medium uplands are known as bhata. Such lands are mostly not bunded, have low water retention, and are less fertile than jhola and beda lands. Bhata areas are used to grow upland paddy, maize, *ragi* (finger millet, *Eleusine coracana*), and minor millets such as *suan* and *kangu*.

Á Dongar

Uplands, or dongar, make up nearly 80 per cent of all private land holdings in the village. These areas support the cultivation of *ragi* and minor millets such as *kangu* and *suan*; pulse crops such as *biri* (black gram, *Vigna mungo*) and *kandul* (pigeon pea, *Cajanus cajan L.*); and oil crops such as *alsi* (castor bean, *Ricinus communis L.*).

Á Podu

Shifting cultivation, know locally as podu, is carried out on sloping hillsides (see box 1). In the past, almost 90 per cent of families in Mangara carried out shifting cultivation on various patches, mostly located in forest areas. As of 2004, most of the shifting cultivation had been stopped by the forest department and just a few patches are still cultivated in this manner. Households in Mangara cultivate three such patches, two in the Bisipani Reserved Forest and one in the Malikurchi Reserved Forest. This practice is illegal, since shifting cultivation is not permitted in reserved forest.

Box 1: Shifting cultivation in Orissa

The term 'shifting cultivation' refers to two distinct practices. The first of these is also known as 'pioneer forest farming', where farmers slash and burn existing growth, cultivate the land and then abandon it. The other system, called 'long fallow cultivation' or 'forest fallows', is one where a particular piece of land is cultivated for some years, then abandoned for the period required to restore its fertility by natural vegetative growth and subsequently cultivated again.

The distinguishing feature of shifting cultivation is that neither organic fertilisers nor manure are used to retain soil fertility (FAO, 1995). A number of authors have shown that shifting cultivation practices in general are not ecologically destructive, and that they generally become problematic only in combination with other variables, including poorly designed government interventions (Conklin, 1954; Dove, 1993; Ramakrishnan, 1992; Ruthenberg, 1980; Sunderlin, 1997; Watters, 1960). The basis of sustainable shifting cultivation in its pure form is identical with that of true sustainable forestry. The biomass is allowed to recover to the level at which it will, after clearance, permit a new harvest as good as the previous one. Two elements are involved in the case of farming: the biomass itself, and

the action of growing trees in drawing on mineral resources unavailable for food crops, so that these can in turn be released into the soil (Brookfield, Potter and Byron, 1995).

The method of shifting cultivation traditionally employed by farmers in Orissa is long fallow cultivation. In recent years, however, the fallow period has decreased dramatically as a result of land scarcity, with consequent impacts on soil fertility. The village of Mangara is a good example of this process, where a shorter rotation cycle has meant that forests are not allowed sufficient time to regenerate.

Shifting cultivation as it is practised in Orissa has not been properly documented or analysed. No [redacted] shifting cultivation watershed, or to assess its other environmental impacts. Government policy on the issue has largely

Reserved forest

The hills next to Mangara village are classified as forest. In the past, much of this area was used for shifting cultivation. Today, almost all the forested areas have been converted to reserved forest and the villagers have been forced to discontinue shifting cultivation.

Reserved forests are legally under the control of the Orissa government's forest department and are not included in the area of a revenue village. In Mangara, the reserved forests of Bisipani and Malikurchi are located on the outskirts of the village. Shifting cultivation continues to take place in these forests despite the fact that the practice has been banned. Similarly, paddy fields exist in certain patches within the Bisipani Reserved Forest, although this is now considered to be encroachment under the law. In Khariguda, residents are involved in activities to protect and regenerate forests in the surrounding area (see box 2). But their dependence on shifting cultivation and forest products is much lower than that of other hamlets.

The non-recognition of rights over shifting cultivation areas during the Settlement and Survey operations ha j0.0038yu0.009-io Bca4(w)i4(rro)-. fo778.3(i)n.2(7) K8(ml)-6.4(o)rap(e ou)9[(.)-8catedi3. fo7i3fMato Thiaahve-5(a)7.rro4efor3ad iaiag 2(ia)6.4(a)-Ja.2(ia)yciaede-r

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forest that have evolved to meet practical needs and requirements. Breaking these rules invites punishment by the committee. As this is a self-initiated community forest protection and management effort, the rules are not statutory, have no legal validity, and are enforced by the committee and members of the community without intervention or support from the forest department.

The Khariguda committee's rules for forest protection include:

- No one may cut any green tree in the protected forest patch;
- A person who has an urgent need for small timber or wood must seek permission from the committee. If the committee approves, the person may take from the protected patch whatever has been approved;
- No one may carry any sharp tools inside the protected forest patch;
- No one may carry out podu (shifting) cultivation inside the protected forest patch;
- Anyone setting a fire inside the forest may incur a penalty of up to 5,000 rupees. Villagers carrying out shifting cultivation next to the boundary of the protected forest patch are responsible for protecting the forest from fire;
- Hunting wild animals inside the protected forest patch is not allowed;
- Anyone may collect dried twigs and leaves from the forest for their domestic needs;
- Anyone may collect tubers, fruit and other non-timber forest products as long as doing so does not damage the trees;
-

cultivation patches. The percentage of households depending on agriculture as a primary occupation has fallen from 48 per cent in 1958–59 to just 24 per cent in 2003 (Census of India, 1961). Simultaneously, the number of households depending on income from the sale of forest products (primarily charcoal and fuel wood) and wage labour has increased. Together, these activities now serve as the primary occupation for nearly 64 per cent of households (see table 4).

Today, 43 per cent of households state the collection and sale of forest products to be their primary occupation, with agriculture falling to second place, while 19 percent of households depend primarily on wage labour. Although most households no longer depend primarily on agriculture for their livelihood, farming is the single most important secondary occupation for nearly 40 per cent of households in Mangara. Wage labour also serves to supplement income, with nearly 21 per cent listing this activity as their secondary occupation, while forest product collection is the secondary occupation for a little over 7 per cent of households (see table 5). Other livelihood opportunities are insignificant despite the fact that large industrial establishments such as Hindustan Aeronautics Limited and the National Aluminium Company operate within 50 kilometres of the village.

A breakdown of primary occupations by hamlet shows clear differences across hamlets (see table 6). Forest product collection and sale is by far the most important source of livelihood in Dayanidhiguda, where 88 per cent of households list this activity as their primary occupation. Similarly, 72 per cent of residents in Talamangara and 44 per cent in Bhitarmangara depend primarily on forest products. In Khariguda, meanwhile, agriculture serves as the most important primary occupation for nearly 45 per cent of households.

Landownership is negatively correlated to dependence on shifting cultivation and forest product collection. Only 37 per cent of Paroja families depend on charcoal and fuel wood as their primary source of income, compared to nearly 95 per cent of Kondha families. Similarly, in Khariguda hamlet where residents own almost 58 per cent of the lowlands and 52 per cent of the uplands in the village, agriculture is the primary occupation among 52 per cent of households. Dependence on shifting cultivation is also lowest in Khariguda hamlet compared to the other four hamlets of Mangara.

Charcoal and fuel wood

Charcoal and fuel wood have become the most important source of livelihood in the study area. Residents collect these materials for sale in the nearby towns of Koraput and Jaypur, where charcoal and wood are used in hotels, roadside eateries (*dhabas*) and other commercial establishments as well as in middle-class homes.

Although the practice itself is not new, dependence on charcoal as a source of income has intensified in the recent years. Today, collecting wood for charcoal production serves as the primary occupation for nearly 44 per cent of households and the secondary occupation for another 8 per cent. But while dependence on these resources has grown, the availability of trees suitable for charcoal making has dwindled.

Charcoal making and fuel wood collection is physica

the felling and burning of larger trees. It is also illegal, and villagers regularly risk fines or even arrest at the hands of forest department personnel.

Other forest products

Local communities depend on forests and common lands to meet subsistence needs and generate income. Fruit, leaves and tubers collected from the forest supplement food supply, while nearly all material for construction is taken from forests and common lands. For Kondha and Paroja households, forest tubers form an important part of their diet, especially in times of scarcity. Villagers state that in the past they were able to earn a relatively decent income from non-timber forest products such as *amala*, *harida*, *bahada*, *kendu* (also known as '*tendu*', *Diospyros melanoxylon Roxb*.) leaves, *siali* (*Bauhinia vahlii*) leaves, *sikakai* (soap nut, *Acacia concinna*), *jafra* (annatto, *Bixa orellana*) seeds, *jamu koli* (Java plum, *Syzygium cumini*; also known as *jamun*) and mango.

Both food security and opportunities to earn additional income have suffered as forest resources have dwindled. This trend is confirmed by the participatory rural appraisal exercise carried out in Dayanidhiguda hamlet to determine the availability of forest products. The exercise showed that all

gochar. For most households, production from agriculture currently provides only a few months of food security each year. The principal crops grown are rice, minor millets and maize. Except for a few jhola patches, all land is cropped only once in the *kharif* season, during the June–October monsoons. Almost no chemical inputs are applied and mostly traditional varieties of food grains are grown.

Á Shifting cultivation

A traditional practice among the Kondha and Paroja tribes, shifting cultivation is carried out on forested hill slopes. The patches used are more or less fixed, and cultivation rotates between the same patches year after year.

During the months of March and April, trees and bushes are cut and burnt to clear slopes for cultivation. The land is again cleared in May–June, when new shoots are removed. After a shower or two of pre-monsoon rains, the debris and ashes are spread over the field. Hoeing and sowing takes place between June and July.

The same patch will be cultivated for two years in succession and then left fallow for four to 10 years, while farmers move to the next patch. Three to five such patches may be cultivated by the same household in rotation. During the fallow period, the forest regenerates and is subsequently cleared during the next cycle, providing nutrients for the crops.

In the past, almost 90 per cent of families in Mangara carried out shifting cultivation. The practice was not only an important source of food but also provided households with much-needed cash income. In 1982, most of the areas used for this purpose were included as part of the Bisipani Reserved Forest, where the forest department gradually put an end to shifting cultivation.

Today, only 35–38 per cent of the original area used for shifting cultivation is still farmed. Since 1998, farming in Kantamali, Lohaguli and Muskudki has stopped more or less completely, while patches in Boda Pahada and Kalikado Dongar are still cultivated. Parts of the Bisipani and Malikurchi forests near Talamangara hamlet are also used for shifting cultivation, since the area is at some distance from the road and is seldom visited by forest department personnel.

Restrictions on shifting cultivation in reserved forests and the resulting shortage of shifting cultivation land have meant that the patches in revenue lands that are still used for this purpose are farmed more intensively. The increased pressure has led to the expansion of shifting cultivation to more marginal lands which are not suitable for the purpose (less soil, less fertile, more prone to erosion). Both of these processes are leading to the degradation of revenue land, with low regeneration of secondary growth and higher soil erosion. The restrictions have also meant that some tribal communities who previously depended entirely on this type of cultivation have now been forced to shift to selling fuel wood and charcoal as a full-time occupation. Reduction in the shifting cultivation cycle has not been accompanied by increased investment in land conservation or changes in land use to agroforestry or plantations since the cultivators have no secure tenure over government land.

Wage labour

Nearly 20 per cent of households in Mangara list wage labour as their primary occupation. Most such

LOCAL GOVERNMENT

Medium lands and uplands

Under the customary system, medium lands (bhata) and uplands (dongar) are also deemed to be private property which may be sold or mortgaged. Traditionally, these lands were created by clearing forest area which was then given over to permanent cultivation.

As the number of households in the study area has increased, new bhata and dongar land has been cleared and brought under cultivation. For various reasons, however, much of this land has not been settled with cultivators and under statutory law this use is encroachment. The main reasons for non-settlement are the lack of awareness on the part of cultivators of the statutory consequences of customary practices, and the laxity or, in some cases, rent seeking, on the part of revenue and other officials.

Shifting cultivation

Tribal communities in northern and north-eastern India practice shifting cultivation. It has been estimated that as much as 85 per cent of total cultivation in north-eastern India is shifting cultivation, and Orissa accounts for the largest area under shifting cultivation in the country. A recent study estimates that out of a total of 37,084 square kilometres under shifting cultivation by 700,000 tribal households in Orissa, 11,528 square kilometres, or almost 40 per cent of the total area in the state, was in Koraput alone (Jyotishi, 2003; Pattnaik, 1993).

Shifting cultivation is generally carried out on hill slopes, since flatter land is the hands of affluent, non-tribal communities. For tribal peoples, shifting cultivation is not just the basis of their livelihood, but also an important part of their way of life, with many rituals and festivals centred on the fields (Ranjan and Upadhyay, 1999).

Under the zamindari system prior to survey and settlement, individuals were allowed to "own" land in the sense that their holdings were inheritable and transferable. In effect, however, such individuals were nevertheless tenants because they could be evicted by the estate for failure to pay rent. It is reported that such evictions were not common in the Jeypore estate (GOO, 1965).

MELA, which applied to the zamindari estates of the Madras Presidency, covered various aspects of land revenue administration under the zamindari system including the responsibilities of landlords, the relationship between tenants (*ryots*) and landlords, rules for settling land and preparing records of rights, and the determination of land rents. The law also provided safeguards for tenants in the form of protection from eviction and the requirement that proper records be maintained. Many of these protections were, however, not properly implemented in the Jeypore zamindari tracts (GOO, 1965). For instance, although MELA required records of rights to be maintained, no holdings of individual tenants were mentioned in any records. As a result, no formal record of land ownership or the tenancy of individual cultivators existed for the district.

The primary purpose of the 19th century survey and settlement operations launched by the British in the Madras Presidency was to determine land revenue dues, rather than to record rights in land. In Koraput, ownership and tenure remained unrecorded until the survey and settlement exercise that was conducted during the period 1938–64. During this process, records of rights for different areas were prepared and published. Since no formal record of ownership or tenancy had been maintained prior to that date, the 1938–64 Koraput survey and settlement was extremely important since it was the first time that land ownership was recorded in exhaustive detail. The process was all the more significant because rights that were not recorded were effectively lost.

Alienation of tribal private land to non-tribals has been recognised as a serious problem for almost a century. In former Madras Presidency areas, the prohibition on the transfer of land by members of tribal communities (Adivasis) in favour of non-Adivasis was attempted through the enactment of the Agency Tracts Interest and Land Transfer Act 1917 by the government of Madras (GOO, 1965). Under this law, during the 1938–64 survey and settlement, land transfers after 1917 should have been detected and land reverted to tribal owners. In many cases, however, the transferees had managed to mutate their names in the Jeypore Estate records even though the transfer of land was illegal under the Agency Tracts Act. Unaware of the legal intricacies of land laws, tribal communities were unable to raise the necessary legal objections during the preparation of preliminary records of rights during the settlement (GOO, 1965). As a result, large areas of land were registered in the name of non-tribals.

The survey and settlement process used the definition of tenant (*ryot*) that was set out in MELA, according to which a person who had occupied land continuously for 12 years was defined as a *ryot* (section 3(15)). Cultivable land other than private land and communal land was eligible for settlement with the *ryot*. During the survey and settlement, and in the preparation of records of rights, however, the definition of *ryot* provided in MELA was interpreted in a manner which led to the dispossession of tenants in areas used for shifting cultivation.

Land survey and settlement in Mangara was completed in 1952 and the record of rights was published in 1956. A total of 76 families was recorded as having either a lease or full title to land. The boundary of Mangara village was drawn during the survey and settlement, and most of the land within the boundary was settled as government land.

No documentation or research exists on recorded or unrecorded rights in land used for shifting cultivation. In 1954–55, surveys were initiated to demarcate shifting cultivation areas in a number of villages in the Nandapur area of Koraput district. At the same time, it was decided that in the future no cultivation would be allowed on slopes steeper than 10 degrees and that encroachers would be evicted. The process continued until 1957–58, by which time the demarcation of shifting cultivation areas in 231 villages had been completed. In 1957–58, the Orissa government ordered the survey to be halted (GOO, 1965).

The following year, in a letter dated 12 March 1959, the Orissa board of revenue ordered that all land in the continuous possession of farmers for 12 years, on any slope, was to be recorded in their names. All land on hill slopes which had not been in continuous possession of one tenant for 12 years was to be recorded as government land (GOO, 1965). This order was specifically aimed at shifting

cultivators, since in podu two to three years of cultivation is followed by a long period of fallow. The time during which a podu patch lay fallow was not taken into account when 12-years' continuous possession was calculated. All such areas were consequently recorded as government land. In fact, the Koraput Survey and Settlement Report notes that podu (shifting cultivation) was neither recognised nor assessed (GOO, 1965).

Not only land, but also trees planted on sloping lands used for shifting cultivation were recorded as government property. All mango, tamarind and jackfruit trees on these lands in Mangara village have been legally government property since settlement was completed.

The OGLSA prescribes how land owned by the government may be classified and settled. Under this law, government land is defined as any wasteland belonging to the government, whether cultivable or not (section 2(b)). Land that has been demarcated through the survey and settlement process under the Orissa Survey and Settlement Act 1958 may be categorised as either cultivable wasteland (*abad jogya anabadi*) or uncultivable wasteland (*abad ajogya anabadi*). Under the OGLSA (section 3(1)(a)), land within the boundary of a village is to be reserved for specific purposes including *sarbasadharana* (land set aside for communal purposes such as burial or funeral grounds, paths), gochar (pasture land), *gramya* jungle (village forest), *basti jogya* (land suitable for homesteads) and *urnatajogana jogya* (land suitable for future development purposes). The most important categories among these are the village forest and pasture land, and a minimum of 10 per cent and 5 per cent, respectively, of the effective area of the village has to be settled under these categories. Once reserved, such land cannot be leased or settled by the revenue department without first changing its revenue classification. The FCA applies to village forest and forbids its conversion to non-forest use.

Revenue lands can be settled by the state government according to the principles laid out in the OGLSA (section 3), which allows revenue officials to settle government land subject to the restriction that 70 per cent of such land in a village is to be settled with Scheduled Tribes and Scheduled Castes (section 3(2)). The government has the discretion to specify the maximum amount of land that may be

The FCA provides that the following actions require prior approval of the central government: de-reservation of forests; use of forest land for non-forest purposes; leasing forest land to any private party; and clearing natural forest growth for reforestation. Non-forest purposes are any purposes other than reforestation (section 2). The penalty for violations is imprisonment for up to 15 days (section 3A). The Indian Forest Act 1927 had allowed state governments to approve the same actions and activities that are listed in the FCA.

continuous. Although survey and settlement did not recognise any form of tenure in lands used for shifting cultivation, this practice and other customary methods for permanent cultivation as well, have continued for reasons linked to the second fundamental inconsistency, which is the gap between the substance of statutory law and how it is implemented.

Statutory law does provide mechanisms for landless people and others to assert claims to forest land and other government land. Government authorities, however, have the discretion to initiate most of the procedures required to implement them, disempowering the people whose livelihoods depend on access to the land. The difference between actual land use and legal status also means that the

Jhola land

Local residents claim that Champa Jhola, Niputi Jhola and Road Jhola were created by their forefathers before the 1960s. During the survey and settlement process, these and other jhola areas, especially those created in forested valleys, were not settled with the cultivators. Since the end of the survey and settlement process in 1964, many more jholas have been created that have also not been settled with the cultivators either through the settlement process set out in the OGLSA or the encroachment settlement process provided in the OPLE. The state government did initiate processes to do so, but they were inconclusive.

In 1972, the state government issued orders to constitute official committees to conduct comprehensive surveys of all forest lands to identify areas which would be managed as forest and which would be set apart for agricultural use, releasing land cultivated in forest areas by Scheduled Tribes, Scheduled Castes and other landless persons for settlement with those cultivators. This process was delayed and a state government resolution, dated 8 July 1975, extended the deadline for surveys to December 1975. The identification surveys had not been completed by the time the FCA

Revenue land

Nearly 70 per cent of the land in Mangara village is classified as various categories of revenue land. Much of this area is cultivated by farmers who have no legal rights to these lands.

In the Khariguda hamlet, for example, villagers were

INDIA

The sale of land between members of tribal communities is legal and non-tribal purchasers use members of Scheduled Tribes as proxies to buy land from other tribals, as a cover for acquisition that would otherwise be illegal. In 2000, the government amended OSATIP to mandate a review of all land transfers from tribals to non-tribals in the district since 1956, putting the burden of proof on the persons who possess the land. Implementation of this law has just begun but history indicates that there should be a high degree of oversight in this process.

Fifty years after the first statutory laws to protect tribal communities from moneylending were adopted, tribal land loss through mortgaging and sale to non-tribals continues. Loss of agricultural land through mortgaging and proxy sales to non-tribals has meant that the tribals have been pushed to more fragile lands for cultivation, and this has increased their dependence on shifting cultivation at a time when available land is becoming scarce.

Existing laws against lending money to tribals fail for several reasons but principally because the laws are easily subverted due to the illiteracy of the tribal poor and their unfamiliarity with statutory legal procedures. The laws fail also because the market offers few, if any, alternative sources of credit to the tribals. This lack of options forces households

In Koraput district, development projects have led to the displacement of approximately 5,435 families. To date, approximately 28,558 hectares of land in the district has been used for projects including the Kolab dam, the Hindustan Aeronautics Limited factory, the National Aluminium Company bauxite mining and alumina refinery, and construction of the railway through Dayanidhiguda for the Visakhapatnam–Kirandul line. Most of the land dedicated to these projects was being used by tribal communities for either permanent or shifting cultivation. Because no form of private or communal tenure had been officially recognised on most of this land, the government could easily use the land for development projects without having to pay compensation of any sort.

Since 2004, the Telingiri Medium Irrigation Project has placed additional pressure on land resources in the study area. The project will submerge approximately 35 hectares of private land and 22 hectares of government land. In all, 59 households owning private land and 32 landless families cultivating the government land in Talamangara hamlet will be directly affected. While landowners are expected to receive some compensation for the land they lose, those cultivating government land are not eligible for compensation or land grants. The irrigation project has introduced uncertainty and insecurity amongst the residents of Talamangara, since even those with legal title to their land are not certain about how much compensation they will receive, or whether they will be resettled elsewhere. The households being evicted will be forced to move to even more marginal lands on the hill slopes to eke out a living or to take to charcoal making and fuel wood selling to survive. Experience with similar projects indicates that either of these livelihood options will lead to further degradation of the land and forests, and increase livelihood insecurity.[58]

Inadequate resettlement of individuals and communities displaced by development projects has significant environmental and social impacts particularly for tribal peoples whose cultural and religious beliefs are linked to their land and who are disproportionately affected by these projects. As people lose access to resources which form the basis of their livelihoods, they are trapped in a vicious circle of exploiting available resources, which in turn undermines their livelihood base even further.

The absence of secure tenure in cultivated government land also leads to the inability to invest in land improvement. Cultivators are reluctant to invest, in terms of both capital and labour, because of the possibility that the land will be taken away once they have developed it. Lack of secure tenure means that even those willing to invest in the land are unable to get legal, institutional credit.

The loss of shifting cultivation areas in reserved forest has meant that shifting cultivation has increased on revenue land, with a reduced fallow cycle because the land must be more intensively farmed, resulting in soil erosion and reduction of soil fertility.

CONFLICT

The fundamental cause of insecurity—loss of rights to land and rights to access land—is also the

SYNTHESIS AND RECOMMENDATIONS

of these projects miscarried as a direct or indirect consequence of not taking the chronic issues of rights over land and forests into account and addressing them in project design and implementation. Because Orissa has not fully implemented PESA, acquisition of land for such projects continues without oversight from the Gram Panchayat.

Mangara is a reflection of the situation in most Scheduled Areas of Orissa and, to some extent, of tribal areas all over central India. Issues of rights in land and forests, loss of land because of the lack of credit and abuses of informal mortgagingIof cdingeab9(e)m(a)7.dt-5(g)7.gmce of thegeabus(pme(Iof cd9(e)t7(s)3.46.3(c)7(
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the forest department. If that were to happen, before transferring revenue department-controlled land to the forest department, rights over these lands should first be settled by the revenue department. Any eventual transfer of land to the forest department without first settling pending issues of rights and use would be simply repeat the earlier, flawed settlement process with predictable consequences for insecurity and conflict.

The proposed review process should also carry out a plot-wise survey to ascertain the incidence of illegal land transfers and of informal land mortgages and work out plans for redeeming them. Existing laws against informal moneylending need to be enforced, accompanied by support for a range of micro-financing alternatives, including self-help groups.

These review processes could be funded by channelling part of the development funds being spent by the central and state governments in Scheduled Areas to rationalise the tenure and rights regime. Multilateral development banks as well as the government need to view the security of resource rights as an essential prerequisite to development and poverty alleviation, and include security of resource rights as an objective of all development initiatives.

For example, funding for watershed development should be used for a baseline survey of land tenure

ANNEX: SCHEDULED CASTES AND SCHEDULED TRIBES

The term ‘Scheduled Caste’ is used to describe historically disadvantaged Indian castes of low rank in specified traditional religious hierarchies. ‘Scheduled Tribes’, meanwhile, refers to indigenous peoples who are not part of religious hierarchies. Scheduled Caste peoples are also known as Dalits, while Scheduled Tribe peoples are also referred to as Adivasis. The Government of India Act 1935 introduced the term Scheduled Tribes, whereas Scheduled Castes were first listed in the Government of India (Scheduled Castes) Order 1936. Following Independence and the adoption of the Constitution of India, Scheduled Castes and Scheduled Tribes were listed in the Constitution (Scheduled Castes) Order 1950 and the Constitution (Scheduled Tribes) Order 1950, respectively.

3(iii) stipulates that a member of a Scheduled Tribe

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Livelihoods, Security and Conflict

KOSHI TAPPU, NEPAL

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ABBREVIATIONS

BCE	Before the Christian era
BS	Bikram Sambat
BZMR	Buffer Zone Management Regulations
CFUG	community forest user's group
DDC	district development committee
DFO	district forest officer

GLOSSARY

bigha	unit of land measurement; roughly equivalent to 0.65 hectares (1 hectare = 1.54 bigha)
guthi	tenure system developed in the Licchavi period; land is held in trust for the upkeep of religious or welfare institutions
kipat	

INTRODUCTION

The relationship between resource scarcity and conflict is explored in a 2002 publication, *Conserving the Peace: Resources, Livelihoods and Security*:

> Our thesis is that environmental mismanagement and resource scarcity, alone or in conjunction with other forces, can have such a destabilizing impact on communities and societies that they may experience high levels of insecurity and even succumb to violence and conflict (Matthew et al., 2002).

The report recognises three main reasons for scarcity: increasing demand, declining productivity and restricted access. These factors are in turn impacted by the resource rights regime.

The question of rights, particularly in the case of women and indigenous peoples, is today a key governance issue in Nepal. The rights of communities to access and use natural resources has been the focus of work by the Federation of Community Forestry Users, Nepal, as well as several community forestry projects such as the Nepal Australia Community Resource Management Project, Nepal Swiss Community Forestry Project, and Livelihoods and Foresit( )6.4(nNon-g-5.8(co0.5(s)-4.7(e)6.9(l)-6.2(e)6.9(d)-89e

DESCRIPTION OF THE STUDY AREA

Nepal is divided into four main physiographic zones: the terai (plains) in the south, the low-lying Siwalik hills, the middle hills or mid-hills that run along the length of the country from east to west and are higher than the Siwaliks, and high mountains that also span the length of the country from east to west.

The study site, covering the KTWR and its buffer zone, falls within the Koshi River floodplain located in the eastern terai near Nepal's border with India.[2] The terai region stretches across the southern part of the country and is an extension of the Gangetic plains of India (Central Bureau of Statistics, 2003). The buffer zone covers parts of three districts: Saptari, Sunsari and Udayapur. The site was selected partly because resource- and livelihood-related conflict has been known to occur in the area. The creation of the KTWR and the construction of the Koshi Barrage have greatly reduced access to natural resources, thereby directly affecting the livelihoods of communities residing in the area (Christie, 2003; Sah, 1997; Sharma, 2002).

Following the 1954 "Agreement Between the Government of India and the Government of Nepal on the Kosi Project" (Kosi Agreement), a barrage and embankments were constructed on the Koshi River which flows from Nepal into India. Construction of the Koshi Barrage began in 1958. Spanning half a kilometre, the barrage along with its eastern and western embankments were completed in 1964.

The barrage, embankments and administrative offices are known collectively as the Koshi Project. These structures and the associated offices, all of which fall within Nepal, are managed by the Indian government. Water from the barrage is used primarily to irrigate fields in the Indian state of Bihar.

Under a 1966 amendment to the Kosi Agreement, approximately 5,000 hectares of land in the area was leased to the Indian government for a period of 199 years, for the operation and maintenance of the barrage and associated structures (Basnet et al., 2004).[3] All of the families residing in the 5,000 hectare area were moved out and some compensation was reportedly provided. Nevertheless, some former landowners who vacated their land when the lease came into effect are still awaiting compensation.

The KTWR was established in 1976, primarily for the purpose of protecting the country's last remaining population of Asiatic wild buffalo (*Bubalus bubalis*) numbering about 170 animals. The reserve is roughly rectangular in shape, covering a distance of approximately 16 kilometres from north to south and approximately 9 kilometres from east to west. Its southern boundary lies 6.5 kilometres from the Koshi Barrage.

When the KTWR was created, the area declared to be protected covered 6,500 hectares. The reserve was expanded in 1979 by the designation of an additional 11,000 hectares, and the Department of National Parks and Wildlife Conservation (DNPWC) calculated the total area of the reserve to cover 17,500 hectares. This figure has since been revised. According to data compiled by the DNPWC in 2001, based on GIS mapping, the total area of the KTWR stands at 14,960 hectares (DNPWC and PPP, 2001).

In 1987, the KTWR was declared a Ramsar site—Nepal's first wetland of global importance. The area covered by this study includes not only wetland ecosystems but also forest, grassland and sandy river beaches.

The KTWR is home to 467 species of migratory and resident birds, and sees congregations of over 50,000 migratory waterfowl during the winter months. The area is also the largest known heronry in

2

Nepal. The reserve supports a variety of wildlife, accounting for 45 per cent of all vertebrate species recorded in the country including the Asiatic wild buffalo. The Gangetic dolphin is found in the Koshi River which runs through the area. This river is home to two endemic fish species, *Barilius jalkapoorei* and *Pseudeutropius murius*, both known locally as *jalkapoor*. Over the last few decades, severe resource degradation has been reported as a result of overfishing and poaching, the invasion of wetlands by water hyacinth and other exotic plants, and siltation in wetlands. Forest and grassland have been lost as a result of river cutting, with the progressive erosion of land on the river banks.

The KTWR Buffer Zone was mapped and proposed in 1992, although it was formally declared only in August 2004. The buffer z.6(h4(in.7(e)8(m)- c.6(.6(h4(s)3.6(e)8(r(s)r6(s)-4(3)-6.4(z)-a4(in.1 a)7.8)-5.3(a)1.17(e)8.8)- la)17,

Hindus, another 34 per cent belong to various terai ethnic groups, 12 per cent are Muslims, 6 per cent are recent migrants, and the rest are terai dalits ('low-caste' Hindus). Some 3,300 households in the study area belong to traditionally wetland-dependent ethnic communities such as the Bantar (Satar), Kumale, Mallaha (also called Gongi), Musahar and Tharu (Bhandari, 1998; Sharma, 2002).

SOCIO-ECONOMIC STATUS

Although the three districts in which the study site is located are not ranked among the poorest in Nepal (UNDP Nepal, 2004), nearly 67 per cent of the population is unable to grow sufficient food for more than six months in the year (see table 2). While 73 per cent of households officially own land, the majority (70 per cent) of these households own less than one hectare (see table 3). Among the remaining households, 15 per cent do not own any land but are tenant farmers and 12 per cent are landless.

Overall literacy in the study area stands at 47 per cent, with higher rates for men (58 per cent) than for women (37 per cent).

In the absence of employment opportunities at home, young people seek work in India (Delhi, the Punjab and other areas) for six months in the year, earning 1,500–2,000 rupees per month. This is true also of the Musahar, whose name literally means 'people who eat rats', a landless community whose members engage in daily-wage labour (Bista, 1967). Adults from Muslim communities and individuals belonging to relatively prosperous hill communities travel to the Middle East seeking employment. In 2001, an estimated 2 per cent of the residents of the Koshi Tappu area migrated seasonally in search of work. This figure is suspected to have risen in recent years as a result of the Maoist insurgency across the country.

KEY LIVELIHOODS

Estimates for the number of households in the study area, and for the activities they carry out to support themselves, vary significantly. According to some sources, 57 per cent of the poorest households in the study area are dependent on wetland resources, while others put the number as

Bantar, Musahar and Tharu women and children also collect snails (*ghongis*) and wild vegetables from the wetland for consumption and sale. Only three of the 26 poorest communities do not depend on wetland resources for their livelihoods.

Some wetland-dependent communities are disadvantaged in terms of land ownership. On the western side of the reserve lie 10 VDCs, parts of which fall within the buffer zone. In four of these VDCs, 115 households depend solely on fishing, and 90 per cent of the ethnic communities engaged primarily in fishing are landless (Sah, 2000). Among the Godhi and Musahar, 90 per cent are landless and dependent on fishing.

Communities that depend on wetlands suffer directly as a result of access restrictions imposed on rivers and other wetland resources within the reserve and in the barrage area, while unregulated access permitted in communal land puts heavy pressure on available resources. Recent reports indicate that fishing as an occupation is on the decline as a result of restrictions on fishing in the Koshi River, with younger men from fishing communities seeking unskilled labour in other countries, particularly India (Kathmandu Post, 2004a).

Locals claim their livelihoods are further threatened by factors such as population growth. Since the analysis of population growth trends is beyond the scope of this study, and no independent studies have been carried out on the subject, this assertion cannot be verified.

In addition to wetland resource collection, local livelihoods include subsistence agriculture by landowners and tenant farmers, and wage labour performed locally or outside the area. Of the landowners and tenant farmers, 96.87 per cent raise livestock. Ownership is unevenly distributed, however, with 10 per cent of farmers raising 26.5 per cent of all animals. Recent estimates indicate that 3 per cent of the local population is engaged in the collection and sale of non-timber forest products, while 11 per cent of residents are involved in timber trading, the sale of firewood and other businesses (DNPWC, 2002). Other occupations include retail sales and trade in non-forest goods (4.8 per cent), and employment in various institutions (6.8 per cent). Among 13 per cent of households in the area, younger members of the family travelled to India to work as wage labourers.

Grazing

People living in the vicinity of the reserve, including the 26 poorest local settlements, have long used its grasslands and forests to graze livestock (Sah, 2000). According to local informants, this traditional practice predates permanent settlement, particularly on the eastern side of the river. Elders belonging to the Yadav clan, members of which have traditionally owned large herds of cattle and buffalo, say they have grazed their animals here for centuries. Jhangads and other groups too have long engaged in livestock raising as their primary livelihood. Such claims are difficult to verify independently because no clear records exist. Despite the apparent tradition of grazing in this area, local informants were unable to provide any evidence of a traditional pasture management system. Grazing seems to have been carried out freely in forests and on riverbanks until the people started to clear land for cultivation, set boundaries and claim the land as their own.

farmers may sow the same variety during the same season. Despite this effort, crops continue to be damaged by animals from the reserve.

LOCAL GOVERNMENT

A VDC is responsible for a village development area consisting of nine wards, each with a population of roughly 10,000. A group of VDCs in turn makes a district. Nepal is divided into 75 districts. Under the Local Self-Governance Act (LSGA) 1999, each district is governed by an elected district development committee (DDC).

The last local bodies elections in Nepal were held in 1997, followed in 1999 by elections for the house of representatives. Two years later, in response to the Maoist insurgency, the government of Nepal declared a state of emergency (Gyawali, 2004). Parliament was dissolved on 22 May 2002. When the term of local representatives expired in 2002, the government decided not to hold fresh elections, stating that polls could not be conducted safely or effectively, nor was the term of local elected representatives extended.

The jurisdiction of a VDC extends to the protected area itself in mountain protected areas but not in terai protected areas. As such, VDCs in the study area have no authority within the boundaries of the KTWR. In the buffer zone, VDCs have jurisdiction over government land, but not over private lands or the leased area.

LAND USE

Koshi Tappu Wildlife Reserve

Despite the ban on settlement within the reserve and frequent pressure from the authorities to vacate the area, a small cluster of around 50 houses stands inside the embankment in the south-west corner of the reserve. This wetland-dependent community does not hold legal title to the land and is therefore considered ineligible for compensation. These families have apparently been allowed to stay on because, as DNPWC officials privately admit, it has been recognised that they have nowhere else to settle if evicted (DNPWC official, personal communication, 2003). Local residents are, however, no longer able to access traditional cremation grounds on the banks of the Koshi River inside the reserve.

Koshi Tappu Wildlife Reserve Buffer Zone

The buffer zone encompasses government and privately owned land, as well as the area leased to the Indian government for the Koshi Project. Approximately 3,000 hectares of leased land is included in the buffer zone.

Since 1995, a project supported by the DNPWC and the Unit1.4(c)-3..2(C)-6Na0018r.2(C)n0.0p6(a(n)0.lo8(it1.pme018r.2it,

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Koshi Project (leased land)

Several hundred people continue to live and carry out cultivation in the leased area. These individuals, who occupy the land illegally, include families who were lawful owners of the same land before the lease came into effect, as well as more recent encroachers. In 2004, it was reported that some 500 families in Saptari and Sunsari districts were given notice of eviction and informed that their homes were to be demolished (Himalayan Times, 2004a).

Although the reserve administration has no legal authority over the leased land, it has taken an interest in bird protection in the water impoundment area behind the barrage, where water is collected for diversion to India. This step was prompted by the need to curb rampant poaching reported in the area. Since 2001, a watchman has been employed every winter, when thousands of migratory birds arrive, to protects the birds from hunters (Singh, 2003).

Government land

While some government land is controlled directly by line agencies, in other cases government land is under community management. This includes land within or in the vicinity of villages, used by villagers and considered to be communal land. The term ‘communal land’ is not defined or used in the LSGA or the Land Acquisition Act 1977. The Land (Survey and Measurement) Act 1963 defines public land to include land used “on a communal basis” (section 2(f)). For this study, the term ‘communal land’ is used to mean public land used on a communal basis.

Á Government land controlled by line agencies

In the buffer zone, this category includes land supporting government infrastruct8.2(p)i[1sch l6.4(the)

RESOURCE RIGHTS REGIMES

Various resource rights regimes apply to different categories of land in the study area. These rights regimes are based on statutory law as well as customary resource use practices. Not surprisingly, the statutory regimes in particular are not neutral but rather reflect political choices that favour the interests of dominant economic, political and social elites.

Under most land ownership arrangements, use practices differ significantly from statutory provisions. In some instances this is because the concerned government agencies have recognised the needs of local residents. In other cases, local authorities are themselves unfamiliar with legal provisions related to resource rights. But for most communities, obeying the law involves a high cost in terms of their survival. Such communities and individuals are faced with the choice of breaking the law or losing the basis for their livelihoods.

Several tenure arrangements are in force in the Koshi Tappu area, where the statutory regime varies according to the status of the land in question. The study site includes a protected area (the KTWR) and its buffer zone, the latter made up of private, government and communal land, as well as the area leased to the Indian government. At the famous temple of Ramdhuni, loc Tw(Rr4(, lo22 TD0.0)S 3-9(tiov2vR0 th.152 TD0.0

the reserve for the purpose of watering domestic animals throughout the year, without obtaining a permit or paying fees. This concession was granted after the expansion of the reserve in 1979.

Similarly, in 1976 the ban on collection of wild grass in the Chitwan National Park was relaxed in the case of local communities living around that protected area (Lehmkuhl, 1988). This was done under section 16 of the NPWCA which allows reserve authorities to hunt, remove vegetation or undertake similar activities for the purpose of management in a national park or reserve. Subsequently, communities in the KTWR were also permitted to harvest thatch grass each year during a specified season, upon payment of a small entry fee (currently 10 rupees). Since 2001, however, only those residing in the area that was in 2004 officially declared as the buffer zone are permitted to harvest grass inside the reserve.

The NPWCA and the 1977 Regulations contain no provisions allowing the performance of religious rituals or funeral rites within protected areas. A warden, however, has the discretion to grant permission for the harvesting of fuel wood and timber for weddings, funerals or other special

approved plan for its unit. A users committee may apply to the warden to take responsibility for managing any forest in the buffer zone area designated as “buffer community forest” (BZMR, section 21). Similarly, a religious authority, group or community may apply to the warden to take responsibility for a “buffer religious forest”, defined as any religious place situated in the buffer zone, provided that religious activities do not negatively impact the environment or the rights of other users (BZMR, section 22). The Forest Act 1993 (sections 35–37) also provides for the handing over of religious forest under conditions similar to those related to buffer religious forest areas.

The warden may dissolve a users committee for a buffer community forest or a buffer religious forest if the users committee is unable to implement work plans, or if it contravenes rules and regulations (BZMR, section 14). Procedures for dissolution, as stipulated in the BZMR, include a provision for appeal by the committee to the director-general of the DNPWC.

Under the BZMR, a number of activities are prohibited in a buffer zone, unless specific permission has been granted by the warden (BZMR, sections 17 and 19). Such activities include harvesting trees,

Government land

Á Government land controlled by line agencies

In cases where the government seeks to acquire land, provisions for acquisition and compensation are outlined in a number of laws including the Public Roads Act 1974 (section 4), Land Acquisition Act 1977 (section 3), Electricity Act 1992, Water Resources Act 1992 and Forest Act 1993 (Belbase and Thapa, 2004).

Á Communal land and community forest

The LSGA deals with the rights and management responsibilities of elected local bodies such as the VDCs, municipalities, metropolitan authorities and DDCs, with respect to communal land as well as natural and cultural heritage that lies within such land. Under the LSGA, all communal land is the property of the VDC concerned (section 68(1)).

The statutory regime does not explicitly recognise rights over communal wetlands. If wetlands are interpreted to be 'natural heritage' under the LSGA, then wetlands within a village development area would also fall under the jurisdiction of the VDC.

VDCs are empowered to prepare and implement programmes concerning forests, vegetation, biodiversity, soil conservation and environmental conservation at the village level, and to sell timber, fuel wood, twigs, branches, grass, straw and other resources from the village development area (LSGA, section 189). Village-level projects are to be carried out by consumers' committees (section 49).

Under the Forest Act, all forests except for those under private ownership are defined as national forests (section 2(e)). National forests are managed by the government (sections 20–22), or handed over as community forest (section 25), leasehold forest (section 31) or religious forest (section 35). District forest offices and range posts enforce forest management regulations.

The Forest Act authorises a district forest officer (DFO) to hand over any part of a national forest to community forest user's groups (CFUGs) as a community forest, entitling the CFUGs to develop, conserve, use and manage the forest and to sell and distribute forest products according to an approved work plan (section 25(1)). Some forests, such as the Ramdhuni Forest, are found in the north-east of the buffer zone but most 'forest' areas standing today are recently-established community plantations.

The LSGA, meanwhile, stipulates that the natural heritage of the village development area, as well as forests granted by prevailing forest laws and forests handed over by the government, are the property of the VDC, which may dispose of or sell its property with the permission of the government (section 68(1)).

Nepali law also recognises prescriptive rights to land. The Land (Survey and Measurement) Act 1963 stipulates that land may be registered as private holdings on the basis of an unofficial deed if the area in question has been in an individual's possession for 15 years (section 6(5a)).

While taking wildlife is prohibited in protected areas under the NPWCA (section 5), prohibitions on species harvesting in the Forest Act (section 38) and the Aquatic Animals Protection Act (section 4(b)) do not apply in private land. Reserve authorities claim that hunting and the poisoning of birds, activities banned in the KTWR and the buffer zone, continue to take place on private land, with negative effects on wildlife within the reserve.

Inconsistencies in the statutory regime and its application

The regulatory regime for protected areas contains a fundamental inequity. Under the Himalayan Parks Regulations 1979, communities living in the vicinity of mountain protected areas enjoy greater access to natural resources in those areas than do communities in the vicinity of terai protected areas (Belbase and Thapa, 2004). Communities living in the Koshi Tappu area suffer this basic disadvantage in addition to the difficulties created by inconsistencies in the quality and security of use rights created by other laws.

By statute, the rights of users committees formed under the NPWCA and BZMR, and of consumers' committees created under the LSGA, are less secure than the rights of CFUGs that may be formed under the Forest Act or water users associations provided for in the Water Resources Act. CFUGs and water users associations are formed at the initiative of the resource users themselves, and are registered as autonomous corporate bodies (Forest Act, sections 41–43; Water Resources Act, section 6), w -4.te

is prohibited. Even so, local communities continue to fish, harvest forest products and grass, and graze their domestic animals in the reserve.

While local residents have been denied traditional resource uses inside the reserve, de jure if not de facto, protected area officials and the army are perceived to benefit from access to these resources. The NPWCA empowers protected area officers to provide specified forest products or other services in exchange for specified fees (section 16A), but neither permits nor prohibits protected area officers and military personnel from using fuel wood or other resources from national parks and reserves free of charge. The inequity perceived by local communities has created resentment against both the reserve and the military (Sah, 1997).

CUSTOMARY PRACTICE

Custom and customary law are usually associated with local tradition. They are considered to be sets of rules that are legitimised by generally accepted social practice, distinct and different from the rules of the state.

Land tenure studies of the Licchavi state as well as modern Nepal note the existence of customary tenure arrangements. The Hindu Licchavis initially retained the customary tenure arrangements of the non-Hindu Kirata rulers who had preceded them (Sharma, 1983) but gradually replaced customary tenure with centralised land ownership by the king.

During the rule of the Licchavis, a tenure system called *guthi* was developed under which land was held in trust by communities for the upkeep of religious or welfare institutions. Income from a share of the products of such land and rent is given to the priest, and used for the temple's upkeep. The *guthi* system was developed by the Newar ethnic group but was adopted by others who wanted to give land in trust. All such land held in trust is now considered *guthi* land. *Guthi* also enjoys statutory cover through the Guthi Corporation Act 1976, most recently amended in 1993, which expands the definition of *guthi* to encompass any movable or immovable property or any income-yielding fund used for any religious or philanthropic purpose (section 2(c)).

A similar customary system of communal land ownership, known as *kipat*, exists in Nepal to this day (Regmi, 1999 [1977]). For ethnic communities residing in the eastern and middle hills of Nepal, *kipat* was an important land tenure system until the late 1960s. The *kipat* system was discontinued in 1968 by means of land reform legislation but its erosion is considered to have started as far back as the late 18th century with the unification of Nepal under the conquest of a Hindu king, Prithvi Narayan Shah. Although the system was officially abolished, the move has not been fully implemented. As a result, the *kipat* system continues to be practised across the country.

Other customary natural resource practices have comparatively recent origins. For example, community forest management in the mid-hill districts of Sindhu Palchok and Kabhre Palanchok started as late as 1951, in response to declining forest resource availability in the area. This practice continued even after all forests were nationalised in 1957 (Fisher, 1989).

The suppression of customary tenure practices under statutory law has been opposed by communities in the past. Between 1914 and 1917, for instance, the Limbus, an ethnic group belonging to Ilam[5] in eastern Nepal, "were compelled to present a united front against the authorities when the district became the locus of a concerted effort on the part of Kathmandu severely to restrict—indeed, virtually to abolish—lands held under the *kipat* system" (Caplan, 1970). Similarly, in 1951 the Limbus submitted a petition to the king in an attempt to retain this form of land ownership.

Little is known about customary practices in the study are6.4(stud9.3(lis5.7(s8 1 Tf18.25392Tc)-4.1pse)9(y)-3.9(1)-3.9(1)-3.9

Whether communities have lived in the Koshi Tappu area for centuries or settled here a few generations ago, it is interesting that current residents are unable to recount any customary tenure or resource management practices, particularly since these communities depend at least partially on natural resources for their subsistence. Field research carried out for this study failed to uncover any evidence of past or current customary resource management practices. Local informants claimed that for nearly a century, access to fishing and grazing was open to all. Since most local communities in the Koshi Tappu area do not fish or graze animals in a single location, it is difficult if not impossible to secure their customary rights to use resources in any particular area.

Why customary law governing resource management apparently failed to evolve in the study area is an interesting question. There are a number of possible reasons for this seeming anomaly. Establishing use rights may have been impractical. In the KTWR area, the Koshi River changes course annually during the monsoon within the confines of the embankments on both sides. It is a braided river with several channels and the river changes its channels. Along with seasonal fluctuations come variations in the depth of the wa

The LSGA provides that public properties, including ponds and grazing fields, are the property of the corresponding VDC (section 68). Similarly, forests that have been granted to a VDC by law, or otherwise handed over to a VDC by the government, are the property of that VDC. Natural heritage is also the property of a VDC. The LSGA does not define the term ‘natural heritage’, which could be interpreted to cover other natural resources not specifically mentioned in that law.

INSECURITY AND CONFLICT

Koshi Barrage was constructed and the KTWR created, there has been no satisfactory resolution of the problems caused by cutting communities off from the resources on which the security of their livelihoods depends.

The laws that allocate rights to resources in the area do enable local communities to participate in resource management and share in the benefits of sustainable management. Disparities in the quality and security of those rights, however, and apparent overlaps in jurisdiction to administer resources, diminish their effectiveness as instruments for ensuring livelihood security.

The poorest, most marginalised individuals and communities are those whose livelihoods are most insecure. While existing law offers soft resource rights to members of various users groups, the very poor confront substantial obstacles to participating in groups that could assist them. Language barriers and the lack of adequate information are two such hurdles, as is the fact that the very poor rarely have the luxury of taking time off from subsistence activities to participate in such initiatives. Even in groups established to facilitate benefit-sharing, moreover, the tendency is for elites to dominate decision-making and monopolise benefits. The widely lauded community forestry programmes, for example, are now starting to be questioned regarding their ability to improve livelihood security for the poorest of the poor, as new elites emerge within user groups (Upreti, 2000).

Compensation

Residents of the study area report claims for compensation arising from three sets of circumstances:

the reserve to earn a livelihood, they risk fines, confiscation of their catch and gear, as well as verbal and physical abuse from army troops and reserve staff.

Damage caused by wild and feral animals

Fewer than 200 wild buffalo are believed to live in the KTWR, which was created primarily to protect

traditional fishermen, Muslims residing in the same area had recently taken up fishing, thereby becoming direct competitors. The conflict was not brought to the attention of local authorities since both groups were fishing illegally inside the reserve to begin with. No other communities interviewed for this study mentioned any such competition or violence in the area.

LOCAL RESPONSES

In the four decades since the Koshi Barrage and the KTWR came into existence, government measures in response to particular incidents of conflict in the area have for the most part been ad hoc, applied to groups in some areas while not applying to others. This has contributed to perceptions of inequity among communities residing in the study area.

A series of commissions has to date been unable to resolve disputes over compensation for the loss of rights to land. The single government response to conflict that has been generally successful is the one that provides local communities and individuals with certain soft rights to resources on which their livelihoods depend—the creation of the KTWR buffer zone.

Alternative sources of livelihood

Rather than continue in conflict with the reserve, communities and individuals have in many cases adapted their livelihoods to compensate for the loss of access to resources. Residents of the Koshi Tappu area have adapted to restrictions on resource access and use by turning to livelihood options which they consider to be less desirable. Many fishers, for example, have been forced to abandon their traditional lifestyle and instead turn to manual labour (Kathmandu Post, 2004a) as a result of fishing restrictions.

Land commissions

The government has set up 12 successive national commissions to look into the issue of compensation for those displaced by the creation of the KTWR. A new committee was formed in 2004 to allocate more land to households that were able to prove they had received no compensation (Pandey, 2004). Families who were evicted but are unable to offer legal proof of their tenure are not considered eligible to file claims for compensation.

In response to local communities' conflict with reserve authorities and continuing dissatisfaction over the absence of compensation for land appropriated for the barrage, an NGO, the Koshi Sarokar Samuha (Koshi Concern Group), was formed to assist locals in finding solutions to key issues. Registered in the late 1990s with the district administration office in Saptari, the NGO's main objectives were to build a coalition of farmers affected by the reserve and Koshi Barrage, to seek compensation for those rendered landless, and to ensure that local concerns were addressed appropriately. In 2001, the organisation was banned on the grounds that it was allied to the Maoist insurgency. Members of the NGO argued that only their past president was a Maoist. In 2002, they formed a new organisation, the Koshi Pidit Sangh (Koshi Victims Association).

Buffer zone

In order to resolve park-people conflict, Nepal has in recent years been shifting from a centralised, preservation-oriented approach to a more 'people-oriented' approach (Mehta and Kellert, 1996), and the creation of buffer zones is one of the most popular regimes in practice (Chrly2.29(s)-11n.2(h)70.002T8.1( )s.6(l hA4( )-6u

As the government engages with citizens to rebuild trust, government institutions and civil society organisations will be collaborating to a degree never before experienced in the country. The processes initiated to draft the constitution, not to mention the contents of the constitution itself, may be expected to provide the basis for reviewing resource rights regimes, resolving their inconsistencies, and eliminating inequities in both the substance of regimes and their application.

Post-conflict processes provide an opportunity to introduce guarantees of public participation into the constitution, and to integrate mechanisms for participation into law and practice. It has been argued that unless the poor have some measure of political power, even the law is not 'on their side'. Poor people understand that environmental issues are often not legal problems but political problems, and that in such cases political means are required to solve them (Cole, 1992). These observations are equally relevant with respect to rights to natural resources and the sharing of benefits arising from the use of those resources. Communities residing in the Koshi Tappu area, particularly in the vicinity of the Koshi Barrage, KTWR and buffer zone, are by and large ill-informed about laws that determine or affect their rights to access and use natural resources.

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LEGISLATION

Aquatic Animals Protection Act 1961(2017 BS)
Aquatic Animals Protection Act 1961 (1999 Amendment) (2055 BS)
Buffer Zone Management Guidelines 1999 (2055 BS)
Buffer Zone Management Regulations 1996 (2052 BS)
Constitution of the Kingdom of Nepal 1990 (2047 BS)
Electricity Act 1992 (2049 BS)
Forest Act 1993 (2049 BS)
Guthi Corporation Act 1976 (2033 BS)
Himalayan Parks Regulations 1979 (2036 BS)
Industrial Enterprises Act 1992 (2049 BS)
Land (Survey and Measurement) Act 1963 (2019 BS)
Land Acquisition Act 1962 (2018 BS) repealed by Land Acquisition Act 1977 (2034 BS)
Land Acquisition Act 1977 (2034 BS)
Land Act 1964 (2021 BS)
Local Self-Governance Act 1999 (2055 BS)
Mines and Minerals Act 1985 (2042 BS)
National Parks and Wildlife Conservation Act 1973 (2029 BS)
Public Roads Act 1974 (2031 BS)
Soil Conservation and Watershed Management Act 1982 (2039 BS)
Water Resources Act 1992 (2049 BS)
Wildlife Reserve Regulations 1977 (2034 BS) Amendment 1985 (2042 BS)

AGREEMENTS

Agreement Between the Government of India and the Government of Nepal on the Kosi Project. Signed at Kathmandu, 25 April 1954; in force upon signature.
Amended Agreement Between His Majesty’s Government of Nepal and the Government of India Concerning the Kosi Project. Signed at Kathmandu, 19 December 1966; in force 19 December 1966.

Livelihoods, Security and Conflict

DIR KOHISTAN, PAKISTAN

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ABBREVIATIONS

AI	Amnesty International
BOS	Bureau of Statistics
P&DD	Planning and Development Department
DG	Director General
ERNP	Environmental Rehabilitation in North-West Frontier Province and Punjab
ICG	International Crisis Group
IUCN	The World Conservation Union
NDCP	National Democratic Consultative Process
NWFP	North-West Frontier Province
PATA	Provincially Administered Tribal Area
UNDP	United Nations Development Programme
USDOS	US Department of State

GLOSSARY

Gujjar	nomadic herders
jirga	tribal council; adjudicating body of nominated village elders
khan	chief
Kohistani	original resident of Dir Kohistan
nawab	general title for ruler, used in the Indian subcontinent; conferred upon the ruler of Dir by the British in 1895
Shariah	Islamic law
serai	customary form of land grant; later established as permanent land entitlement
wesh	system of communal land ownership based on the periodic redistribution of landholdings; property remained under the control of the same tribe permanently, while within the tribe ownership would be rotated; wesh holdings were contiguous parcels of different types of land

INTRODUCTION

The district of Upper Dir is located at the confluence of the three highest mountain ranges in the world: the Karakoram, the Himalayas and the Hindukush. Historically, the region served as a bulwark against Russian expansionism during colonial rule. Today, the area is once again of strategic importance, this time from the perspective of political stability within Pakistan as well as the country's geopolitical interests abroad.

The region, part of Pakistan's North-West Frontier Province (NWFP), is among the most politically volatile in the country. Not infrequently, this instability has boiled over into open conflict with the state, the most notable example being a conflict over timber royalties in the 1970s which culminated in the aerial bombing of the valley by the Pakistan Air Force in 1976 (field interviews, 2003). The region is also known to serve as a conduit for the illicit trade in narcotics and weapons (Matthew, 2001).

Stakeholder interviews were conducted in person, while focus group discussions were held separately with members of different ethnic communities, to minimise inter-ethnic discord. Participants were selected to represent a cross-section of that community. The Pathan-Gujjar mix did not present problems as the interests of both groups over royalty distribution were identical. Preliminary study findings were presented at a national workshop in Islamabad in December 2003. Subsequently, community elders participated in an August 2004 regional workshop in Kathmandu, where the draft study was presented.

DESCRIPTION OF THE STUDY AREA

The district of Upper Dir is spread over a reported area of 127,070 hectares (BOS, 2004). The area included in this study in turn covers some 75 per cent of Upper Dir (95,302.5 hectares), stretching from the village of Charot in the north to Rondesh in the south, and from Badgowai village in the east to Kato Awar in the west.

The study area includes the Dir Kohistan valley along with a number of converging valleys (Badgowai, Bela, Dhok Dara, Ganshal, Gawaldai, Jandrai, Junkai, Kumrat, Lamotai, Shandoor, Siasun and Sundrai). The Panjkora River, approximately 70 miles in length, bisects the main valley and is fed by perennial streams flowing through the converging valleys.

Fairly reliable development indicators based on government census data are available for the district as a whole, and apply more or less to the study area. But many sectors and activities with a direct relationship to the livelihoods of local communities are not documented by government statistics. In such cases, the only data available comes from one small valley, Dir Kohistan, situated in the extreme north of the study area, which was the subject of a long-term study carried out in the 1990s. Although it is not possible to extrapolate from this data statistical information for the entire study area, findings from the Dir Kohistan valley provide a snapshot of the conditions that might reasonably be assumed to exist elsewhere in the study area.

Situated in the extreme north of the study area, the Dir Kohistan valley covers an area of 16,702 hectares, bordering the districts of Chitral to the north and Swat to the east (ERNP, undated). With a total length of approximately 150 kilometres, the valley lies an elevation of between 1,400 and 2200 metres above sea level (ERNP, undated). Here, the climate is temperate with mild summers and harsh winters. Much of the valley is blanketed in snow from December to February, accounting for most of the 1,100 millimetres of annual precipitation in the area (ERNP, undated).

The Dir Kohistan valley is self contained, branching off to the east form the main Dir road before it reaches the town of Dir itself. The geographical boundaries of the valley extend well beyond the outlying villages. The northern-most village in the valley is Thal, although alpine pastures are situated further north and there are no permanent settlements in that area. Similarly, Sheringal marks the lower part of the valley but is not where the valley begins.

Three distinct vegetation types (oak forests, coniferous forests, and alpine pastures) characterise the valley ecosystem (Shakeel, 2002). Oak (*quercus ilex*) forests radiate upwards from the valley floor and terminate laterally in the mid-valley section. Small stands of chir pine (*Pinus roxburghii*) and isolated *chilghoza* (*pinus gerardiana*) trees are scattered among them. Mixed coniferous forests are found near the upper ridges of the mid-valley section. In the northern uplands, coniferous forests begin at the valley floor and spread up the valley slopes (Shakeel, 2002).

In the uplands, the predominant species are kail or blue pine (*pinus wallichiana*), silver fir (*abies pindrow*), *deodar* (*cedrus deodara*), *chilghoza* and spruce (*picea smithiana*). These forests also serve as a repository of non-timber forest products such as mushrooms and medicinal plants. The alpine pastures extend beyond the tree line to permanent snowfields and are dotted with fairly large freshwater lakes. Agricultural land consists of silt and sediment deposits along the valley bottom and alluvial fans and terraced encroachments in oak forests. At higher elevations, coniferous forests and pastures are converted for cultivation.

The Dir Kohistan valley is rich in biodiversity. The oak scrub habitat at lower altitudes is inhabited by a variety of wildlife including the *chakor* (partridge), wolf, monkey, red fox, common otter and porcupine, and favours the *markhor* (ungulate) in the summer. The higher altitude mixed coniferous habitat is home to the *chakor* partridge, koklas pheasant, monal pheasant, common otter, common leopard, black bear, wolf, monkey, red fox, flying squirrel, musk deer and porcupine. The snow leopard, brown bear, black bear, marmot, markhor, ibex, musk deer, monal pheasant, Himalayan snow cock and

as a result of habitat destruction and illegal hunting. A survey carried out by the wildlife department (Shakeel, 2002) referred to various illegal hunting methods adopted by the locals such as the use of dogs and decoys. Out of season hunting was common, reportedly the greatest risk to wildlife. The survey also confirmed the perception of decreasing wildlife populations.

In the Panjkora River, introduced trout varieties are under threat from illegal fishing, and habitat encroachment. According to anecdotal information provided by netters, trout catches are becoming smaller and more of the smaller, fast-breeding local varieties are being caught.

DEMOGRAPHICS AND ETHNIC COMPOSITION

According to the 1998 census, the population of Upper Dir stood at 576,000, with a density of 156 persons per square kilometre (BOS, 2004). The vast majority of the population resides in rural areas, with urban areas home to just under 4 per cent of the district's total population (BOS, 2004). The average household in the district consists of eight persons (BOS, 2004). The Dir Kohistan valley, meanwhile, is home to a population of 112,000, distributed among some 196 villages and 15,600 households (ERNP, undated).

Little or no information is available about the ethnic composition of the district as a whole or the study area in particular. But studies carried out in the Dir Kohistan valley suggest that three main ethnic groups—the Kohistanis, Pakhtuns and Gujjars—reside in that area. There, Kohistanis are thought to be in the majority, followed by the Pakhtuns and Gujjars (ERNP, undated).

Provisional estimates for 2002–03 show water supply in the district to cover 61 percent of the population, better than only three of the province's 24 districts (BOS, 2004). District-wise figures are not available for access to sanitation but cannot in any case be higher than the national average which, in the years 1990–96, stood at 30 per cent of the population (Hussain, 2003).

KEY LIVELIHOODS

The population of Upper Dir district is predominantly dependent on agriculture, with wage labour and subsistence harvesting of natural resources contributing to household income. Harvesting natural resources is not included in any of the categories defined in census data, perhaps since it is a supplementary activity rather than a full-time occupation. Men from the area are known to travel down-country as well as abroad in search of work but recent figures for migration are not available. Forest royalties contribute to the household income of some communities but these figures have not been tabulated systematically.

In the Dir Kohistan valley, subsistence is based on the simultaneous exploitation of a number of

Livestock owners fall into three categories: land-owning households who rear buffalo and cattle; resident landless tenants or sharecroppers, who own cattle, sheep and goats, and practise vertical

down commercially valuable cedar (*Cedrus deodara*, known locally as diyar) for the resinous part at the base of the trunk, which is a good lighting source because it burns slowly.

Rangeland and pasture

According to 1995 estimates, some 48 per cent of land in the province as a whole was classified as grazing land (Aumeeruddy-Thomas, 2004). No reliable statistics are available for the area of rangeland and pasture in the district. Figures from 1992–97 for Upper Dir and Lower Dir combined show that wasteland and rangeland together cover 352,077 hectares (DG Audit, 2002). This figure does not tally with recent statistics according to which the total reported area of both districts combined is 269,210 hectares (BOS, 2004) but does suggest that a large portion of land in these districts is used as rangeland.

In the Dir Kohistan valley, meanwhile, rangeland including alpine pasture is thought to cover some 56 per cent of the land area (ERNP, 1992). Here, pastures are located at different elevations. Three main types of pastures are to be found: oak forest, cleared grazing areas in coniferous forests and alpine or sub-alpine pastures. Pasture and rangeland is being degraded by over-grazing as well as through conversion for agricultural use. The changing composition of grazing herds (more than 50 per cent of herds now consist of goats that are voracious feeders) adds to the problem. Over-grazing has led to the replacement of grass and scrub with non-palatable seasonal shrubs and forbs. Livestock also competes with wild ungulates for rangeland resources (ERNP, 1992).

GOVERNANCE

Upper Dir is counted both as a district in the NWFP as well as a Provincially Administered Tribal Area (PATA). On an administrative level, PATAs are today no different from other districts in the province. The local government system introduced across the country in 2001 has also been extended to the PATA and administrative matters at the local level are handled by a hierarchy of civil servants. But the legal regime in force in the province does not automatically apply to the PATA. Rather, the provincial governor is required to issue a specific notification extending laws to the tribal areas. In addition, the governor may also issue special regulations, with the approval of the president, for the governance of PATAs. The Pakistan Penal Code and the Criminal Procedure Code have been extended to the PATAs (Shah, 2006).

The unique status of the PATAs dates back to 1947, when the British colonial administration quit India and the indebi56 T8.6(h)3.5(o)1.h56 TDm

Regulations'—the Provincially Administered Tribal Areas Criminal Law (Special Provisions) Regulation 1975 and the Provincially Administered Tribal Areas Civil Procedure (Special Provisions) Regulation 1975—under which separate civil and criminal procedures were put in place, distinct from the procedures applicable elsewhere in the country (Ayub, 1989). The PATA Regulations allowed for the creation of tribunals which in 1976 were re-named 'jirgas' and awarded enhanced functions (AI, 2005). Although these jirgas were to adjudicate criminal and civil matters, they played an advisory role, submitting their recommendations to the deputy commissioner who was alone empowered to issue judicial decisions (AI, 2005).

This arrangement remained in place more or less unaltered until 1990, when the Peshawar High Court declared the PATA Regulations to be unconstitutional (AI, 2005). The judgment was challenged by the provincial government before the Supreme Court, which upheld the High Court decision and dismissed the appeals in 1994 (AI, 2005; Shah, 2006).

This verdict was followed by growing political unrest in the area, with calls from Islamist political groups such as the Tehrik-e-Nifaz-e-Shariah-e-Muhammadi (Movement for the enforcement of the Shariah) for the introduction of Islamic Shariah law (Shah, 2006). The legal and judicial vacuum created by the Supreme Court ruling was filled in 1994, when the Nifaz-i-Nizam-i-Shariah Regulation 1994 was passed, allowing for the creating of a quasi-Islamic system (AI, 2005; Dawn, 2004). In 1998, this law was replaced by the Nizam-e-Adal Regulations 1999, which changed the designations of judges in PATA, adopting Islamic nomenclature (Shah, 2006). The 1999 Regulations also made it obligatory for the qazi (judge) to consult an Islamic legal advisor before issuing any ruling. In substance, the Pakistan Penal Code and the Code of Criminal Procedure remained applicable (AI, 2005).

It was also around this time that the single district of Dir was itself bifurcated. In 1996, the two new districts of Upper Dir and Lower Dir were created (Shah, 2006). The town of Dir serves as the district administrative headquarters of Upper Dir, while Lower Dir is administered from the town of Timergarah (Shah, 2006).

Today, Upper Dir is counted both as a district of the NWFP as well as a PATA. This creates unique obstacles for efficient governance, primarily because laws applicable elsewhere in the province do not necessarily apply to the PATA.

The people of the PATA elect their public representatives through general elections, as do citizens elsewhere in Pakistan. These elected representatives participate in legislative activities in the national and provincial assembles, but the laws they help to frame do not come into force automatically in their own constituencies (Gillett, 2001; NDCP, c 2001). This incongruity has created legal complications both for ordinary citizens as well as the government machinery (NDCP, c 2001).

Traditional dispute resolution—the jirga

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The traditional jirga system dates back to pre-Islamic times. As a consultative assembly comprised of community elders, its collective decision was binding. Traditionally, the emphasis of the jirga was on maintaining peace (*lamo aman*). Thus, in disputes involving women, property or violence, the risk of factional discord and political disintegration had a tempering influence on jirga decisions. Among certain tribes, community leaders were known to expel those found guilty of murder, and victims who chose to accept compensation rather than exacting revenge were lauded by their peers (Keiser, c 2002). Even today, in many tribal cultures, *lamo aman* is a respected value and it is considered a compliment to be referred to as *aman pasand* (peace loving) (Keiser, c 2002). But the role of the jirga has undergone a metamorphosis, reflecting the changing political, economic and cultural dynamics of the times.

The early history of the jirga system in the study area is not well-documented. Originally, the jirga drew its authority from the people. Around the time of British colonial consolidation in India, however, a hybrid form of jirga began to emerge. Instead of deriving its authority from the people, the new type of jirga began to follow the dictates of the ruler. Eventually, the jirga evolved from being a community-rooted, egalitarian institution to a tool which the ruler used to consolidate power.

Following Independence, the jirga in Pakistan began to regain its legitimacy in many parts of the NWFP, partly because of the unique administrative arrangements that prevailed in many parts of the province.

The present-day jirga is an amalgam of the old and the new. On property and resource rights issues, it continues to adjudicate as it did, seeking conciliation between feuding individuals, villages or clans. Invariably, such differences are resolved amicably. In interpersonal, or inter-familial matters, however, the jirga today embodies a mixture of tribal customs and traditions that in many cases conflicts with Pakistan civil and criminal law. Even so, for many individuals, the jirga remains a viable option for conflict resolution. In fact, in many areas it is beginning to support and even supplant the civil courts.

RESOURCE RIGHTS REGIMES

Resource rights in the study area are governed by a statutory regime that focuses on policing and

rightsholders, “local beneficiaries and users”, and a range of community- and village-based organisations (section 2(24)).

Five types of forest are classified under the Forest Ordinance, based on management arrangements as well as use rights. Forested areas or wasteland that are government property, or over which the government exercises “proprietary rights”, may be declared reserved forests (section 4). A forest settlement board hears and settles individual claims over such forests (sections 6–8) but once the hearings are concluded, all individual rights in reserved forests are extinguished (section 11). Such forests are strictly controlled by the government and few use rights are permitted (section 26), except to those who have secured their rights through the settlement board. The government may choose to manage reserved forests or may hand over management to village communities. In the latter case, the forests so managed are called village forests (section 28). All of the use restrictions applicable to reserved forests generally apply to village forests as well.

The government may also declare forests or wasteland over which it has proprietary rights, and which are not included in reserved forest, to be protected (section 29). Individual claims in such forests are also to be settled, either by means of survey and settlement records or in another manner that the government deems “appropriate”. The government has wide powers in a protected forest to reserve

Commission is established. The Roundtable works as a “think-tank” and resolves “major conflicts” among stakeholders that are likely to hamper forest management (section 6).

Use rights in protected forests are further defined in the NWFP Management of Protected Forests Rules 1975.[1]

Ritchieana, known locally as *mazri*),[4] allowing the government to restrict the cutting, possession and transport of this species (section 47), and vesting the management of growing tracts including those that have been denuded with the forest department (section 49).

Wildlife is another subject for which the sole provincial law, the NWFP Wildlife (Protection, Preservation, Conservation and Management) Act 1975, does not apply to the tribal areas. This law does not in any case apply to wildlife outside protected areas (section 1(2)). As such, the hunting

The serai system may arguably be viewed as the first manifestation of private property in the area. By the early 20th century, however, both wesh allotments and serai grants were subsumed under more formal arrangements and the holdings became permanent (Rome, 2005).

Although forests were the property of landowners, not communal property, all members of the community were either right-holders or concessionists. These rights were never recorded but were common knowledge among the communities concerned. With the consolidation of the wesh system, ownership of forests was claimed and held by the same parties who held wesh land or serai grants (Rome, 2005).

In many areas, forests were not demarcated and villagers enjoyed free access for grazing animals, and to take timber for domestic use. Outsiders were also permitted to collect forest produce such as mushrooms and medicinal herbs. The right to sell trees, however, lay with the clans who held proprietary rights in the land. Serai landowners exercised proprietary rights over forests that were included in their land grants. Gujjars and other smaller communities, who had no share in the land, had no share in the ownership of the forests or in the revenue accruing from the sale of trees (Rome, 2005).

The customary regime governing land and forests underwent dramatic changes as a result of political developments both in the region and elsewhere in colonial India. As the relatively non-hierarchical tribal social structure gave way to a system under which political power was consolidated in the hands of the nawab, resource rights also became concentrated.

Early formal arrangements

Although historical details for the period are sketchy, it is believed that somewhere between 1740 and 1750, an elected leadership began to emerge from within the various tribes in the area. These elected tribal leaders in turn paid homage to the Akhundkhel khans of the Yusufzai tribe whose progeny later became the ruling family of Dir.

As the khans grew in stature, their control over communal resources increased, marking a dramatic shift from the original dispensation under which land was granted to the khan only for the duration of his lifetime. They took control of the forests, imposing penalties for encroachment and unauthorised use of forest resources. They imposed fiscal burdens on the population in return for permitting access to various resources, including land tax and levies on crops, and they extracted labour.

By the 1890s, the region was in the grip of internal strife brought on by battles between rival rulers of the many principalities in the area. These political develo(de)r -1.e e log i ei e(s)-eeeernal 3.5( )56 TD0.07( ) tv(r)7.3(m)-1.9(i

remained in place as long as communities fulfilled their various financial obligations towards the ruler. Eventually, however, the nawab gained the power to grant permanent ownership rights in agricultural

What this suggests is that subsistence use is not automatically denied. Guzara forests are also said to have been designated in Dir Kohistan's "Malakand Civil Division" (Matiullah, 2004) but information

INSECURITY AND CONFLICT

It is a great injustice that in an area rich in commercially viable forest, the majority of the people live in extreme poverty. This is in no small part a result of the current system under which the timber trade is conducted.

In the protected forests of Dir and in guzara forests located in Dir Kohistan's "Malakand Civil Division", timber harvesting is currently carried out by the Forest Development Corporation (Matiullah, 2004). Although various organisational (direct contracts, Forest Development Corporation) and financial (fixed price, 'net-sale') arrangements have been tried over the years, these have without exception limited the community share in revenues to a minimum.

Under the fixed-price system, for example, which was in use until 1981, rightsholders were paid a pre-determined amount per cubic foot of harvested timber (Knudsen, 1995). This system was clearly exploitative since it allowed the government rather than the communities to benefit from rising timber prices. Subsequently, a 'net-sale' system was introduced, whereby harvested timber was auctioned and net proceeds from the sale (less marketing and administrative costs, and other overheads) were divided between communities and the government according to a set formula (Knudsen, 1995). In theory, this entitled communities to receive a more equitable share of the income from the timber trade. In practice, however, this proved not to be the case. Prolonged delays is disbursing royalty payments in many cases left -9.7(to b)r(payments5to a)7 m3e3,7(r).7()7.7ayme-pen7(t[(ex)-3.7(p)7.9(l)-1.5(oit)-9.5(a)7.9(o(

communities are also embroiled in court cases related to accumulated royalties and the method of payment (Shah, 2006).

In 1996, the Peshawar High Court delivered a judgment disposing of two writ petitions concerning royalties in Upper Dir as well as the Kalam valley in neighbouring Swat district, and held that royalties should be paid on a net-sale basis. The Forest Development Corporation filed an appeal in the Supreme Court which remanded the case back to the High Court because certain legal formalities were not fulfilled by the High Court while delivering its verdict. In June 2005, another bench of the High Court decided the petitions, ruling that a 60 per cent royalty should be paid on the basis of net sales. The Forest Development Corporation has again appealed the decision and the matter currently lies with the Supreme Court. The uncertainty surrounding the outcome of this case has created a great deal of anxiety not only amongst those directly involved in the proceedings but also within other communities grappling with the same issues (Shah, 2006).

But perhaps an even greater cause for concern is the fact that many communities with customary claims in forest areas are denied the right to royalty payments altogether. Their exclusion owes largely to the fact that no means exist to verify their claims. The land grants that were awarded by the nawabs to their favourites, and later provided statutory cover in the Dir State constitution, are today a key source of tension between communities because claims to forest royalties are asserted based on these grants. Within communities, this tension has caused resentment and disaffection but not open conflict. Violent conflict over the issue of forest royalties has pitched local communities against the state.

There have been at least two such cases in the Dir valley. The first episode occurred in 1976, five years after the government declared Dir's forests to be protected under statutory law. In an attempt to secure higher royalties for their own communities, and to curb the inroads into forests by contractors, local people (all three ethnic groups) staged a protest against the government at Sheringal, the largest town in what is today the district of Lower Dir. The government initially deployed the Frontier Constabulary to control the unrest but as tempers flared and the situation turned violent, the military was called in (Shah, 2006). The disturbances were eventually handled by resorting to aerial bombing (field interviews, 2003).

Coming as it did less than a decade after Dir State was abolished and its residents drawn under the mainstream administrative aegis of the Pakistan government, there is no doubt that this incident sowed the seeds of distrust and paved the way for repeated bouts of anti-government violence in the decades to come.

Following the bombing atrocity, the then prime minister visited the area and announced that royalties would be increased. By means of a notification issued on 14 March 1977, the community share in royalties was raised from 15 per cent to 60 per cent (Shah, 2006). Certain tribes, who bore the brunt of the government crackdown and sustained the heaviest number of casualties, received a larger share of 80 per cent (field interviews, 2003). And here the matter should have ended.

It did not take long for local communities to realise that while their share of forest royalties may have been substantially increased, the system of extracting timber remained unchanged. Exploitative contractors had been a feature of the timber trade since the time of the nawabs, when such contractors were employed by the state to extract and transport timber from Dir's forests. This situation after accession to Pakistan was no different. Resentment erupted into violence less than two decades later.

In 1993, in the wake of massive floods that had occurred the previous year, the government banned logging activities in the area to allow the forests to regenerate (Dawn, 2005). No restrictions were, however, placed on the down-country movement of timber. This created a potential windfall for timber contractors, who had in many cases already paid communities meagre sums of money for large volumes of cut timber which would now greatly increase in value, and who were in the process of transporting the timber out of the valley.

The matter remained unresolved for many years until local youth in the town of Kalkot, Upper Dir, decided to take action. They set up a checkpoint to stop all movement of timber outside the valley,

and both the written and spoken rhetoric became confrontational. Scuffles broke out as forest officials attempted to dismantle these checkpoints.

The situation was eventually brought under control and in March 1997 the government ordered an inquiry (Shah, 2006). The inquiry commission, which submitted its report in June 1997, vindicated the communities' stance and advised payment of royalties in full (Khattak et al., 1997). It also recommended that the funds plundered by contractors be recovered and paid to rightsholders (Shah, 2006). These recommendations were not implemented and agitation continued.

Protest demonstrations were staged on a regular basis and hunger strikes were launched (Shah, 2006). A 'long march' to Islamabad was organised. Finally, in the year 2000, a second inquiry was commissioned which submitted its findings in October 2000. This time, however, the commission observed that it would be difficult to recover the looted money at this late stage (Shah, 2006). Not surprisingly, public agitation continued.

Eventually, a jirga was constituted which in 2000 negotiated with the government on behalf of the

SYNTHESIS AND CONCLUSIONS

The question of resource rights is without doubt the most obvious issue affecting the lives and the livelihoods of the people in the Dir valley. It has been more than 30 years since the forests of Dir were taken over by the government and declared to be ‘protected’ by law. And it is since that time that disputes over royalties have been foremost in the minds of the communities and individuals who lay claim to these forests. The disaffection created has taken an explosive turn on many occasions in the past, reflecting the frustration and perceived helplessness of the communities concerned. The long-standing conflict between local communities and forest authorities over royalties has never been

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