

Nepal's buffer zone legislation: Legal and policy issues

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INTRODUCTION

This report examines Nepal's 1993 buffer zone legislation from a legal and policy perspective. The goal is to suggest general principles that might be used to implement the legislation. It begins by identifying and analyzing legal issues raised by the legislation. Next, it identifies and analyzes policy issues that should be addressed before regulations are framed. Finally, it suggests an implementation strategy that might be adopted. A translated version of the legislation is attached as Appendix A.

In 1993, Nepal passed the Fourth Amendment to the National Parks and Wildlife Conservation Act (hereinafter the Buffer Zone Management Act or BZMA or Act) to enable His Majesty's Government (HMG), acting through the Department of National Parks and Wildlife Conservation (DNPWC), to address natural resource problems occurring on lands adjacent to national park boundaries. The Act gives HMG authority to designate buffer zones on lands adjacent to national parks or reserves. The DNPWC, as the representative of HMG, cannot take ownership of private lands in the buffer zone areas, but it can assume responsibility for public lands administered by the Department of Forestry (DOF) or other governmental agencies. The Chief Warden (or warden) is responsible for managing forest resources in designated buffer zone areas, but the law encourages him to form User Group Committees (UGCs) to promote local involvement in forest management. Law, however, does not specify the UGC's rights and duties, leaving that to be done through regulations or otherwise. In addition, the Act provides that 30 to 50 percent of the funds (30/50 funds) generated from park revenues (e.g., entrance fees, hotel royalties, etc.) may be expended for local community development. In sum, the language and structure of the Act is designed to promote coordination between park authorities and local villages to protect the parks through responsible management of buffer zone forest resources and to ensure sustainable forest resources for local consumption.

SUMMARY

The following section summarizes the principal legal and policy issues raised by the Fourth Amendment or BZMA. The conclusions and recommendations are based upon the basic philosophy of the BZMA: ensuring adequate protection for

national park buffer zone area forest resources by encouraging responsible and sustainable local management of these resources. This summary analysis is organized to follow the format of the report itself. A more detailed discussion is contained in the full report.

Legal Issues

1. Does HMG's buffer zone management authority apply to villages or communities located inside national parks, or does it only apply to villages or communities located outside the national parks?

Answer:

The BZMA clearly authorizes HMG to designate buffer zone areas on lands surrounding national parks and reserves, and it also probably allows the HMG to designate buffer zones within existing national parks and reserves.

2. Does HMG's buffer zone management authority extend to conservation areas?

Answer:

Because the BOMB authorizes HMG to designate buffer zones on lands surrounding national parks, it also seems to authorize the creation and management of buffer zones within conservation areas located adjacent to national parks and reserves.

3. Does HMG, by declaring a buffer zone, displace the management authority of the Department of Forestry over public forest lands located outside national parks?

Answer:

Representing HMG, the DNPWC can either assume ownership of forest lands within a designated buffer zone area or leave ownership with the Department of Forestry. Whenever the DOF will continue to administer buffer zone forest lands, the two agencies should clarify their relationship to avoid confusion and inconsistency. In any event, the warden is ultimately responsible for managing buffer zone area resources, though he may create local User Group Committees (UGCs) to assist in managing these resources.

4. Are there any limitations on how HMG distributes funds from the 30/50 Fund established by the buffer zone legislation?

Answer:

The Act authorizes the dispersal of 30/50 funds for local community development, regardless of whether the community is located within the designated buffer zone area. Any community impacted by national park or buffer zone resource management policies should be eligible to participate on UGCs and to receive 30/50 funds. There is no legal prohibition against allocating the 30/50 funds to promote effective, innovative, and responsible resource management policies in designated buffer zone areas.

5. Can or should HMG, if it cannot assume ownership of private land, exert any regulatory power or influence over private property located within designated buffer zones?

Answer:

Although the BZMA precludes HMG from acquiring ownership of private lands within designated buffer zone areas, it does not prohibit regulation of private land use or development. Private land use might be regulated directly by limiting resource use or development on these lands, or it might be regulated indirectly by limiting access to buffer zone forest resources that might be used to develop the property.

Policy Issues

1. Should HMG promulgate general or specific regulations implementing the buffer zone legislation?

Answer:

HMG should promulgate general regulations establishing a buffer zone management framework, but otherwise give wardens the flexibility to respond to diverse local conditions and problems.

2. Recognizing that HMG would prefer not to regulate directly or coercively in buffer zone areas, does the SIGMA contain sufficient incentives to ensure meaningful local cooperation in buffer zone management?

Answer:

To promote local cooperation as well as responsible local management, HMG should establish a connection between UGC management and the 30/50 funds to reward villages that successfully protect or sustain buffer zone ecosystems. To protect national park ecosystems against irresponsible local management, HMG should promulgate regulations establishing a non-impairment (or sustainability) management standard to guide UGC decision-making, and also give the warden a veto power over UGC decisions adversely impacting park resources.

3. How should the UGCs be structured and selected?

Answer:

Although HMG should establish general membership and representation requirements for the UGCs, park wardens should otherwise have authority to design UGCs to meet local conditions. Consistent with these general requirements, the affected villages generally should be responsible for selecting UGC members.

4. What authority and responsibility should UGCs be given?

Answer:

The UGCs should have general management responsibility for buffer zone forest resources, subject to clearly established resource management standards and the warden's veto authority. (See no. 2 above). Local villages should be consulted before buffer zone designations are made, with wardens required to identify specific resource issues to be addressed through buffer zone management.

5. Should HMG, in its planning for buffer zone management, distinguish between areas where largely intact ecosystems are under imminent threat from resource use activities, and other areas where the existing ecosystem is already seriously damaged and requires restoration?

Answer:

Park wardens, using their buffer zone management authority, should approach imminent ecosystem damage problems differently than ecosystem restoration problems; they should be prepared to take emergency measures to prevent destruction of an existing ecosystem, while recognizing that ecosystem restoration might take longer to accomplish.

6. Should buffer zone management, either through regulations or otherwise, distinguish between commercial and individual resource use activities?

Answer:

Given the difficulty of distinguishing between commercial and noncommercial resource use activities and the high level of local interest in both activities, HMG probably should not treat commercial resource use activities differently than individual resource use activities.

7. Can or should buffer zone management authority be used to regulate tourism infrastructure development, {e.g. lodge and teahouse construction and maintenance?

Answer:

The BUM provides HMG with an opportunity to regulate, either directly or indirectly, tourism and trekking infrastructure development, particularly lodge and teahouse construction which has a major impact on forest resources in areas adjoining established parks.

8. Should HMG's buffer zone management authority be linked expressly to the denigration and revision of park boundaries?

Answer:

HMG probably should not expressly link its national park boundary revision power with its buffer zone management authority, although this power is available and can be exercised to resolve particularly intractable buffer zone management problems.

Implementation Strategy

Implementation of the BZMA will be an experimental process, subject to reassessment and adjustment with experience. Initially, after consulting with potentially affected communities, HMG should promulgate general regulations establishing an institutional framework governing buffer zone management. This institutional structure and related processes should be based upon the principles outlined above. It should give park wardens sufficient authority to protect against irresponsible local management of buffer zone resources, while also leaving them with flexibility to respond to diverse local conditions. After finalizing the regulations, the Department should provide wardens with a timeframe and criteria for designating buffer zones and for establishing local UGCs. In addition, HMG should create a 30/50 Fund dispersal mechanism, which should ensure that funding is linked to responsible local management of buffer zone areas. Finally, the Department should monitor how the system is operating, make adjustments where necessary, and share this information throughout the park system. To facilitate this monitoring process, wardens should file periodic reports assessing their buffer zone management progress.

LEGAL ISSUES

The following legal issues are not fully addressed in the buffer zone legislation and require some further clarification:

1. Scope of buffer zone management authority

Does HMG's buffer zone management (buffer zone management) authority apply to villages or communities located inside national parks, or does it only apply to villages or communities located outside the national parks? Can HMG designate buffer zones inside existing national parks? If so, can HMG give a User Group Committee (UGC) any management authority or control over park resources? Are local communities inside national parks entitled to any revenues from the 30/50 Fund?

Analysis

The issue of whether buffer zone management authority extends to communities inside national parks is important because several parks (e.g., Sagarmatha, Langtang) contain local communities that use and depend upon park resources as well as resources located on adjacent lands. These communities are often heavy users (and sometimes abusers) of park resources as well as forest resources located outside the parks. If these communities are not covered by the legislation, HMG may find it difficult to secure local participation (through UGCs) in a joint resource management program or to assert regulatory authority, where necessary, over community resource use activities. In addition, if these communities are not covered by the Bum, then they may not be eligible for 30/50 funds, a significant inducement for villages to pursue park-sensitive resource management policies. This would be unfortunate, because the local participation philosophy (and funding inducement) of the BZMA offers a unique opportunity for Nepal's national parks to establish a new relationship with key local communities. Besides, several communities located inside national parks (e.g., Namche in Sagarmatha National Park) depend heavily upon forest resources located in potential buffer zone areas outside park boundaries, which means effective buffer zone management must address these communities' needs and problems.

Section 2(1) of the Buffer Zone Management Act (BZMA) defines buffer zone" as The surrounding area of a national park or reserve.. In addition, section 3(a) of the BZMA gives HMG authority to declare a buffer zone for n any surrounding area of the national park or reserve. These statutory provisions, which only address surrounding areas, strongly suggest that buffer zone management authority extends to lands located outside, but not inside, existing national parks. However, section 5 of the BZMA authorizes creation of a User Group Committee (UGC) Afar the management of fallen trees, dry wood, firewood and grass in a national park, reserve, conservation area, or buffer zone, thus implying that buffer zone management authority (which utilizes UGCs) can be exercised inside as well as outside existing national parks. Section 8 of the BZMA, which provides for dispersal of the 30/50 funds, does not distinguish between villages located inside or outside national parks, providing that these funds "may be expended, in coordination with the local agency, for community development of the local people."

In short, although the BZMA defines a buffer zone in terms of lands located outside national parks, it nonetheless allows buffer zone management tools (UGCs and 30/50 funds) to be used for communities located inside existing national parks. If the overarching statutory goal is to achieve maximum protection for national park ecosystems, regardless of where threatening activities occur, then the BZMA should be interpreted to authorize buffer zone designations both inside and outside national park boundaries. But even if buffer zone designations are not made inside national parks, the BZMA authorizes park communities to participate in UGCs and to receive 30/50 fund revenues. Moreover, under the National Parks and Wildlife Conservation Act (NPWCA), HMG has broad management authority over national park lands, and can rely upon thin statutory authority to address forest resource management problems involving lands located inside the national parks.

One potential problem arises from this conclusion. In Royal Chitwan National Park and other terse parks, where there is intensive resource use by adjacent villages that spills into the park, park wardens might be pressured to designate buffer zones inside the park to accommodate village resource needs by opening the parks for local harvest. This pressure, of course, could be avoided by interpreting the BZMA not to authorize designation of buffer zones inside national parks, although this conclusion would not help with management problems in the mountain national parks. Instead, because the BZMA is designed to use buffer zones to protect park resources (not to open parks for exploitation), the legislation should not be read to give the DNPWC authority to create buffer zones inside parks to meet local resource demands. Any other interpretation would violate the letter, purpose, and spirit of the legislation.

2. Buffer Zones and Conservation Areas

Does HMG's buffer zone management authority extend to Conservation Areas? In other words, can HMG designate and manage a buffer zone in a Conservation Area adjacent to a national park?

Analysis:

The BZMA does not directly address this question. By statutory definition, buffer zones are contemplated on the perimeter of national parks and reserves (Sections 2(1), 3(a)), while UGCs may be established for resource management in national parks, conservation areas, and buffer zones (Sec. 5), and 30/50 funds may be expended for local villages regardless of location (Sec. 8). As a practical matter, only the newly established Makalu-Barun National Park and Conservation Area currently involves a situation where a national park is bordered by a designated conservation area. In that case, HMG has extensive statutory management authority in the designated conservation area, which probably renders designation of a buffer zone unnecessary. Since the UGC and 30/50 fund tools can evidently be employed in conservation areas, regardless

of whether a buffer zone has been designated, it may not be necessary to clarify the relationship between conservation areas and buffer zones.

However, because both of these designations are new park management tools that will likely be used again, it may be useful to clarify the relationship between buffer zones and conservation areas. Since buffer zones are designed to address areas of intense conflict on lands adjacent to national park boundaries, it would be helpful if HMG has authority to designate buffer zones inside conservation areas to highlight the need to manage particularly sensitive lands more carefully than other lands located in the conservation area. Designation of a buffer zone inside a conservation area should not change the administering agency since the DNPWC should already have authority in the conservation area. Moreover, designation of a buffer zone would clearly signal the need to utilize UGCs and 30/50 funds in the area, a significant inducement for local communities to engage in protective resource management. In short, neither the legislative language nor statutory policy seems to preclude use of the buffer zone designation authority in conservation areas adjacent to national parks.

3. Interagency Relations

Does HMG, by declaring a buffer zone, displace the management authority of the Department of Forestry (DOF) over public forests located outside national parks? Can the DNPWC, once a buffer zone has been declared, exercise the same legal authority as the DOF previously exercised? What legal authority, if any, is retained by the DOF? What relationship then exists between the DNPWC and the DOF?

Analysis:

The DOF is presently responsible for managing public forest lands outside existing national parks. For the most part, under the BZMA, it is these public forest lands that are subject to designation as a buffer zone. Once these lands are included in a buffer zone, the BZMA does not resolve the issue of which agency is then responsible for (or owns) them. Section 3(a)(2) of the BZMA provides that HMG may either leave ownership of buffer zone lands with the DOF or transfer ownership to the DNPWC or another entity, or perhaps even change the boundary of the park itself by publishing in the Gazette. Section 3(b), however, indicates that the park warden is responsible for conservation and management activities in the buffer zone area, which seemingly gives him legal authority over the area regardless of which agency "owns" or administers the land. But even if HMG declares a buffer zone adjacent to an existing national park, the DOF will be responsible for the remaining public forest lands, which suggests the necessity of maintaining good relations between the two agencies.

If ownership of the buffer zone land is transferred to the DNPWC, then it would have full legal authority to administer and regulate forest practices within the designated area. But if ownership is not transferred to the DNPWC, then it is less clear exactly what legal relationship exists between the DNPWC and the DOF. Within the agencies themselves, the issue may not be too important; both departments are located within the Ministry of Forestry, which can resolve any legal, jurisdictional, or policy disputes that might arise. Nonetheless, to avoid confusion among local managers or within local villages, it will be important to clarify the relationship between the DISC and the DOF at the time a buffer zone is designated. Otherwise, if both departments can (or do) assert management authority over the area, the risk exists of inconsistent policies and strained relationships, or of local villages playing both departments off against one another. Neither of these situations would promote harmonious relations between the national parks and local villages, a key buffer zone management goal.

4. 30/50 Fund Dispersal

Are there any limitations on how HMG distributes funds from the 30/50 Fund established by the buffer zone legislation? More specifically, can HMG distribute 30/50 funds to villages located outside the designated buffer zone but impacted by the designation? Relatedly, can 30/50 funds be distributed to villages located inside a national park that might be impacted by buffer zone limitations imposed outside the park? More generally, what considerations, equitable and otherwise, should govern distribution of these funds (i.e., population, proximity to park, degree of restrictive regulation, degree of need, tourist numbers)?

Analysis:

The BZMA provision establishing the 30/50 funds do not contain any explicit limitations on distribution of these funds, except the requirement that the monies be expended for local community development. There is no requirement linking distribution of the funds to communities located within designated buffer zone areas. Moreover, the legislation provides that UGCs may be formed for management of resources inside national parks as well as within adjacent buffer zone areas. In short, the legislation contemplates use of 30/50 funds to promote responsible resource management both inside and outside national parks.

This analysis suggests that any community impacted by a buffer zone designation, whether located inside or outside the designated buffer zone, may be eligible to receive 30/50 funds. For example, a village like Namche, which is located inside SNP but also dependent on forest resources outside the park (and in a potential buffer zone), might be eligible for 30/50 funds, along with other villages also dependent upon resources from the same buffer zone area.

Similarly, a village located outside the national park and outside a potential buffer zone area, but nonetheless dependent upon forest resources located inside the proposed buffer zone area (like some villages located outside Royal Chitwan National Park), also might be eligible for 30/50 funds if impacted by the buffer zone designation. Such an interpretation ensures that villages impacted by a buffer zone designation would be eligible for 30/50 funds, which are intended to encourage responsible resource use and management practices inside designated buffer zones.

Except for requiring coordination with a local agency, the statute is silent about how 30/50 funds should be allocated between local communities. Since the intent of the statute is to promote responsible buffer zone management, the funds should be dispersed in a manner consistent with this statutory goal. The funds, therefore, should be used to reward villages that implement, through the UGCs, responsible (as well as innovative and sustainable) resource management programs. HMG, perhaps in conjunction with local agencies, might establish a Buffer Zone Fund Committee to evaluate the effectiveness of buffer zone management schemes and apportion the funds accordingly. In any event, the legislation does not require that the 30/50 funds be dispersed in accordance with where the funds are earned or local population size. This means that communities in the vicinity of the largest revenue producing parks (e.g., SUP, RCNP) are not necessarily entitled to the funds produced from those parks. This gives HMG flexibility to use these funds to address the most serious buffer zone management problems, regardless of which park is concerned. (Other issues involving dispersal of the 30/50 funds are addressed in the Policy Issues section.)

5. Regulation of Private Property

Can or should HMG, if it cannot assume ownership of private land, exert any regulatory power or influence over private property located within designated buffer zones? For example, does the BZMA give HMG any authority to regulate private lodge construction in the Lukla corridor leading to Sagarmatha National Park?

Analysis:

Under the BZMA, HMG is not authorized to acquire ownership of private lands located in a designated buffer zone (Sec. 3(b)), but it may assume ownership of public lands located in a buffer zone (Sec. 3(a)). This interpretation is supported by the provision specifically requiring compensation if a UGC recommends removal of a private house moved from a buffer zone into a national park by natural forces like a flood (Sec. 3(c)). The statute, however, does not prohibit the DNPWC, working in conjunction with a local UGC, from regulating private land use and development in these areas. Such a regulatory power is particularly important in areas where national parks are bordered by

private lands subject to intensive development potentially detrimental to park ecosystems. This situation currently prevails on private lands outside Royal Chitwan National Park and in the Lukla corridor outside Sagarmatha National Park.

Indeed, in areas where national parks are bordered by private lands undergoing intensive development, the only effective buffer may be some regulation of development or resource use on those private lands. In consultation with UGCs and through judicious use of the 30/50 funds, HMG (acting through the park warden) might seek to convince local villages to impose some restraint on private land or resource use to ensure the integrity of the Shared ecosystem. These restraints might be imposed if it is shown that private land development or resource use is adversely impacting national park ecosystems or resources. Alternatively, HMG might directly regulate private land use by imposing specific limitations on development, or it might indirectly regulate private land development by limiting access to forest resources. Direct regulatory controls could involve limitations on livestock numbers or fuelwood consumption, or lodge construction limitations or design requirements. Indirect regulatory controls could involve limitations on livestock grazing or fuelwood gathering, as well as limitations on timber cutting for lodge construction, on forest lands within designated buffer zone areas. (See the Policy Issues section for further discussion of regulation of tourism and trekking infrastructure development).

POLICY ISSUES

Following is an examination of some of the many policy issues presented by the buffer zone legislation:

1. General or Specific Regulations

Should HMG promulgate general regulations implementing the buffer zone legislation? Should it promulgate separate regulations for each park, or separate regulations for the mountain and terse parks? Or should it use both approaches, promulgating general regulations addressing buffer zone management as well as individualized regulations addressing the unique problems of each park?

Analysis:

A combination of regulatory approaches probably makes the most sense. To ensure some uniformity in buffer zone designation criteria, the structure and operation of UGCs, and 30/50 fund management, HMG should promulgate universal regulations governing these aspects of buffer zone management. To address the diverse local problems that individual parks will encounter with buffer zone management, HMG should delegate considerable discretionary authority to park wardens to respond to the unique problems they each will

confront. However, to ensure that wardens have sufficient authority in the field and to provide them with some political protection, HMG should be prepared to promulgate regulations to address particularly difficult local resource issues.

2. Securing local Cooperation

Recognizing that HMG would prefer not to regulate directly or coercively in buffer zone areas, how should it enlist the cooperation and assistance of local communities to implement the buffer zone legislation? Does the BZMA contain sufficient incentives (e.g., creation of UGCs and dispersal of 30/50 funds) to induce meaningful local cooperation in buffer zone management?

More specifically, are the 30/50 funds a sufficient inducement to ensure that local UGCs will fully consider the welfare of the park when deciding resource use issues in the buffer zone area? Should the park warden retain a veto power over UGC decisions if the park's welfare has been ignored or jeopardized? Is the threat of the warden's veto sufficient to ensure that UGCs will protect park ecosystems when regulating resource use in buffer zone areas?

Analysis:

The BZMA contemplates that creation of UGCs and the availability of 30/50 funds, combined with HMG's authority to designate and manage buffer zone areas, provides sufficient incentive to ensure responsible local community involvement in managing buffer zone resources. Because the role of the UGCs and dispersal of the 30/50 funds is not specifically defined in the legislation, it is important for the DNPWC to structure these community involvement devices to ensure meaningful local support and regulation. One approach is to establish a connection between the UGCs and 30/50 funding. Absent the realistic prospect of a direct financial reward, local UGCs may be reluctant to impose meaningful resource use restraints in designated buffer zones simply for the neighboring park's benefit. Particularly innovative or protective UGCs should be assured some local reward through 30/50 funding for their efforts. In other words, the 30/50 funding should be linked, at least in part, to effective buffer zone management approaches. With this incentive, local communities interested in 30/50 funds for development should be encouraged to protect park resources in buffer zone management areas.

These incentives, however, will not always produce responsible local management of buffer zone resources. To protect against recalcitrant or unsympathetic UGCs, the park warden should have the power to review local resource management decisions. Because Section 3(b) of the BZMA specifies that the warden is ultimately responsible for buffer zone management, the warden should serve on the local UGCs and retain a veto power over decisions harmful to park ecosystems or resources. In addition, HMG (perhaps acting

through a Buffer Zone Fund Committee) should retain the power to deny 30/50 funds to villages where UGCs have acted adversely to park interests. To be sure, neither the veto power nor the funding denial power should be exercised lightly; they should only be exercised after it is clear that the UGC (or local village) has ignored or disregarded the park's interests and thus jeopardized its ecosystems or resources.

2. UGC Selection and Structure

How should the UGCs be structured and selected? What role, if any, should the warden play in designing and selecting UGCs? Should the warden serve on the UGC? If so, what role should the warden play? What power (veto or otherwise) should the warden have over UGC decisions? In addition, should the UGCs be linked, directly or indirectly, to the existing local governmental structure (i. e., Forest Management Committees, etc.)?

Analysis:

Other than requiring coordination with the local agency, the EMMA does not establish any criteria for selecting or designing UGCs. However, Section 5(2) of the BZMA given HMG the apparent authority, through regulations or otherwise, to define the structure, role, and authority of UGCs. Because UGCs are intended to promote local involvement in resource management in buffer zone areas, the wardens should be afforded some flexibility in designing UGCs to accommodate local traditions, practices, and the like. However, HMG should promulgate regulations establishing basic principles governing UGCs, including minimum size and representational requirements, a definition of the warden's role and authority, periodic meeting requirements, and some governing standards. Otherwise, given the enormous disparity in geography and cultural tradition between Nepal's national parks, the park wardens should be given maximum flexibility to meet local conditions.

Because buffer zone management is linked to local community involvement, villages should generally have the authority to decide for themselves (through their own processes) who should serve on the UGC. To promote public acceptance and local cooperation, it may be prudent to ensure that important local political leaders, such as Village Development Chairs, are included on the UGCs. Local selection power, however, should be subject to a general representational requirement to ensure that particular groups or communities are not left out of the process. In particular, village women, who are generally responsible for firewood gathering and the like, should be represented on the UGCs. The park warden's UGC role and authority also should be specified in general regulations, leaving no question about his membership on the UGC or his authority to veto decisions detrimental to park resources. In addition, a regulation requiring periodic meetings would ensure that the UGC remains an involved and functioning entity, and it would ensure regular contact between

the warden and local villages. The regulation might specify that failure to meet regularly would empower the warden to dissolve the UGC and assume management responsibility for forest resources located in the buffer zone area.

Moreover, the regulations should require that UGC resource management decisions must not impair or harm the park's ecosystem or resource-a requirement that is designed to protect park resources and also give UGCs a standard to guide their deliberations and decisions. Absent such a standard, the UGCs would have little guidance about what is expected in buffer zone areas, and wardens should they exercise veto power-could be accused of acting arbitrarily. By promulgating a regulation establishing a tangible resource management standard, the warden should be able to avoid charges of inappropriate intervention or arbitrariness in the event it becomes necessary to overturn a UGC decision. Alternatively, the regulations might require the UGC to manage resources to address the expressed concerns that caused HMG to establish the buffer zone area. (See the next section addressing buffer zone designation). In the case of buffer zones designated in conservation areas, the regulations also should require UGCs to manage these lands consistent with the general management plan.

The Department of Forestry, through its local representatives, also might play a role in the UGCs. In the event that the DNPWC, upon designating a buffer zone, does not assume ownership of the designated land (leaving ownership with the Dept. of Forestry), then the DNPWC should consider including the DOF as a member of the UGC. This would enable the warden to enlist the DOF's expertise and assistance in buffer zone management. The DOF may have useful information about buffer zone forest resources, and it may have important local contacts to facilitate village cooperation. In addition, the warden might enlist members from the Forest Management Committee to serve on the UGC or otherwise provide for some overlapping membership on the two committees. As a practical matter, however, where the local Forest Management Committee has successfully managed forest resources on a sustainable basis, it may not be necessary to create a buffer zone adjacent to a national park. In other words, buffer zone management may only be necessary in those locations where local forest management has failed, which means the warden should replace the existing Forest Management Committee with a new UGC.

4. UGC Authority and Responsibility

What authority and responsibility should UGCs have? More specifically, should the warden retain a veto power over UGC decisions? Should UGCs be required to adhere to any standards when making resource management decisions involving designated buffer zone areas? What role, if any, should UGCs have in designating buffer zones adjacent to parks? Should UGCs have any role in deciding where and how the 30/50 funds are spent?

Analysis:

The BZMA provides that "management and conservation activities of the buffer zone area shall be done by the warden" (Sec. 3(b)). It also provides that the UGC is responsible, with the warden, for "The management of fallen trees, dry wood, firewood and grass in national parks, reserves, conservation areas or buffer zones" (Sec. 5). The statute does not otherwise specify the UGC's authority or responsibility, although it does give HMG authority to define other rights and duties, presumably through regulations. Given the delicacy of relations between park authorities and local communities in most national park areas, it is important to specify clearly what role local communities, through the UGCs, will play in buffer zone management.

The veto power issue is perhaps the most difficult issue, since retention of a veto power would give the warden ultimate authority over resource management in buffer zone areas outside park boundaries—a situation that could further exacerbate relations with neighboring communities. But failure to vest the warden with a veto power puts park ecosystems and resources at risk if local villages are intent on acting without regard for sustainability and only for short term goals. It is still unclear whether the availability of 30/50 funds or UGC involvement in decision-making will be sufficient inducements to ensure responsible local resource management. Besides, under Section 3(b) of the BZMA, the warden is ultimately responsible for buffer zone management. Thus, the warden should retain a veto power to protect against UGC mismanagement. However, this veto power should only be exercised as a last resort, and then only if clearly articulated resource management standards (either in the regulations, the buffer zone designation, or the general management plan) have been violated. Moreover, should the warden exercise this veto power, he should be required, in writing, to explain why he has vetoed a UGC decision and to suggest alternatives that might enable the UGC to realize its resource use goals.

Because of the delicacy of park-community relations, it also is important to establish clear standards governing UGC management of buffer zone lands. Absent clearly defined standards, the UGC is left without any guidance (other than HMG's determination that these buffer zone lands are critical to the park ecosystem) about how to manage these resources, or what problems must be addressed. A two-pronged approach to this problem would be to promulgate a general regulation requiring that UGC buffer zone management must not impair or harm park ecosystems or resources, and also to require park wardens to identify critical resource management issues in the buffer zone designation itself. (In the case of buffer zones located in conservation areas, the regulation should specify that management must be consistent with the conservation area general management plan.) Thus, the UGC would be guided by a general "non-impairment" standard as well as a more detailed, site specific statement of local resource management problems. As noted above, this would give the UGC

some guidance in its local resource management decision-making, and it should insulate the warden from charges of arbitrariness should it become necessary to intervene further in buffer zone management.

The BZMA gives HMG sole authority to designate buffer zones in areas surrounding national parks (Sec. 3(a)). There is no provision for local involvement in the buffer zone declaration, although the statute otherwise contemplates extensive local involvement in management of the area. Given the delicacy of relations between park authorities and many local communities surrounding Nepal's national parks, it would be advisable for wardens to consult with local villages before designating a buffer zone area. To promote good local relations, the warden also should be required to provide a written statement of reasons why a particular area should be designated a buffer zone and allow local villagers an opportunity to comment on the proposal. Moreover, the DNPWC should consult with the DOF before designating buffer zones. In any event, once an area is declared a buffer zone, the warden should be required to provide a Statement of resource management problems or issues that must be addressed to protect park ecosystems and resources. This should give local villagers, as well as the UGCs and other affected parties, a clear idea of how to proceed with resource management in the area.

The BZMA does not directly connect the UGCs with expenditure of the 30/50 funds that are available once a buffer zone has been established. The BETA simply provides that 30/50 funds may be expended for local development in coordination with a local agency (Sec. B), which obviously implies some local involvement in expenditure decisions. To provide the UGCs with a sufficient incentive to engage in responsible resource management, the UGC's performance should be linked with the expenditure of 30/50 funds. Particularly innovative or effective UGC resource management programs should be rewarded by making 30/50 funds available for local development. This would enable responsible UGCs to see a tangible and immediate return from their resource management decisions. (See no. 2 above for further discussion of this point). One approach would be to provide for UGC representation on the committee or body responsible for dispersing 30/50 funds, — —, the Buffer Zone Fund Committee. Another approach would be to allocate a portion of the 30/50 funds, to reward local communities with effective UGCs.

6. Distinguishing Ecosystem Protection and Restoration

Should HMG, in its buffer zone management process, distinguish between areas where largely intact ecosystems are under imminent threat from local resource use activities and where immediate action might protect important forest land and resources, and other areas where the existing ecosystem is already seriously damaged and where ecological restoration activities are needed, which will take a much longer time to accomplish? In other words, should HMG adopt different buffer zone management approaches in areas where the

ecosystem might be saved by immediate intervention as distinguished from areas where the ecosystem is already so degraded that major restoration efforts are necessary?

Analysis:

The BZMA draws no distinction for forest management purposes between buffer zones in areas of relatively intact ecosystems and areas of degraded ecosystems. Despite some intensive cutting, the forest areas surrounding most mountain parks are still relatively intact and can probably be protected through sensitive management. But the forest areas surrounding several terse parks (particularly Royal Chitwan National Park) are seriously degraded and require extensive ecosystem restoration efforts, which will require large expenditures and a lengthy period of time. Given these two quite different situations, the DNPWC should be prepared to pursue different buffer zone management strategies to protect park resources.

In the case of imminent and serious environmental threat to a relatively intact buffer zone area, HMG should be prepared to act immediately to stop or enjoin potentially harmful resource use activities on lands adjacent to national park-. It is far easier to protect relatively unharmed areas from destructive resource use than to restore severely degraded areas. To accomplish this, HMG should adopt regulations giving park wardens emergency power to intervene in such cases, including the power to declare interim buffer zones. On the other hand, immediate intervention and action is not as necessary in already seriously degraded buffer zone areas. Instead, HMG should focus on long term ecosystem restoration efforts for these areas. HMG might earmark some of the 30/50 funds to promote ecosystem restoration efforts for seriously degraded buffer zone lands. Thus, direct intervention authority might be limited to cases of imminent and demonstrable ecological damage requiring an immediate response.

7. Distinguishing Commercial and Individual Resource Use

Should buffer zone management, either through regulations or otherwise, distinguish between commercial and individual resource use activities? If so, how should commercial and individual resource use activities be defined? For example, should commercial logging be treated differently than wood gathering for private home construction or fuel consumption? Should the construction and maintenance of lodges and teahouses be treated as individual or commercial activities?

Analysis:

The BZMA makes no distinction between commercial and individual resource use activities in designated buffer zones. Although commercial logging

operations have an obvious destructive impact on forest ecosystems, the cumulative impact of numerous individual subsistence-level activities can be every bit as destructive over time as commercial activities. Moreover, both activities directly affect the availability of forest resources, thus giving local villages a stake in management decisions. While commercial forestry activities can provide local employment opportunities and otherwise stimulate local economic activity, these benefits may not outweigh the adverse impacts (environmental and otherwise) associated with large scale development.

A buffer zone management system that treats these two activities differently would risk losing local support. If the UGCs are precluded from managing commercial forest activities, then this might undermine local confidence in the UGC system, particularly if commercial activities continue unabated while the UGC is limiting individual use. By giving the UGCs some control over commercial activity, HMG conveys the message that it has confidence in local management; whereas removing commercial activities from UGC oversight would communicate the opposite message. Moreover, a responsible forest resource management program must be able to assess the cumulative impact of commercial and individual resource consumption to establish sustainable and ecologically sound buffer zone forest management goals. If commercial forest use is adversely impacting the buffer zone ecosystem, then local villagers concerned about forest sustainability will be sensitive to this fact and can be expected to respond accordingly.

HMG, however, should ensure fair treatment of commercial and noncommercial forest users. A local UGC, for example, should not be allowed to prohibit commercial forest activity while not imposing any meaningful limits on individual resource use activities- result that would be inequitable and also perhaps environmentally harmful. Indeed, in areas with commercial forestry, HMG should provide for commercial representation on local UGCs to ensure a truly representative resource management committee. Particularly troublesome commercial use problems that the UGC refuses to acknowledge can probably be addressed through the warden's reserved veto power, which ensures some DNPWC oversight of these activities. Moreover, defining what constitutes commercial forest use activity is not easy. Should lodge or teahouse construction and maintenance, most of which involves individual (or family) ownership for profit making purposes, be treated as a commercial or individual resource activity? While this type of business activity is quite different from commercial timber harvesting, both activities are prompted by the profit motive and both involve the use and "sales of forest resources to others. In fact, the trekking and tourism industry has had a greater environmental impact on Nepal's mountain forest resources than any other commercial activity. But recognizing that tourism and trekking development also can provide important local economic benefits, it may be advisable to address this type of forest resource use activity separately. (See the following section for discussion of tourism infrastructure regulation.)

8. Tourism Infrastructure Regulation

Can or should buffer zone management authority be used to regulate, either directly or indirectly, tourism infrastructure development, i.e., lodge or teahouse construction and maintenance?

Analysis:

At least since the creation of the mountain national parks, the major impact on local forest resources has been the need to meet trekker demands. To date, HMG has not been involved in regulating trekking or tourism infrastructure development, either inside or outside the national parks. Although the Ministry of Tourism is directly responsible for trekking regulation, which includes deciding whether to open new areas, issuing trekking permits, and the like, it has not regulated the development or maintenance of trekking facilities. Indeed, throughout the government, there has been a reluctance to regulate trekking infrastructure development, perhaps because most of the actual development is occurring on private lands or perhaps because the trekking industry has brought much-needed foreign currency into the country. However, the time may be at hand for the government to begin addressing the environmental impacts of tourism.

An ever increasing number of tourists and trekkers are having an adverse environmental impact in the national parks, where tourism infrastructure development (lodges, restaurants, teahouses, etc.) is growing rapidly. Perhaps the clearest example of this infrastructure growth is in Sagarmatha National Park, where the number and size of lodges has grown dramatically over the past ten years. The same growth pattern is evident in the Lukla corridor outside the park. This proliferation of lodges and teahouses is stressing forest resources, both inside and outside the park. While the kerosene requirement for organized trekking groups has reduced demand for firewood from this contingent of trekkers, the growth of lodges and teahouses has fostered another contingent of trekkers who are now putting a similar pressure on local forest resources. Trees are being cut to provide timbers and wood for lodge construction, and firewood is being gathered and burned to cook food for trekkers, and to heat lodges and shower water for them. Much of this activity is occurring on lands adjacent to park boundaries, which probably should be included in a designated buffer zone. (A similar pattern of explosive development and use of forest resources is evident with the jungle lodge construction that has occurred in Saurha just outside Royal Chitwan National Park.)

The BZMA provides park authorities with an opportunity to begin regulating, at least indirectly, tourism and trekking infrastructure development. Since the BZMA authorizes regulation of forest resources both inside and outside the national parks, the DNPWC could use this opportunity to impose some restraints

on access to timber and wood for lodge or teahouse construction and maintenance. These constraints might be linked to requirements that new lodges or teahouses meet certain location, design, and energy (or fuel) efficiency requirements. In other words, before local residents (or others) could receive authorization to cut timbers or wood for lodge construction, they would have to assure the warden (or UGC) that the lodge would be located and designed appropriately, would contain proper sanitation facilities, and would be fuel efficient. Additional requirements might be imposed depending upon local conditions.

To be sure, such indirect regulation of the trekking infrastructure development would not initially be popular in many locations. HMG might be accused of regulating private property, undermining local initiative, and favoring new or existing lodge owners. But by regulating forest resources located inside the parks and adjacent buffer zone areas, HMG would not be regulating private property; rather, it would be regulating public resources that are now being exploited for private gain. Moreover, such regulation does not have to put anyone out of business or foreclose new business opportunities; instead, these opportunities should be tied to responsible lodge management and resource use. New lodges might be required to meet the requirements immediately, while existing lodges could be given a reasonable period of time to bring their operations into conformance with the new requirements. Because the additional costs could be passed on to the tourists or trekkers and because the regulatory limitations would not apply to forest resources used for personal purposes, local villagers should see little effect on local prices. Over the long term, such an approach actually should improve facilities inside and outside the parks; further promote tourism and trekking in the region, and ensure equity among responsible lodge owners and operators.

9. Buffer Zones and Park Boundaries

Should HMG's buffer zone management authority be linked explicitly to the designation and revision of park boundaries? Should HMG promulgate regulations providing that a UGC's failure in managing designated buffer zone areas could result in redesignation of park boundaries and thus expansion of the government's authority outside existing park boundaries?

Analysis:

Section 3 of the SOME gives HMG authority to declare buffer zones adjacent to national parks, and it provides for outright expansion of national park boundaries to ensure responsible management of buffer zone areas. Moreover, Section 3 of the NPWCA gives HMG authority to revise and alter the boundaries of national parks. This boundary revision power, although subject to obvious political constraints, gives park authorities additional power over the management of designated buffer zone areas. Should a local UGC fail to

manage a buffer zone area properly, the option exists for park authorities to initiate proceedings to enlarge the park boundary to include the buffer zone area.

Whether or not this boundary revision power should be linked expressly with buffer zone management is a difficult judgment call. The advantage of linking the two powers is that it would give park authorities some additional assurance that UGCs would behave responsibly. This may be important if the twin inducements of local involvement in forest management (through the UGCs) and the 30/50 funds prove to be inadequate inducements to ensure responsible local management. On the other hand, the overt threat of boundary revision as part of the DNPWC's buffer zone management authority may antagonize relations between the park and local villages, and thus undermine the UGC system from the outset. In any event, the boundary revision power can always be invoked if buffer zone management does not adequately address forest resource use issues.

IMPLEMENTATION STRATEGY

HMG's implementation of the BZMA should be viewed as an experimental process—one that will require reassessment and adjustment with experience. Recognizing this fact, the DNPWC should begin constructing an institutional system and related processes for implementing the legislation. This system should be based upon the principles and recommendations outlined in the earlier sections of this report. One overarching question that remains to be answered is whether the twin inducements of local UGC involvement in forest resource management and the availability of 30/50 funds will promote responsible local management of buffer zone areas. Therefore, once a buffer zone management system is in place and functioning, the DNPWC should monitor the results to assess whether it is working and whether changes are necessary. What follows is a suggested framework and schedule for making buffer zone management operational throughout Nepal's national park system.

First, HMG should prepare general regulations establishing a uniform institutional framework for buffer zone management. These regulations should establish general size and composition requirements for the UGCs, authorize a warden's veto of UGC decisions adversely impacting park ecosystems or resources, and establish a general management standard to guide UGC decision-making. Otherwise, the regulations should provide park wardens with flexibility in designing UGC systems to respond to local conditions. The regulations also should establish general procedures and standards governing designation of buffer zone areas, including the requirement that wardens involve local communities in the designation process and specify resource issues that must be addressed through buffer zone management. In addition, the regulations should establish a system for dispersal of the 30/50 funds, which should include creation of a Buffer Zone Fund Committee to allocate the

funds, the requirement that fund dispersal is linked to responsible and effective local management, and the designation of some funds for ecosystem restoration efforts. Moreover, the regulations should provide that any community impacted by the buffer zone designation is entitled to participate in local resource management decisions through the UGC process and to receive 30/50 funds. Before being finalized, the proposed regulations should be circulated within potentially affected local communities (and shared with key local leaders) to secure local input in designing the system. Serious and meritorious objections should be addressed and revisions made where appropriate.

Second, HMG should begin the process of designation buffer zone areas and implementing a management system. The DNPWC should establish a timeframe for wardens to designate buffer zones and to create local UGCs. To ensure that buffer zone management objectives have been established and to secure information on different buffer zone management approaches, wardens should be required to submit local UGC regulations or policy statements for departmental review. Wardens also should be required to file periodic reports on their buffer zone management efforts, assessing how the system is working as well as current ecosystem conditions. Wardens should be able to secure a time extension for problem cases. Moreover, HMG should create the 30/50 Fund dispersal mechanism, probably a Buffer Zone Fund Committee with local representation as well as DNPWC representation. This committee should establish a procedure for local communities to request 30/50 funds, and it should create a

Notes to readers

This paper is an outcome of the research carried out by the author as a Senior Fulbright Scholar in Nepal during the fall of 1993. An earlier version was transmitted to Dr. Tirtha Maskey, Director General of Nepal's Department of National Parks and Wildlife Conservation, on December 17, 1993.