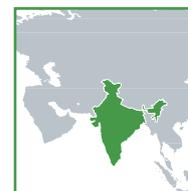


Snow Leopards and 'Himalayan Homestays': Catalysts For Community-Based Conservation in Mountain Areas



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Introduction:

Payments for environmental services (PES) take many forms. In this paper, we outline how two NGOs, the Snow Leopard Conservancy (SLC) and the Khangchendzonga Conservation Committee (KCC), each working in important Indian mountain habitats, have used a unique set of monetary and non-monetary incentives to integrate powerful, sustainable biodiversity conservation actions within each community's distinctive cultural and natural heritage. We end with a summary of what we see as key success factors to grass-roots initiatives that blend traditional and scientific knowledge.

The snow leopard in Ladakh: from pest to valued asset – the example of the Snow Leopard Conservancy (SLC)

The endangered snow leopard *Panthera uncia* is perhaps the world's most elusive and charismatic large felid, serving as a flagship for mountain biodiversity. It persists in naturally low numbers, totalling 4500 to 7500, spread across more than one million km² of habitat in twelve South and Central Asian countries. Inhabiting mountainous regions at elevations of 3000 to over 5000m in the Himalaya and Tibetan Plateau (and as low as 600m in Russia and Mongolia), their habitat is among the least productive of the world's rangelands, due to low temperatures, high aridity and harsh climatic conditions. With naturally low prey densities, snow leopards often kill livestock, thus engendering animosity from herders. Annual economic losses in the region range from around US \$50 to nearly \$300 per household, a significant sum given per capita annual incomes of \$250 - 400.

The approach: supporting livelihoods, building partnerships

In Ladakh, the Snow Leopard Conservancy used a two-pronged approach to resolve human-wildlife conflicts and encourage protection of wildlife. Firstly, assistance was provided in protecting livestock from predators; secondly, SLC offered non-monetary incentives that enhanced income from ecotourism and related sources. The payment (assistance in setting up ecotourism/homestays/protecting livestock corrals) is conditional upon the village committing to specified conservation actions and is formalised in a signed contract between SLC-India and the local Village Management Committee.

The first step, emerging from planning meetings that involved a majority of households, centred on predator-proofing the most vulnerable night-time corrals. Villagers contributed materials and labour while SLC provided technical support and funds for materials. All livestock owners signed an agreement to protect snow leopards and other wildlife, and keep their livestock numbers within reasonable limits. They were also encouraged to improve daytime guarding practices, and, where possible, to set aside



Shepherd with animals in improved livestock pen, Nubra, Ladakh. Photo: Rinchen Wangchuk.

areas where wild ungulates would benefit through better access to forage. However, depredation losses to predators cannot be completely eliminated on the open range. The second PES component therefore sought to reduce or offset adverse economic impacts by enhancing income-generating capacities of households living in prime snow leopard habitat, such as the Hemis National Park. Villagers chose homestays and wildlife tourism as the incentives that would give value to conservation of the snow leopard and generate supplementary household income.

Supported by UNESCO, the Mountain Institute (TMI) and the Wildlife Department, the largely self-sustaining 'Himalayan Homestays' incentive programme builds upon existing tourism and trekking to enhance livelihoods and garner support for snow leopard conservation, and offers villagers training in operating homestays and nature guiding. Individual households operate homestays through established women's groups, with revenue accruing from 'bed and breakfast' services in village homes (rotated among households). Catering and handicraft sales at tented cafes along trekking routes and nature guiding provide other sources of income for households unable to operate homestays.

Currently embracing over 100 families in 20 Ladakh-Zaskar communities, 40 homestays located in prime snow leopard habitat earn US \$100-650 (average \$230) during the four month tourist season. Tourist visitation increased from 37 in 2001 to over 700 in 2006, with client satisfaction exceeding 85%. Another \$400 in sales from cafes is shared among four to eight families. Approximately 10-15% of homestay profits are directed into a village conservation fund that has supported tree planting, garbage management and recently the establishment of a village wildlife reserve for the threatened Tibetan argali (*Ovis ammon hodgsonii*). One community used the fund to construct predator-proof corrals; another paid a fulltime herder to guard livestock in high summer pastures, and a third insured large-bodied, high-valued livestock such as yak through a national insurance programme.

PES incentives can be diverse, ranging from compensation or subsidies for veterinary care to handicrafts produced through initiatives such as the Mongolian Snow Leopard Enterprises programme. Experience from this project shows that it is largely when tangible economic returns are realised that communities are willing, indeed able, to assume their role as conservation partners and serve as effective environmental stewards.

Working at the ecosystem level in Sikkim: brokering biodiversity conservation – the example of the Khangchendzonga Conservation Committee (KCC)

Rather than protecting a single endangered wildlife species, the Sikkim incentive model works at an ecosystem level, conserving the environmental and spiritual values of a large protected area, Khangchendzonga National Park and Biosphere Reserve (KNP/BR) in West Sikkim. Sikkim is part of the Eastern Himalaya biodiversity "hotspot." Centred around Mt. Khangchendzonga, the third highest peak in the world, the KNP/BR is a primary destination for trekking and mountaineering tourism. Most of the 5400 annual trekkers to KNP/BR begin their trek in the farming settlement of Yuksam.

The approach: benefit sharing for market driven biodiversity conservation

Based in Yuksam but increasingly influential throughout Sikkim, the Khangchendzonga Conservation Committee (KCC) collects payments in the form of 1) professional service fees received for consultancy and training services; 2) grants and donations from I/NGOs; 3) fees and donations from eco-tour operators for environmental education services; 4) membership fees from KCC members,¹ and 5) revenue from the sales of tourism products and services. This is then used to provide the following conservation outputs:



KCC help raise environmental awareness of Yuksam youth. Photo: Wendy Brewer Lama.

¹ KCC members were born and grew up in Yuksam and give their time to KCC voluntarily, as well as paying membership fees. They work as teachers, as officers in the State Department of Education and other government offices, as farmers, homestay operators, trekking and nature guides, planning consultants, etc.



Himalayan Homestays provider offering a guest tea. Photo: Wendy Brewer Lama.

- Training local residents in environmental trekking practices, including the removal of garbage from KNP/BR and the use of alternative fuel.
- Environmental education in schools and teacher training; organisation of garbage clean-up by Yuksam school children and construction of composting toilets at Yuksam schools.
- Advocacy at the local, state and central government levels, e.g., lobbying for a statewide ban on plastic bag use and for improved government monitoring of illegal wildlife exports.
- Raising awareness among key ecotourism and conservation stakeholders as the precursor to conservation actions, including porters, pack animal drivers, guest house and homestay operators, trekking agencies, guides, and tourists.
- Conducting research and monitoring tourism impacts and ecological conditions.

Rather than a formal contract, KCC requires local contributions in kind for benefits received, e.g., participant payments for guide training, contribution of labour to construction work, formal training and meeting the standards required for guide certification.

Investments are now paying off in the form of market-driven conservation activities initiated by the Yuksam community and other tourism stakeholders in Sikkim. In the past, few community members realised concrete benefits from the tourism sector, and therefore took little initiative to either manage its negative impacts or promote conservation. An estimated 70% of Yuksam households now benefit from tourism, with ten households seasonally operating family homestays as part of the Himalayan Homestays network. Local forest guards and Yuksam residents patrol and monitor

activities inside KNP/BR, supplementing the place of insufficient Wildlife Department staff: a recent report to authorities resulted in the capture of Russian bio-pirates carrying 200 species of butterflies and moths for export. Sikkim's statewide ban on plastic bags also began in Yuksam, evidence that regular garbage clean-up programmes are beginning to change young people's behaviour and attitudes towards the environment.

However, there is still a need for better impact monitoring and visitor management. In a recent study of tourism impacts on KNP/BR, students of the University of Puget Sound (Washington, USA) found that garbage and human waste is still a significant problem along the Dzungri-Goechela trekking route, while the use of pack animals to carry trekkers' gear has affected rhododendron and alpine grass re-generation. Furthermore, an open door policy that allows non-Sikkimese operators to run treks and work as porters runs counter to KCC's efforts to link conservation to local benefit sharing. It is clear that neither visitor demand for sustainable tourism practices nor regulation and enforcement is, as yet, strong enough.

Building resilience

Tourism is especially vulnerable to political and market forces that are beyond the control of service providers. To avoid over-dependence on tourism, practitioners should help rural communities diversify their livelihoods and improve sources of on-farm or pastoral income. Expanding tourism markets also helps temper the impacts of the global tourism economy. Connecting homestay providers with regional and national travel agencies offers new opportunities for outreach and capacity building, while personalising the process of tourism services development. By encouraging higher-paying clients from the international tourism sector, local travel agents can increase their involvement and support of rural homestays. This may include donating equipment or the co-financing of simple infrastructure such

as solar showers, where rental fees benefit the entire community. International NGOs such as SLC can foster self-sufficiency by matching each service provider's contribution to the community conservation fund. Such networking often opens new avenues for collaboration or sources for PES.

Villagers' willingness to pay for corral improvements or livestock insurance premiums is closely linked to household capacity for generating supplemental income. Ongoing participatory monitoring and periodic review of programme impacts (e.g., household income, increased educational opportunities, community-funded tree planting) involving diverse stakeholders is critical to enabling local communities to better adapt and respond to changing conditions. Impact monitoring data is also useful in demonstrating conservation linkages and for gaining donor support, as well as international recognition in the media (e.g., SLC and the Himalayan Homestays have received numerous international ecotourism awards and recognition).

Conclusions and lessons learned

In these two remote regions of the Indian Himalaya, Himalayan Homestays, KCC, SLC and their community partners provide rare examples of largely self-sustaining, non-profit entities that broker locally-managed biodiversity conservation in exchange for benefit sharing, monetary payments and non-monetary incentives (Figure 1).

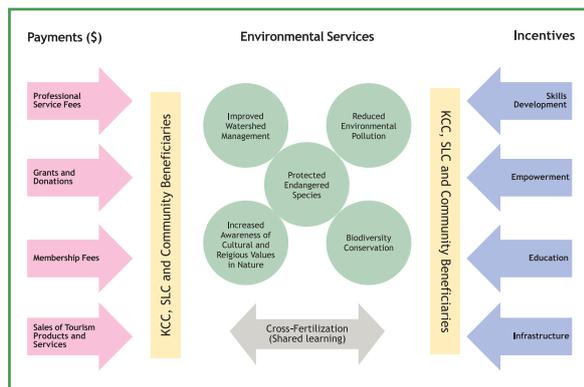


Figure 1: Model for the incentive based approach

These bottom-up models of environmental stewardship were associated with several key success factors and innovations:

- Both KCC and SLC encouraged cross fertilisation of planning experiences and tools through exchange study tours and joint workshops with project advisors, leaders and partners.
- Broad stakeholder involvement from the initial planning stages incorporated private sector and government participation (e.g. local travel agents help market homestays in Ladakh and Sikkim).
- Community ownership of key decisions is transparent (e.g. village knowledge played a key role in reducing human-wildlife conflict in Ladakh).
- Transference of skills occurs through mentoring and training of trainers (e.g. KCC has trained 120 school teachers to impart conservation education in 22 schools).
- Community-managed conservation funds support new opportunities and self-reliance.
- The existence of a relatively homogeneous, cohesive

community eases the willingness to share benefits widely (e.g. homestay visitor rotation, external investments that equalise the competition).

- As homestay operators women play leading roles, generating confidence and supplemental income to support village-based conservation actions.
- Youth have also taken a key role as future conservationists and in the promotion of wildlife protection.

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