The Annapurna Conservation Area Project: tourists as agents of development and environmental management in the high Himalaya?

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Abstract: The Annapurna Conservation Area Project (ACAP) strives to blend environmental and cultural conservation with economic development in the Nepali Himalayas. At the heart of ACAP's strategy, is a programme of sustainable tourism. This paper seeks to contribute to a broader assessment of ACAP's work. It focuses on the part one specific constituency – foreign trekkers – play in helping deliver the project's goals. Based on interviews conducted with western tourists in the region, this paper assesses the extent to which trekkers are engaged with the ACAP mission. The research found that, although foreign tourists, on the whole, acted in an environmentally responsible manner whilst enjoying their time in the Annapurna region, they were not particularly aware of the work that ACAP undertook. This paper suggests that if policy adjustments are made by ACAP, and awareness levels raised, then trekkers could play an increased role as agents for development and conservation in the high Himalaya.

Keywords: tourism; Nepal; trekking; environmental impact; sustainable development; Annapurna Conservation Area Project; ACAP; poverty alleviation; capacity building; cultural conservation; Himalayas.

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Introduction

The Annapurna region of Nepal is blessed with an abundance of spectacular scenery. This ranges from several of the highest mountain peaks in the world (measuring in at over 8,000 meters), through to subtropical forests nestling in the valleys. In between, can be found meadows, areas of subalpine and alpine shrub, temperate woodland, bamboo jungle, vast rhododendron forests, impressive rivers and the Tibetan steppe desert of the

Mustang district. Annapurna is also home to an abundance of bird species, rare mammals (such as snow leopards and blue sheep) and human communities preserving ancient cultural traditions.

This variety of dramatic scenery, housing interesting flora and fauna, combined with the possibility of observing unique human ways of life, attracts significant number of western tourists to the Annapurna region. In particular, the area is a trekking Mecca. The absence of roads permit trekkers to enjoy a well-established network of footpaths covering the region. They walk between villages, sampling the scenery and cultures outlined above and can gain relatively easy access to the high Himalaya. Many tourists, for example, opt to trek the classic two-to-three week 'Annapurna Circuit', traversing the Thorong La pass, which, at 5416 m, is at an altitude higher than any point in Europe.

There is, however, an environmental price to having some 40,000–50,000 foreign visitors trek through the Annapurna region each year. Trees are felled to accommodate, feed and keep tourists warm, while paths are worn. Local cultural traditions also need to absorb foreign influences brought by trekkers.

Similarly, it should be acknowledged that the populace of Nepal, and particularly this country's mountain residents, are some of the poorest people in the world. Nationally, Nepal ranks 136th in the United Nations' Human Development Index of 177 countries (UNDP, 2005). Of particular concern are mortality and morbidity rates in Nepal. On average, 91 infants per thousand births fail to survive to their fifth birthday. In the mountains, this statistic rises to 157 deaths per thousand. At the other end of existence, life expectancy is approximately 74 years for Nepalese citizens living in the wealthier areas of the capital, Kathmandu, while residents in the more remote mountain districts die at an average age of 37 (Winrock International Nepal, 2005).

The Annapurna Conservation Area Project (ACAP) was launched in 1986 to address the issues above. How could mountain residents capitalise on the natural resources of their region, exploiting these to alleviate the problem of chronic poverty? A strategy was devised to manage tourism in the area, using the foreign capital that this activity generated to pay for improved healthcare, social services and education provision. Tourist receipts were also to be invested in income generation schemes aimed at stimulating the local economy. It was realised, however, that the Annapurnas' natural beauty is a fragile resource. Alongside a development strategy, ACAP also devised an environmental conservation plan. Conservation and development were to go hand in hand. In its own words, the ACAP seeks to:

- conserve the natural resources of the Annapurna Conservation Area (ACA) for the benefit of present and future generations
- bring sustainable social and economic development to the local people
- develop tourism in such a way that it will have minimum negative impact on the natural, sociocultural and economic environments (King Mahendra Trust for Nature Conservation, 1997).

This paper seeks to contribute to a broader assessment of ACAP's work. It focuses on the part one specific constituency – foreign trekkers – play in helping deliver the goals outlined above. Based on questionnaires and semi-structured interviews conducted with western tourists in the region, this paper assesses the extent to which trekkers are engaged with the ACAP mission. The research found that although foreign tourists, on the whole, acted in an environmentally responsible manner whilst enjoying their time in the Annapurna region, they were not particularly aware of the work that ACAP

undertook. This paper suggests that if policy adjustments are made by ACAP, and awareness levels raised, then trekkers could play an increased role as agents for development and conservation in the high Himalaya.

Structurally, this paper is divided into four sections. Firstly, it is necessary to introduce the ACAP in more detail. Section 1 explains the genesis of ACAP, illustrating its unique and progressive nature, while Section 2 highlights the work ACAP currently undertakes. Section 3 presents the research findings, demonstrating that trekkers are favourably, but only partially, engaged with the project's aims. The paper then concludes by making recommendations on how ACAP could gain more from trekkers as a resource for development and conservation.

1 Why ACAP is different

In the last 35 years, the government of Nepal has gradually altered its approach to administering areas of natural beauty found within its territory. The Annapurna Conservation Area Project is a product of this policy evolution. ACAP is very much grounded in a philosophy that both involves and serves the immediate community. Local interests are the priority. In this respect, it differs considerably from two other major Nepalese national parks, established earlier: the Royal Chitwan National Park and Sagarmatha (Everest) National Park.

Royal Chitwan opened in 1973 in an effort to preserve remaining tracts of jungle in Nepal, and, in particular, these forests' wildlife residents. Rhinoceros numbers had fallen from over 800 animals in 1950 to less than 100 by 1968, while tigers dwindled to less than 25 animals in the same period (Keiter, 1995, p.606). Responding to population pressures that threatened the jungle ecosystem, with former hill residents migrating to the more fertile lowlands once malaria had been controlled, the Nepalese government created the Royal Chitwan National Park. The park was based on a model of wilderness preservation. The aim was to conserve. Little thought was given to how this park would be integrated into the local economy or local society. Central government in Kathmandu would manage Chitwan on behalf of the nation (and the world), with an eye to attracting foreign tourists to Nepal. The park, in this respect, was viewed as a national, and not a local, obligation and resource.

Although Royal Chitwan's borders were drawn, in most cases, to avoid the resettlement of existing villages, numerous communities found themselves just outside the park's perimeter fence. As a consequence, locals were denied access to hunting grounds, fishing spots, land for grazing and cultivation, firewood and sources of thatch enjoyed previously. Securing livelihoods became more difficult, and local resentment towards the park grew. There have been numerous instances of residents clashing with the army, who police the park, since Chitwan's inception.

This situation of resource denial has been exacerbated by compensation, in terms of tourist receipts, failing to reach the communities most disadvantaged by Chitwan's perimeter fence. This is because the majority of tourist trips to the park are either booked in Kathmandu, 170 km away, or through western travel agencies. This reinforces the idea of Chitwan being very much a *national* conservation and development initiative. Tiger and Rhino populations have since recovered from dangerously small numbers, and Chitwan is now high on the itinerary of tourists visiting Nepal, but the economic benefits and opportunities that the park has generated are not widely enjoyed at the local level.

Sagarmatha (Everest) National Park, established in 1976, similarly seeks the preservation of a wilderness area for the benefit of the nation (and the world). Unlike Chitwan, however, the local Sherpa residents won victories enabling them to continue to live within the park's boundaries. What is more, the park's managers (eventually) came to respect Sherpa culture, recognising that traditional knowledge was useful in informing Sagarmatha's environmental policy. Park regulations evolved from initially barely tolerating local interests (e.g. a total ban on access to forest resources) to a situation where local needs are taken into account. Robert Keiter reports that park policy now "reflects an uneasy accommodation between the government's commitment to centrally regulated environmental protection and its acquiescence to local participation in park management decisions" (Keiter, 1995, p.614).

Indeed, having won a degree of autonomy in their homeland, and influence over park policy, the Sherpa community has been very successful in taking up the economic challenges of serving the park's tourists. Many residents have gained economic security from running lodges or acting as porters or guides for foreign visitors. The success of many of these ventures is reflected in the fact that, today, Sherpa business people now dominate the tourist industry throughout Nepal, and not just in the Everest region.

The ACAP learnt lessons from both Chitwan and Sagarmatha. Rather than remove residents from the ACA, or try to isolate them within the 'park', ACAP recognises that the future of this region's environmental management rests on the local population's full participation in the project. Residents are to be both the 'principal actors and beneficiaries' (King Mahendra Trust for Nature Conservation, 2004a. p.5).

This devolution of responsibilities is reflected in ACAP's organisational structure. Instead of being centrally managed by the Nepalese government from Kathmandu, the 7629 sq km of the ACA, in terms of development and conservation, have been ceded to what is effectively a Non-Governmental Organisation (NGO). ACAP manages the 'conservation area' (not 'national park') on behalf of the state. Certainly, the Nepali government holds a tight rein over this NGO (as, indeed, it attempts to do so over the whole of civil society in the country). ACAP's parent body is the King Mehendra Trust of Nature Conservation (KMTNC), with the King as patron and the crowned prince as the Chair of the Board of Trustees. However, ACAP is not just an extension of the Ministries of Tourism or Forests. It is operationally independent of government.[1] With the success of the initial pilot project established in the village of Ghandruk in 1986, ACAP received a government mandate to administer a larger portion of the Annapurna region in 1992, with this mandate renewed and the geographical area further expanded in 2002.

Devolution is also a theme found within ACAP itself. The project's leadership, based in the town of Pokhara, likewise cedes power to local management committees dispersed throughout the ACA. Theoretically, policy decisions are made by the region's residents through these village committees. The people of Annapurna decide themselves how their homeland should be developed, and how tourism should be managed.

In reality, once again, the centre keeps a tight rein on the project. Senior ACAP officials make sure residents' demands are prioritised and made realistic.[2] Requests for widespread electrification, road building and a comprehensive programme of schools construction are scaled-down, reflecting the resources available, while the attention paid to the conservation side of the project is increased. Effectively, ACAP leaders persuade local residents to modify their behaviour in terms of environmental conservation, in return providing resources for economic and community development. An electrification

programme will be extended to a village, for example, alongside a campaign to persuade residents to manage their local forests in a more sustainable manner. This partnership between ACAP and the villages is reflected in the organisation of most of the projects: ACAP provides materials, transport and skills not found locally, while residents provide materials available in the vicinity, unskilled labour, and, in many cases, a financial contribution.

In that ACAP manages a 'national park' where the economic and social development of the local community is a priority, alongside environmental conservation goals, this project is very different from the 'wilderness preservation' models practised in both Chitwan and Sagarmatha.

2 ACAP in practice

The Nepalese government provides no funding for the Annapurna Conservation Area Project. It has, however, granted ACAP the right to charge foreign tourists an entrance fee (currently NR2000 – approximately US$30) to enter the Annapurna region. None of this revenue finds its way into the government treasury, instead it is added to donations received by ACAP from foreign governments and international NGOs, and is used to finance a series of interlocking development and conservation programmes. These initiatives can be divided into five broad areas: project management and capacity building, environmental conservation, income generation, community development and sustainable tourism (see Table 1).

Table 1 ACAP conservation and development programmes

Project management/ capacity building	*Environmental conservation*	*Economic development*	*Community development*	*Sustainable tourism*
Promoting ACAP mission	Natural forest management	Agroforestry	Education programme	Standardising prices and menus
Building maintenance	Forest nurseries	Kitchen gardening promotion	Health programme	Lodge management training
Staff training	Reforestation	Crop diversification	Sanitation programme	Training of guides
Servicing local committees	Wildlife/flora protection	Tea plantation	Maintenance of trails and bridges	Maintaining trails and bridges
Financial management	Alternative energy programmes	Bee-keeping	Promoting local festivals	Village 'clean-up' days
	Energy conservation programmes		Repair of cultural monuments	Drinking water stations
	Environmental education		Cultural museum	Removal of rubbish from ACA
				Trail signage
				Publication of publicity materials

2.1 Project management and capacity building

Initially, ACAP invested resources in communicating its message and building its capacity within the Annapurna region. Whereas ACAP officials were first met by the throwing of stones by locals, who were fearful of losing their forest resources, events such as public meetings and slide shows have helped to create a more favourable working relationship between the project's leadership and residents.[2] Similarly, the funding of materially beneficial development programmes, such as the electrification schemes and school building proposals discussed below, have also demonstrated to the villages the value of ACAP's presence. Such investment caught the attention of residents and made them more amenable to the wider goals of the project. Indeed, the educational process of winning hearts and minds consciously did not shy away from the need for 'conceptual clarity'.[3] It was always emphasised that the material benefits of development programmes needed to go hand in hand with local support for environmental conservation.

Building a working relationship with the local population has allowed ACAP to develop a network of communication and support systems throughout the ACA. The devolved nature of the project theoretically puts village committees at the heart of decision making, with these bodies being served by a series of regional project offices, which are, in turn, supported by the headquarters in Pokhara. Funds have been invested to enhance the capacity of this network, with ACAP providing the auditing of local accounts, honorariums for office staff and forest custodians, fact-finding trips for local committee members, and training in the areas of decision making, bookkeeping and general administration. Although hampered by harassment from Maoist insurgents, ACAP today can boast an impressive organisational capacity in the Annapurna region, as well as a widespread understanding of the ACAP mission amongst this region's residents.

2.2 Environmental conservation

The largest problem related to conserving the existing environment of the Annapurna region is the pressure placed on forest resources. Trees are disappearing rapidly in order to supply fuel and building materials. Most of this demand emanates from households burning wood for everyday purposes. It has been calculated, for example, that 80% of Nepal's total energy expenditure is claimed by boiling water, and western visitors use more energy than local residents, when this total consumption is averaged out per capita. The 200-odd tourist lodges in the Annapurna region burn up to 220 kg of wood per day. Each lodge requires land to be cleared, timber for its construction and then wood to provide heating and food for trekkers. Whereas residents of Ghandruk, in living memory, could once forage for fuel and timber close to their village, they now have to walk up to two hours to collect enough firewood for their needs.[4]

ACAP has responded to this deforestation, not by banning residents from using forest products, but by trying to involve local communities in conserving these resources. Support has been given to the traditional role of the *heralu*, or forest guards/custodians, to protect the existing forest, while planting programmes have been introduced to replenish depleted woodland. Villages have also been encouraged to establish their own forest nurseries. In 2004, for example, the ACAP Natural Resources Conservation Programme distributed 65,000 seedlings of local tree species to 4051 households in the

Bhujung region of the ACA (King Mahendra Trust for Nature Conservation, 2004b. p.10). Not only does this scheme supply saplings for reforestation, nurseries also serve to educate the local community about the time period it takes to replace a tree felled for fuel or shelter.

Complementing ACAP's attempts to manage and expand existing forests are efforts to actually reduce the demand for firewood. This campaign is primarily focused on the promotion of alternative fuel sources and energy conservation programmes. The most ambitious of these projects are local microhydroelectric schemes making use of two of Annapurna's most abundant natural resources: topology and water. Ghandruk now has a 50 kw hydroelectric generating station, half financed by local contributions, while Kuligar has a 2.5 kw plant. Through its Alternative Energy Programme, ACAP audits and facilitates hydroelectric proposals across the ACA, finances the repair of existing schemes and trains local technicians. Similarly, solar power is also encouraged in the region. Subsidies and loans are available for villages and lodge owners who wish to make an investment in this form of power generation, and, again, ACAP trains technicians in the repair of this technology. Signs advertising 'Hot Solar Shower' are now common in villages located on trekking routes. Indeed, a few communities have gone a step further and brought the benefit of solar technology to local residents as well, via the building of communal bath houses (where residents are charged NR5, compared to the tourist rate of NR50). Experiments using other alternative energy sources, biogas and bio-briquettes for example, have also begun to be conducted in the Annapurna region.

It is perhaps with programmes involving older technology, however, that ACAP has had most success in terms of reducing demand for wood fuel. The promotion of back-boiler stoves, which result in the more efficient burning of wood, have had an impact. Being relatively cheap to buy and install, this alternative to an open fire for heat and cooking has gained popularity. Other simpler technologies, such as the use of thermos flasks to keep water warm and pressure cookers in the preparation of food, have likewise gained increased use in the Annapurna region. Supporting these initiatives, ACAP organises popular energy saving workshops for local residents, and conservation education classes are run in schools and for community groups and youth clubs. Kerosene stoves are also encouraged rather than wood-burning alternatives. Indeed, in a rare case of imposing, rather than encouraging, 'greener' behaviour from locals, the burning of wood for heating and cooking is now banned in certain (largely non-residential) high-mountain areas of the ACA, where ecosystems are more fragile and wood supplies scarcer. Tourist lodges in the popular Annapurna Sanctuary locale, for example, now exclusively use non-wood fuel.

Additional projects within ACAP's Natural Resources Conservation Programme look beyond the forests. The NGO, for example, organises a census of the 1226 species of flowering plants, 474 species of birds, 41 species of reptiles and 23 species of amphibians recorded in the region. Particular interest has been shown in assessing the medicinal value of resident plants. Similarly, ACAP has donated and subsidised fencing to farmers to protect their goats from snow leopards, and to stop cattle damaging land assigned for reforestation. Technical assistance in producing fodder has also been made available to ease the problem of overgrazing of winter pastures. Pressure on these pastures had previously led to soil erosion.

This strategy education, facilitation, assistance, subsidy and very occasionally compulsion, is the hallmark of the ACAP.

2.3 Income generation

Partnering ACAP's environmental conservation programmes are those projects seeking to advance the economic development of the Annapurna region. Poverty is never too far away in this part of the world. ACAP therefore assigns a considerable portion of the park fees collected from tourists to act as seed money aimed at stimulating the local economy. Traditionally, residents of the ACA have occupied themselves with subsistence agriculture: the growing of maize, millet, rice, barley, buckwheat, potatoes, peas and beans cultivated largely by hoe and animal drawn plough, together with the grazing of livestock. Supplementary income has been obtained by seasonal migration, gaining employment away from the mountains, and via service in the military (within the Nepalese security forces, or recruitment into the Ghurkha regiment of the British Army). These remittances, however, have not been enough to generate a standard of living for the region's inhabitants comparable to those living elsewhere in Nepal.

Tourism is seen by many as a way out of this poverty, and, in recent decades, this sector has indeed provided many local residents with economic opportunities through guiding, portering for, and accommodating, western visitors. Yet, it is mainly those villages located on the trekking trails that have had access to this income. More remote settlements have not necessarily benefitted. Additionally, the tourist trade is highly seasonal, with most trekkers visiting the Annapurna region during two brief periods of the year: October/November and April/May.

ACAP therefore aims to put the local economy on a more secure and diverse footing. Alongside promoting sustainable tourism (discussed below), it seeks to complement this income with additional initiatives to aid wealth generation beyond the trekking trails. Programmes have been devised to support local entrepreneurs, and to facilitate microcredit schemes to fund economic investment from the region's residents themselves.

The main focus of ACAP's economic development strategy, outside the tourist sector, has been to diversify the region's agriculture. Seeds, for example, have been subsidised, encouraging locals to grow more efficient species of fruit and vegetables. Similarly, (organic) kitchen gardening has been promoted, to meet the food demand created by trekkers (instead of these supplies being portered in from outside the region). Local produce, in all these cases, has been prioritised. Production of the juice of the resident Sea Buckthorn plant, for example, has been targeted, and is now for sale at most tourist lodges in the region. ACAP has also funded research into new crops most likely to be successful in the ACA. Beekeeping emerged as being an activity suited to local conditions, and those wishing to invest in this area can now buy hives from ACAP at a 50% subsidy. It was also found that tea plants would prosper in the foothills of the Annapurnas, and a number of plantations have since been established.

ACAP is seeking to address the poverty of the region through this series of small, self-managed, income generation initiatives.

2.4 Community development

Running alongside ACAP's goals of environmental conservation and economic enhancement, is its mission of community development within the Annapurna region. ACAP makes it clear that as an NGO, it is not only about preserving the natural beauty of the mountains, or wealth creation for entrepreneurs, but it also seeks to improve the

quality of life for all residents within the ACA. Hundreds of small-scale projects, sanctioned by local village committees, have therefore been funded, or part-funded, by ACAP. Common initiatives include the improvement and maintenance of schools (ranging from significant structural work, through to the supply of furniture or toilets); adult literacy drives; general health education campaigns (in addition to the maintenance of permanent health posts, mobile health units and reproductive health services) and improving the sanitation infrastructure of the region (with the provision of toilets to private homes and the piping of clean water). In addition to these health and education initiatives, transport, in a part of the world where there are no motorable roads, has also been a beneficiary of ACAP funding. Trails are repaired, using local labour and materials where possible, and bridges built and maintained. Community water mills have also been constructed. These self-help projects even include relatively simple ideas, such as assigned 'village clean-up days'.

ACAP also sees 'cultural conservation' as a major part of its community support mission. Just as the physical environment of this unique mountainous region requires conservation, so do its human traditions and customs. The ACA hosts numerous ethnic groups (e.g. the Gurungs, Magars, Mananggis, Tibetans and Thakalis), who practise various religions (largely Hindu, Buddhism or hybrids between the two). These cultures face threats from alternative dress patterns, religions, languages, food habits and daily patterns of life brought by western visitors. ACAP therefore seeks to counter these foreign influences by supporting indigenous culture. Religious sites, such as monasteries, gompas and mani walls, for example, have been repaired, and local festivals supported. ACAP also runs a significant cultural museum of mountain life, located in the heart of the region at Jomson.

2.5 Sustainable tourism

Linking programmes of environmental and cultural conservation, with economic development, is the goal of sustainable tourism. The region benefits from its natural beauty and human diversity, attracting western tourists. These tourists generate income and stimulate economic development. It therefore follows that, for the trekkers to continue to visit the Annapurnas, the natural beauty and human diversity need to be conserved. This is the task of the ACAP Sustainable Tourism Management Programme. ACAP regulates tourism with the ACA, helping to maintain hospitality standards acceptable to foreign visitors, whilst also addressing the environmental and cultural consequences of 40,000 trekkers and their support staff passing through the region each year.

Initially, with an upturn of visitors in the 1980s, there was something of a price war amongst lodge owners within the ACA. In an attempt to attract trekkers to a particular lodge, many locals offered free accommodation in order to secure an income from selling food to their guests. ACAP, supported by the village committees, responded to this situation by introducing a standard accommodation fee applicable to the whole region, and set charges for items on a common menu. This stabilised prices for room and board, and the practise of price undercutting came to an end, permitting more locals to make a profit from the trekking industry.

Beyond this regulation, ACAP offers assistance to those running hostels in the region. Training courses are available for lodge owners and workers in the areas of

general business skills, food preparation, sanitation, menu costing, energy use and health and safety. Parallel training courses are run for trekking guides.

In terms of more direct contact with the visitors themselves, ACAP underwrites the maintenance of paths and bridges, provides a network of signs guiding trekkers, supervises campsites in the ACA, has built visitor centres in key villages on trekking routes, prints supporting publicity materials on the region and manages rubbish removal from the region. This latter aspect is a considerable undertaking, since it has been calculated that each trekker generates an average of 1kg of non-biodegradable and non-burnable rubbish for every 10 days they walk (King Mahendra Trust for Nature Conservation, 2004a. p.10) The waste is carried out of the mountains to Pokhara, where recycling centres have been established. Demonstrating the scale of the problem, a total of 1295 kg of glass bottles was removed from one village alone in 2003, and portered to the roadhead.[5]

3 Research findings: trekkers as agents of conservation and development

The above evidence suggests that ACAP is building an exciting and detailed environmental conservation and economic development programme in the Nepalese Himalayas, with sustainable tourism as the (initial) catalyst. In terms of best practice, this NGO's approach seems to tick all the correct boxes. Potentially, ACAP can be held up as a role model for other sustainable development projects conducted elsewhere in the Third World. However, before any policy transfer is recommended, a detailed audit of the ACAP initiative should be conducted. Does this good practice bring positive results? This paper is part of a wider project undertaking such an audit.

As a full scale assessment of this type is beyond the scope of a single article, this paper focuses on just one dimension of ACAP's work: its relationship with foreign trekkers. These are the individuals, after all, that are providing the lion's share of the finance for this programme. Is ACAP making the most of these partners? Are trekkers contributing to the ACAP mission? In short, to what extent are trekkers fulfilling the role of agents of environmental conservation and economic development in the Annapurna region?

In order to offer some answers to these questions, fieldwork was conducted in the ACA during a four-week period of the autumn trekking season in 2005. Using a semi-structured questionnaire, 30 random groups of trekkers were approached, with one to four individuals from each group being interviewed. These interviews took place at several locations on the 'Annapurna Circuit', to ensure that the sample included a mixture of tourists undertaking both longer and shorter distance treks.

Three main findings emerged from these interviews: that trekkers generally act in an environmentally responsible manner while in the ACA; that few trekkers take responsibility for the environmental behaviour of their support staff, where hired; and that trekkers' awareness of ACAP and its goals is poor. Each of these issues is discussed in turn.

3.1 The environmental behaviour of trekkers

ACAP asks of trekkers that "Awareness and responsibility are the first things to take on your trek". This is the opening line of its Minimum Impact Code (see Table 2). This code

offers advice on how visitors can help conserve the forests, protect flora and fauna, respect the culture they have entered, and in general, act in an environmentally responsible manner. In many respects, this Minimum Impact Code (MIC) lies at the heart of ACAP's sustainable tourism ambitions. Without such green behaviour, 40,000 visitors to the ACA each year could easily destroy the existing environment and culture of the Annapurna region.

Table 2 The ACAP Minimum Impact Code

Be a Guest!

Awareness and responsibility are the first things to take on your trek. Your example affects the locals' attitude towards their culture and environment. Therefore, please apply these rules not only to yourself, but also make them a condition on your trekking staff. Remind other visitors of the importance of respecting the environment.

Conserve the forest

- Do not light campfires: cook with kerosene, and take sufficient warm clothing.
- Buy only what won't pollute, or carry it out.
- Purify water yourself instead of buying it bottled. Use safe drinking water (ozonated) in reusable bottles.
- Return batteries to your home country for proper disposal.
- Use toilets wherever possible. In the wild, stay at least 50 m away from water sources, and bury your waste.
- Minimise your use of polythene/plastic materials.

Protect wildlife

- Do not disturb wildlife.
- Do not hurt or remove animal parts and plants.
- Do not buy items made form animal parts.

Respect people and culture

- Adopt local custom: speak Nepali and local languages to the best of your ability. Do not wear revealing clothes. Save caresses for private moments.
- Respect privacy: ask before photographing people or religious sites. Do not enter house[s] uninvited.
- Leave antiques where they belong.
- Discourage begging and encourage fair dealing.

Keep your eyes, ears and mind open: not only to learn from your hosts, but also to encourage right behaviour. Consult ACAP staff, brochures and guidebooks for more details on how to be a good guest. We encourage you to use trained guide[s] whenever possible during your trek.

Source: Chetri et al. (2004).

Trekkers participating in the fieldwork survey broadly respected the MIC. Of those asked, 76% were aware of this document, with many respondents reporting that this awareness was as a result of the code being printed on the back of many lodge menus.

The 'do's and 'do not's of trekking were therefore reinforced in the minds of visitors at each mealtime. In terms of the detail of this document, when quizzed, 72% of participants remembered that the MIC called for the 'carrying-out' of non-burnable/non-biodegradable rubbish; 55% knew that they were requested to purify their own water, rather than buy bottled water; 35% recalled that they were asked to minimise the burning of wood; and 28% remembered that they should order meals at the same time as their fellow trekkers in lodges, again to reduce the use of wood fuel (see Table 3).

Table 3 Can you remember any of the 'do's and 'do not's of the ACAP Minimum Impact Code?

Problem identified	*Remembered by participants (%)*
Minimise wood burnt	35
Carry out non-burnable/non-biodegradable rubbish	72
Purify own water (minimise use of bottled water)	55
Do not dispose off batteries	10
Use toilets provided	10
Minimise use of plastic	0
Protect wildlife	17
Speak Nepali	7
Wear appropriate dress/be sensitive to public displays of affection	10
Ask permission to photograph local people	7
Discourage begging	4
Order same meals in lodges to reduce fuel burnt	28

When it came to actually following, rather than remembering, the advice of the MIC, compliance, again, was fairly high. All trekkers, for example, asked permission of locals before taking photographs; almost all had spoken basic Nepalese and sampled Nepali dishes, and 83% had avoided buying bottled water (see Table 4). Whereas, the proportion of trekkers 'carrying-out' all their non-burnable/biodegradable rubbish was lower, almost two-thirds of respondents did do this. Following-up this issue in the interviews, there was evident confusion over whether leaving such rubbish in lodges was acceptable or not. Several trekkers assumed, probably incorrectly, that lodge owners would arrange the 'carry-out' of any non-biodegradable waste discarded on their premises.

Table 4 Have you undertaken the following during your trek?

Action	*Positive response (%)*
Checked type of fuel burnt by lodge before staying for the night	10
Usually purified own water instead of using bottled water	83
Visited an ACAP information centre	48
Spoken basic Nepali words	100
Eaten Nepali meals a number of times	99
Carried out most plastic/non-biodegradable rubbish	59
Asked permission to take photos of locals	100

3.2 Trekkers' deference to, and lack of responsibility for, support staff

Two areas where the majority of questionnaire participants failed to follow the Minimum Impact Code related to checking the type of fuel burnt by lodges and visiting local information centres. Only 10% of respondents did the former, while less than half did the latter. To a large degree, this deviation from the MIC can be explained by the organisational nature of a visitor's trek. Two-thirds of the survey participants had hired support staff for their holiday. Most 'independent' trekkers employed a guide along with one or two porters, while some larger professionally organised treks involved up to a dozen, or even more, support personnel.

Where a guide is employed, most trekkers defer decisions relating to route, itinerary and choice of lodge to this individual. Whereas truly independent trekkers, without a guide, may factor in environmental concerns when choosing where to eat and sleep, guides inevitably usher their clients to lodges where they have reciprocal arrangements in terms of the provision of food and the payment of a commission. This deference to guides partially explains why only 10% of the respondents checked the type of fuel a lodge burnt before agreeing to use its facilities. Trekkers simply did not want to challenge their guide's advice.

When asked, as part of this fieldwork, what more he thought trekkers could do to empower ACAP and its mission, Roshan Sherchan, the chief architect of the project, clearly identified this issue of deference. He wanted to see trekkers break free from the network of lodges currently favoured by guides, which would have the effect of sharing the benefits of tourism to a wider local constituency. Such independent behaviour from visitors would also help expose trekkers to more of ACAP's work.[6] Indeed, survey participants themselves noted that they had been whisked through the permit buying process by their guides, not having time to take in the information ACAP provides at these locations. Similarly, no guide employed by the fieldwork participants had suggested that an ACAP visitor centre should be part of the trekking itinerary. Hani Maya Gurung, the curator of the ACA Eco-museum at Jomsom, makes an identical point. If she does have a complaint of trekkers, it is that they do not take the time to take in the local culture, and the information supplied by institutions such as hers.[7] Instead, guides are keen to stick to a familiar and set itinerary.

Another area in which trekkers tend to defer too much to their support staff is in not taking enough responsibility for the environmental behaviour of their employees. Guide books to the region, of the *Lonely Planet* and *Rough Guide* ilk, have done much to impress on trekkers that they are responsible for making sure that their support staff are adequately clothed for high altitude, and that they should ensure guides and porters have access to medical assistance, should they become ill during the trek, but no mention is made of these individual's environmental behaviour. This is remiss given that, alongside the 40,000 tourists who visit the ACA each year, there is an approximately equal number of support staff employed by these trekkers. Even if an environmentally aware trekker makes a conscious decision to patronise a lodge with a back-boiler stove, or one that has installed solar panels, it is almost guaranteed that this visitor's support staff will be burning wood fuel for food and warmth. The survey found that only 16% of participants, who employed a guide and/or porters, asked or checked if these staff followed the Minimum Impact Code.

3.3 Trekkers' awareness of ACAP and its goals

In addition to assessing the environmental behaviour of trekkers, and their relationship with support staff, the fieldwork also investigated these visitors' knowledge of the problems facing the ACA, and their awareness of the ACAP initiative seeking to address these issues.

When the survey participants were asked to identify any social, economic, political or environmental problems that they thought may be present in the ACA, little awareness was demonstrated (see Table 5). The only problem collectively identified by the respondents was that of the Maoist insurgency. Nearly all of those interviewed had been forced to pay a fee at Maoists check-points in order to complete their trek. Awareness of other issues was sketchy. A third of participants mentioned the rubbish that has accumulated on the trails in some areas, and 28% offered both 'poverty' and 'deforestation' to be a problem. Beyond Maoist activity, however, there was no consistent pattern in the trekkers' replies, nor a high, or even moderate, level awareness of the region's challenges demonstrated.

Table 5 Are you aware of any social, economic or political problems in the ACA?

Problem identified	*Identified by participants (%)*
Deforestation	28
Rubbish accumulation	35
Poverty	28
Inflation	0
Soil erosion	14
Maoist insurgency	93
Lack of education facilities	10
Providing food supplies	7
Labour conditions of porters	4
Access to drinking water	10
Climate change	7
Limited electricity supply	4
Impact of new road construction	14
Loss of culture	4
Lack of healthcare provision	4

The fieldwork also reveals a similar lack of awareness of the Annapurna Conservation Area Project itself. Although all the respondents had heard of ACAP, with most realising that they had paid a fee to this organisation in order to enter the ACA, knowledge of this project's aims or how it spent the permit money was poor (see Table 6). There was some recognition that ACAP helped maintain the trails (44% correctly identified this), and that ACAP provided water purification stations along trekking routes (28%), but when it came to recognising aspects of ACAP's work that did not impact directly on themselves, then the trekkers' knowledge was scarce.

Table 6 How do you think ACAP spends the money it receives from trekking permit fees?

Specified recipient of spending	*Identified by participants (%)*
ACAP administration/management costs	14
Managing forests	10
Reforestation	3
Alternative energy programmes	14
Agricultural programmes	10
Health programmes	10
Education programmes	17
Community development programmes	14
Cultural conservation programmes	7
Building and maintaining trails/bridges	44
Sanitation	17
Managing tourist accommodation	7
Income generation projects	28
Wildlife/flora conservation	0
Rubbish management	0
Training guides	4
Goes to government	7
Providing water purification stations	28

4 Recommendations and conclusion

The Annapurna Conservation Area Project is a refreshingly well thought out and well run initiative that seeks to promote economic development alongside the goal of environmental and cultural conservation. It has done much to preserve the natural beauty of the Nepali Himalaya, and has improved the livelihoods of many mountain residents in this region. The results of the fieldwork presented in this paper, however, would suggest that there is at least one area in which ACAP could improve its approach: namely its relationship with tourists visiting the ACA.

Although resources are tight, and the project's leadership under pressure, there should perhaps be room for ACAP to rate, and promote, tour companies, trekking staff and lodges. Trekkers would then have the option to employ ACAP approved travel agents and guides, and would be able to more easily identify lodges in a village that followed ACAP-monitored environmentally friendly practices. In effect, visitors would be forced to consider green issues as part of their travel decision making. Currently, trekkers arriving in a village seeking accommodation and/or food from 'green' lodges have difficulty in distinguishing between the hospitality on offer. Selection is therefore made on other criteria. If lodges were 'eco-rated', and an 'ACAP Approved' sign displayed, then trekkers would be able to make their choice accordingly. Such a rating system would likewise add an incentive to lodge owners to follow green practises, and interface with ACAP, in order to chase business.

A similar scheme of official ACAP approval for guides and tour companies would also present trekkers with a choice to be made. Tourists could opt for an approved company, knowing that their support staff followed the MIC. Pressure would be placed on travel agents to ensure that their guides and porters maintained high environmental standards, fearing a loss of this approved status and consequently business. Such a scheme would cost ACAP time and resources to establish and police, but it would be a method of improving the environmental awareness and performance of trekkers, support staff and lodge owners.

A second recommendation relates to raising the profile of ACAP amongst trekkers. Although it was shown that foreign visitors had generally heard of ACAP, tourist knowledge of the breadth and depth of this project's work was poor. Much as ACAP had originally to win the hearts and minds of the ACA residents, this organisation now has to do more to publicise its activities and goals to trekkers. After all, the monetary spin-off of this education process could be beneficial. When asked, 86% of the survey participants indicated that they were satisfied with the sum charged for the ACA permit fee. Only 14% stated that they thought this price to be too cheap. When asked the same question at the end of the interview, however, after they had been informed of the programmes ACAP administered, nearly all of these trekkers volunteered that they would pay a higher permit fee. Simply put, trekkers would be willing to provide more income to ACAP, provided they knew exactly where this money was going. Currently, this information is not reaching foreign visitors to the ACA.

As shown above, ACAP's remit is broad. As an NGO, it is tackling massive issues of poverty and environmental degradation in the Annapurna region. Tourism certainly is not this organisation's only focus. If the wider project is to succeed, however, ACAP does need help from all the stakeholder groups found within the ACA: trekkers included. This paper suggests that these foreign tourists are generally well disposed to the ACAP mission, if not particularly consciously. Naturally enough, as temporary visitors to this part of the world, trekkers want to concentrate on their primary concern: trekking. They need guidance if they are to modify their environmental behaviour. The Minimum Impact Code represents a good foundation, in this respect, but ACAP consciously has to involve trekkers more in its work. Only if tourists are informed, to a greater extent, about the region's problems, and actively helped to make environmentally correct choices, will these trekkers truly become agents for environmental conservation and economic development in Nepal.

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Notes

[1]I have only found occasional examples of *overt* government influence over ACAP decisions. The intervention of the Ministry of Tourism, for example, to increase the number of tourist permits to the restricted ACA district of Mustang.

[2]Personal interview with Roshan Sherchan, ACAP Project Coordinator. Pokhara, 23 November 2005.

[3]Personal interview with a project worker for the King Mahendra Trust for Nature Conservation who wished to remain anonymous. KMTNC central office, Jawalakhel, Lalitpur, Nepal, 26 October 2005.

[4]See Thompson (1992. p.32) for more details. This calculation of 270 kg burnt per day was made prior to the introduction of alternative fuel sources in the ACA.

[5]Transported by the Chhuksang VDC to the roadhead at Beni (King Mahendra Trust for Nature Conversation 2003, p.23).

[6]Personal interview with Roshan Sherchan, ACAP Project Coordinator, Pokhara, 23 November 2005.

[7]Personal interview with Hani Maya Gurung, Curator – Eco-Museum, Jomson, 15 November 2005.