

'Aid' as Applied to the Himalayan Region: A Partial Appraisal of the Period 1980 to 2005

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Abstract

This paper is based on experience gained and observations made throughout the greater Himalayan region while the author worked as coordinator of a United Nations University (UNU) research project. Research began in 1978 in northern Thailand and Nepal. Later it extended to Yunnan, southwest China, Tibet, and Tajikistan and included reconnaissance visits to Darjeeling, the Central Indian Himalaya, and northern Pakistan. The extensive travel and long periods in the field, along with colleagues and graduate students, facilitated many contacts with mountain minority peoples as well as the frequently large-scale aid and development projects sponsored by national and international agencies. While many 'aid' projects, especially the smaller, carefully focused ones, were beneficial to the poor mountain people, many were insensitive, even inimical. Competition between aid agencies, imposition of 'Western' assumptions and methods, and corruption at many levels appear to have been, at least partly, responsible for the widening gap between the 'haves' and 'have-nots' and for the pursuit of solutions to non-existent problems. The latter is characterized by the 'Theory of Himalayan Environmental Degradation.' Several examples are introduced to facilitate examination of these claims.

The growth in social and political unrest and actual insurgency across much of the region cannot be entirely divorced from the failure to effectively address mountain poverty and unequal access to resources. The paper concludes with a call for a comprehensive review of development policy with adequate representation afforded the so-called 'target' peoples.

Key words: environment, Himalayan development, international aid, minority peoples, poverty, resources

1. Introduction

In 1978 UNU initiated a research programme entitled 'highland-lowland interactive systems' subsequently to become 'mountain ecology and sustainable development.' The organizational 'box' was left empty for the author, as the newly recruited project coordinator, to develop a focus, albeit with certain restrictions. The focus was heavily influenced by the coordinator's academic inclinations and expertise and those of his colleagues who were attracted as collaborators. There was an initial regional restriction: mountains and adjacent lowlands of the humid tropics and sub-humid tropics within Asia. Early emphasis was placed on natural (mountain) hazards and deforestation, and the assumed causes and consequences of the latter: opium production and population growth amongst poor hill peoples in Northern Thailand; population growth amongst poor mountain communities and their as-

sumed reckless forest destruction in Nepal and adjacent mountain regions, and their downstream impacts. An important part of the project entailed the training of scientists from the countries within which research was planned. This was undertaken by award of UNU scholarships tenable at the home institutions of the project leaders (University of Colorado, USA. and Berne University, Switzerland).

The project quickly attracted additional 'outside' financial support and participation by academic colleagues and their graduate students in several other North American and European universities. In terms of field locations, the project expanded to include mountain regions of southwest China, India, Bangladesh, Pakistan, and Tajikistan, in addition to the two original host countries. Much later, research and training activities expanded to the Andes and East Africa. As the project evolved, Bruno Messerli joined Ives as project co-coordinator and both remained with

the project for more than a quarter century. The project also provided a base for a number of significant institutional developments: founding of the International Mountain Society; creation of the African Mountain Society and the Andean Mountain Society; and establishment of the quarterly journal *Mountain Research and Development* in 1981. This institutional phase also led to a series of international conferences, especially the Mohonk Mountain Conference of 1986 (*The Himalaya-Ganges Problem*) and critical input into the efforts to include Chapter 13 (Mountains) in AGENDA 21 (UNCED-Rio de Janeiro, 1992), and to assist in the UN designation of 2002 as The International Year of Mountains.

The research results of this long-term and loosely circumscribed project are published throughout the literature and so are not subjected to direct consideration within the context of this paper. Rather, the focal point will be based on the experiences and informal reactions of one of the project coordinators (JDI) to international aid and related national policies that impinged upon the mountain research being undertaken. The research afforded privileged access to a vast area of montane South and Central Asia. This included visits to many isolated villages and minority communities at a time when the locations were politically restricted for foreigners. Nevertheless, many of the details introduced here are taken from the project's three most significant publications:

1989: *The Himalayan Dilemma: Reconciling Development and Conservation*, by J.D. Ives and B. Messerli, London and New York: Routledge.

2004: *Himalayan Perceptions: Environmental Change and the Well-being of Mountain Peoples*, by J.D. Ives, London and New York: Routledge.

2006: *Floods in Bangladesh: History, Dynamics, and Rethinking the Role of the Himalayas*, by T. Hofer and B. Messerli, Tokyo: UNU Press.

The primary message of this paper is that environmental paradigms that appear to have guided much international aid have been demonstrated to be myths, or even falsehoods. In this context, the *Theory of Himalayan Environmental Degradation* (THED) is offered as an illustration. As the project research proceeded and attracted the active involvement of many other researchers, this environmental catastrophe myth was discredited, but only within academia (Forsyth, 1996; Blaikie & Muldavin, 2004). Several international agencies and national institutions of the region have retained the notion that the main culprits of the perceived environmental and resource destruction are the mountain poor (usually minorities).¹⁾ Several of the national governments have responded by imposing logging bans over vast areas with the stipulated intention of protecting downstream structures, as for exam-

ple, the Three Gorges Dam in China.

Since much of the justification for such policies can still be related to earlier draconian statements by pre-eminent international institutions, it is reasoned that serious and widespread review of aid policy within the Himalayan region is urgently needed.

Three outstandingly authoritarian statements are worthy of emphasis:

WORLD BANK, 1979

Nepal has lost half of its forest cover within a thirty-year period (1950-80) and by AD 2000 no accessible forests will remain.

ASIAN DEVELOPMENT BANK, 1982

[there is a] . . . *distinct danger that all accessible forests, especially in the Hills, will be eliminated within less than 20 years.* (later reduced to 'within 14 years')

WORLD RESOURCES INSTITUTE, 1985

. . . *a few million subsistence hill farmers are undermining the life support of several hundred million people in the plains.*

UNDP, UNEP, and many other international and national institutions, together with the news media world-wide, endorsed this environmental catastrophe theory that remains, at least partly, in place today.

2. Selected 'Aid' Project Case Studies

Several case studies are presented as examples of badly conceived, or poorly designed and implemented projects. They range in magnitude from mega- hydroelectric projects to small run-of-the-river undertakings. This presentation includes an autopsy of the Arun III project of eastern Nepal, albeit, cancelled more than a decade ago, the on-going huge Tehri Dam development of the Indian Central Himalaya, micro-projects in Himachal Pradesh, India, and planned energy developments on the upper Yangtze (Jinsha Jiang) in northwestern Yunnan, China. The upper Yangtze projects, if carried out, would involve major environmental impacts in a recently designated World Heritage Site (2003).

These projects are discussed because they illustrate the disconnection between the desires of large institutions (international) and national interests, on the one hand, and the needs of the mountain rural poor on the other.

2.1 Arun III, Nepal

While the Arun III project was cancelled immediately following the accession of James Wolfensohn as President of the World Bank more than ten years ago, it is introduced here for the following reasons: (1) it provides a clear-cut example of major aid expenditures destined to go seriously astray; and (2) the brief

period of democratic government in Nepal (1991-1996) allowed access to much of the internal politics that was leading to a potential economic and socio-environmental disaster almost becoming a reality (Gyawali, 2003).

The Arun River rises on the Tibetan Plateau and more than three-quarters of its watershed lies within Chinese territory. The lower river flows in a spectacular gorge through the eastern Nepal Himalaya to join the Sapta Kosi before entering India. It was initially identified for its huge hydroelectric potential during a mid-1980s river basin study by the Japanese International Cooperation Agency (JICA). Involvement of the World Bank and the Asian Development Bank was sought. The two banks conditioned their assistance on Nepal agreeing to merge into a single unit its pre-existing Department of Electricity, of the Ministry of Water Resources, and the Nepal Electricity Corporation. This led to the creation of the Nepal Electricity Authority.

According to Gyawali (2003:69), Arun III was the culmination of 'monism from the large multilateral donors side, as opposed to institutional pluralism, a reality on the recipient's side [Nepal], given its wide-ranging social diversity.' Gyawali goes on to imply that these initial institutional adjustments were a reflection of the philosophy of 'efficiency of size' rather than that of 'local institutional needs' and raises the question of 'compulsions to market types of equipment such as turbines, generators, and services such as consultancies.' During the early negotiations, other possible competing hydro-projects, such as the 225 MW Sapta Gandaki project, at about half the cost of Arun III and at a much more accessible site, were eliminated from consideration by the simple expedience of arbitrarily increasing their assumed costs despite the absence of any supporting data.

In 1987 the Government of Nepal requested the World Bank to accept the role of lead donor agency to ensure that the Arun III project went ahead. This was the first time in the development history of Nepal that authority was passed from the government to an external institution to negotiate on its behalf with other potential donors. Germany agreed to provide DM 260 million for the necessary feasibility and engineering design studies. One result of this was that a German consultancy firm received the main design contract. This effective creation of a monopolistic institution resulted in the elimination of several competitors, including JICA, as well as many alternative and possibly more efficient projects.

Arun III, from its earliest stages, had many technical, economic, and social anomalies that received little attention. At an estimated cost of USD 1.1 billion, it became the largest project ever contemplated in Nepal. This made it a potential investment with the largest ever risks. Even worse, the loans were being negotiated in such a way that Nepal would be responsible to make good any losses that may be incurred while the

donors were exempted. Nepal was also committed to the prospect of raising internally up to USD 500 million of the total budget, the remainder being acquired through foreign aid in the form of grants, soft loans, and technical assistance. No opportunity was given to allow competent and legitimate national institutions, such as the Water and Energy Commission and the National Planning Commission, to calculate the risk of such a large investment on such a small economy. Even the World Bank, prior to 1993, failed to undertake a thorough macro-economic impact assessment.

Several studies were undertaken by the World Bank to justify the decision to proceed with the project. One study was conducted under contract by Electricité de France (EdF). Subsequently, it was shown that conditions had been imposed on the study. One condition was that all of the other projects that had been identified as possible alternates must arbitrarily be assumed as unable to be commissioned prior to 1998/99 (that is, before the planned completion of Arun III). Another condition stipulated that EdF must apply arbitrary cost-increase coefficients of as much as 30 % to any alternate project despite there being no rationale other than to render them less competitive.

The need to construct a high-grade 118 km access road with side feeders through difficult mountainous terrain was not considered in the cost and time-for-construction estimates. Nor was serious consideration given to the potential environmental and social impacts of the access road. Power required for construction would depend upon diesel fuel airlifted with expensive helicopter support. In addition, qualified Nepalese engineers and large numbers of potential employees were restricted to liaison duties and low-paid jobs in support of expatriate consultants.

Perhaps the most embarrassing aspect was that the estimated cost of power production per kW in 1989 USD would be close to the highest in the world. Gyawali (2003:73) describes the process as leading into an 'iron triangle' of vested interests that were being given a free hand to trap Nepal into a 'no-options scenario and then escalate the project costs.' The 'iron triangle' consisted of three apexes: low-paid Nepalese bureaucrats in powerful positions who controlled large sums of money; donor agencies where promotion depended on the number of loans skilfully negotiated rather than on projects successfully implemented; and middlemen, the commission agents who would bring together international industries and consultancies with local decision-makers.

During the early stages of the opposition to Arun III, NGOs and concerned individuals were branded as unpatriotic. It was only when Nepalese activists were able to establish effective liaisons with international groups and together initiated a sustained campaign from 1993 onward, that there were real possibilities for stopping an expensive and dangerous undertaking. Gyawali estimates that, the potential for environmental and social damage notwithstanding, it was on

James Wolfensohn's realization, as newly appointed President of the World Bank, that the project would likely be an economic disaster, that its cancellation was assured.

Arun III appears as a potential financial and environmental disaster that has been avoided. Moreover, it has been calculated that, following the collapse of the project, six much smaller hydroelectric projects have been completed in half the time and they are producing more power at half the cost of that which a completed Arun III would have produced. The six projects have incurred comparatively slight environmental disturbance and they have been the source of establishment of independent Nepalese enterprises (Dipak Gyawali pers. comm. 22 November 2003).

2.2 Related water resource development 'aid' to Nepal

Although the derailing of the Arun III project may appear as a victory for common sense, the victory is by no means complete. Other projects remain under negotiation. The Mahakali River negotiations between India and Nepal seem to have no end in sight. In this instance, Thapa (2003) insists that the problem appears to be that India wants to acquire hydroelectric power whereas Nepal needs its irrigated agricultural land extended and the two parties appear to be talking past each other. In addition, little attention is being paid to the needs of the local rural people.

It is also argued that the Kathmandu Valley, with a population exceeding one million and continuing to grow rapidly, is becoming seriously short of water. This has led to the Melamchi Water Supply project that would involve a 26-kilometre long tunnel for transferring water from the headwaters of the Indrawati River into the valley. Calculations have been made comparing the estimated water needs of the valley with that available from normal precipitation. These are claimed to be inaccurate. Furthermore, given appropriate encouragement, village-level corporations could likely achieve a large increase in useable water storage within the valley at a very low cost. This would have the important additional advantage of providing wage employment for a large number of poor local people and of encouraging local economic development. In addition, the proposed 26-kilometre tunnel would traverse a geologically poorly mapped area subject to high seismic risk. In the best possible case, it is likely that much of the water en route to the valley would be lost by underground seepage; in the worst case, all the water may be lost, despite the comparatively vast expense incurred. Finally, the potential for wastage of a large sum of foreign aid would exacerbate the lost opportunity of investing it in village-level water schemes that would aid local small-scale economies. Gyawali (pers. comm. 22 November 2003) raised the question: for how long can Nepal afford to receive this kind of 'aid'?

2.3 The Tehri Dam, Uttaranchal, India

The Bhagirathi River is one of the numerous Himalayan headstreams of the Ganges. The proposed advantages of a large dam several kilometres below the town of Tehri were discussed throughout the 1950s and 1960s. In 1972, the Planning Commission of Uttar Pradesh (of which Uttaranchal was a part until it became an autonomous state in 1999) approved plans for construction of what was to be one of the world's highest rock- and earth-filled dams. The specifications stipulated a dam that would be 261 m high on a 575 m-wide base with a length of 1,000 m. Storage capacity was estimated to be 3,500,000 m³ to occupy an area of 34 km² above the dam. There would be a second concrete dam 103.5 m high and 22 km downstream at Koteswar with an 86 million m³ capacity. The main functions of the dams would be to produce hydroelectricity to meet peaking requirements (100,000 MV for phase 1, the same for phase 2, and a further 40,000 MV from the Koteswar Dam downstream), to irrigate 270,000 ha of agricultural land and to stabilize the existing irrigation of 600,000 ha, and to produce 270 million gallons of drinking water daily for Delhi, Uttar Pradesh, and Uttaranchal. The main reservoir would flood the Old Town of Tehri and submerge, or partially submerge, more than 50 villages.

The Tehri Dam has been the object of considerable controversy since it was first proposed. The most influential and charismatic figure amongst the protesters is Shri Sunderlal Bahuguna, Messenger of the famous Chipko (hug-the-trees) Movement and prominent Gandhian environmentalist and supporter of peoples' rights of access to natural resources. The dispute has also attracted leading Indian and international seismologists and geophysicists, environmentalists, and many NGOs. Construction has been repeatedly stopped, only to start again amidst protests and riots. A 74-day hunger strike by Sunderlal Bahuguna in 1996 forced the government to set up a new review of the seismic, environmental, and resettlement aspects of the project. The range of issues brought against the dam include:

1. Public safety, because of the attested under-design of the dam in view of a projected Great Earthquake in the vicinity (Gaur, 1993) – this topic must have been re-accentuated following the October 2005 catastrophic earthquake in Northern Pakistan. Assuming that the opponents of the dam are correct and a future earthquake were to cause complete collapse of the dam, millions of lives downstream would be in danger and the result would be a severe blow to the entire Indian economy.
2. Such a dam could become a prime target for terrorists or an enemy of the country.
3. Destruction, by submergence, or partial submergence, of more than 50 villages, the Old Tehri Town, and many sacred temples and monuments would be a heavy penalty.

4. More than 100,000 people would be directly affected, a serious situation in view of India's very poor record of providing adequate compensation. By October 2003 provision had been made to re-settle only about half of the fully-affected people and very few of those partially affected. The level of compensation, also, has been criticized as totally inadequate.
5. All the benefits of the project would favour downstream interests; mountain villages would not even receive electric lighting.
6. There would be considerable environmental loss due to submergence and massive manipulation of the Bhagirathi River.

Furthermore, opponents of the dam, including internationally renowned scientists, claim that there has been government intransigence, secret negotiations, breach of commitments, including that of a former prime minister, and corruption. Sunderlal Bahuguna has staged three lengthy fasts, ending with the public commitment of senior politicians for further testimony and review. Each commitment was subsequently broken and Bahuguna himself temporarily imprisoned.

A further pragmatic objection is that the costs will seriously outweigh the benefits. It is projected that the unit cost of electricity will be twice that produced from neighbouring sources. After almost three decades of construction progress and work stoppages, in April 2003 the Supreme Court of India began review of a petition for stopping work on the dam. On 1 September 2003 a three-judge panel of the Court dismissed the petition by a two-to-one decision. Nevertheless, the ruling instructed that the two upper tunnels through the dam must not be closed so that the reservoir could not be filled to its planned level until all re-settlement and compensation had been completed. Further protests were pending.

Much has been written about the Tehri Dam controversy, both technical and socio-economic. In particular, Valdiya (1992, 1993a, 1993b) emphasized that there are viable alternatives to big dams and argued for several smaller run-of-the-river installations, together with a significant modification to down-size the existing Tehri project. He also pointed out that the projected construction would provide no benefit for the people of the Garhwal Himalaya; he foresaw only the misery of enforced evacuation and inadequate restitution.

The Tehri Dam dispute is sufficiently complex and emotionally charged to frustrate any balanced 'outside' judgement. Nevertheless, the honesty of several levels of government officials is clearly questionable. The attitudes of powerful political decision-makers toward the poor mountain people appear to be totally reprehensible. Certainly the Tehri Dam case, and many others comparable to it, represents a form of repression of poor mountain people, amongst

others, that can only lead to widespread unrest and disaffection.

2.4 Micro-hydel Projects in Himachal Pradesh, India

One of the gems of Himachal Pradesh is its Kulu Valley, renowned for its efforts to counteract local poverty by development of a flourishing apple production industry. Tourism has been added to the further development of the valley (Singh, 1989; Gardner, 2003). More recently there has been a significant attempt to encourage development of small-scale hydroelectric projects. The federal and state governments of India and Himachal Pradesh, with support from UNDP, have identified 55 potential micro-hydel sites in the Kulu District. Four facilities are under construction while another 12 are in various stages of approval. Two of the four that were nearest completion were surveyed by an independent research team (Sinclair, 2003).

Sinclair (2003) states that the provision of funding by UNDP was based upon a number of assumed benefits. These included: reduction in local fossil fuel use and accompanying production of greenhouse gases; protection of mountain forests and bio-diversity; enhancement of local economic opportunity; provision of local construction jobs; relief of women's drudgery in collecting fuelwood; and sundry 'capacity-building benefits.'

A survey of people living in the vicinity of the two projects reviewed by Sinclair led to a series of findings that contradicted the proposed benefits put forward by the original project proponents in their bid for UNDP assistance. There was no local motivation to substitute electricity for fuelwood as the former would prove expensive while the latter was considered to be free. The time spent in collecting fuelwood was not regarded by the local people as relevant (while not stated in Sinclair's report, it has often been reported that mountain women have regarded fuelwood collection as a social outing). The construction phase had produced no new local job opportunities as all labour was arranged by the project managers who imported low-paid Nepalese workers. There was some concern that the generating plants and associated infrastructure would eliminate a considerable number of trees. The temporary camps of the imported labourers were regarded as a pollution risk. Above all, there had been no prior consultation with the local people.

The overall series of Kulu micro-hydel projects remain far from complete and Sinclair's (2003) report calls for an urgent review of the current situation and a more rigorous environmental assessment process. Nevertheless, he doubts that the necessary political will can be marshalled.

This project has been introduced because it serves as an example for many that have been undertaken throughout the Himalayan region. Such development projects create tension through disregard of the need

for local consultation and involvement. Furthermore, they increase a tendency toward cynicism in relation to outside aid. In the case of Kulu, however, the situation is worsened by the general level of disregard for the well-being of the local people. An example is the recent gazettement of the Greater Himalayan National Park. While designated in 1985, the park was formally incorporated in 1999. Despite over a hundred years of local farmer access to the natural resources of the area now occupied by the park, the formal incorporation was accompanied by exclusion of local harvesting and grazing and totally inadequate compensation. The growth in local discontent was exacerbated by government cynicism: initial justification for park establishment was based upon the so-called need to preserve the natural environment as necessary to ensure further growth in tourism; this was followed by government deregulation of a large section of the park to permit construction of the Parvati hydroelectricity plant. Furthermore, housing for 6,000 employees of the power plant was to be built in the village of Sainj which had a current population of 2,000. Nearly all of the new workers were to be brought in from outside the Kulu Valley, many from out-of-state (that is, Nepal). These would be added to the already considerable force of transient workers. The planned electric power is for sale outside of Kulu, much of it outside of Himachal Pradesh. Thus the local residents would receive little, if any, benefits and would have to contend with many negative effects (Saberwal, 1999; Mehra & Mathur, 2001; Saberwal & Chhatre, 2003).

2.5 Northwestern Yunnan and the upper Yangtze river, China

In July 2003 UNESCO, with IUCN support, approved China's application for World Heritage designation of the vast Three Parallel Rivers National Park. During the standard negotiations, the Chinese authorities had accepted the recommendation that the proposed northeastern boundary be extended to include the Haba Xue Shan and Yulong Xue Shan mountain ranges. This would encompass the world class Tiger Leaping Gorge of the upper Yangtze (Jinsha Jiang) that cuts between them. The two mountain ranges, in addition to a remarkable elevation range of forest and sub-alpine vegetation belts, support the southernmost glaciers of Eurasia. This boundary adjustment should have protected not only the rich natural environment, but also local minority cultures and sacred places associated with the area for more than a thousand years. Most important, however, would be the protection of a unique gorge, more than twice the depth of the Grand Canyon. Nevertheless, despite the formal agreement, plans are underway for construction of a cascade of hydroelectric dams that will compromise the Tiger Leaping Gorge. Chinese planning appears to be going ahead even before completion of its own environmental impact survey. Added to this, the region-wide logging ban (see below) and the govern-

ment-sponsored mass tourism of the last decade is having serious negative consequences for the very poor local ethnic minorities (Sicroff & Ives, 2001).

2.6 General remarks on water resource development in the Himalayan Region

Ramaswamy Iyer, a former Secretary, Water Resources, Government of India, and a member of two major review committees (Sardar Sarovar – 1993/1995 and Tehri – 1996/1997) has attempted a balanced review of problems facing mega-water projects in the Himalayan region (Iyer, 1998). He addresses the prevailing tendency of proponents and opponents of major water projects to almost invariably assume antagonistic positions. One of the results is that the ensuing conflicts have been part of the cause of delays in the final decision-making that have extended over decades. This has been extremely damaging and costly, whether or not a project is completed or rejected. He makes a series of recommendations:

1. Mega-projects should be treated as projects of last resort to be undertaken only after all other possibilities have been evaluated.
2. Integrated and holistic planning for an entire watershed should be a prerequisite, including social and environmental aspects.
3. Construction should not begin until after completion of the evaluation process.
4. Large water-related projects should never be allowed to pre-empt a disproportionate share of available resources.
5. Ensure and institutionalize the fullest collaboration with the people to be affected and the NGOs representing them from the beginning, and make all information freely available.
6. Establish credible grievance-redress machinery and build safeguards against harassment of people and against corruption.
7. Maintain constant review and institute corrective actions and remedial measures as soon as difficulties manifest themselves.

Iyer (1998) concludes it is often the state itself, through failure to consult, secrecy, and unimaginative implementation, that forces the people and NGOs into a process of confrontation. That such remarks by an experienced professional and former senior government bureaucrat are assumed necessary, indicates the magnitude of the water resource development issue facing the region.

These criticisms are further emphasized in an overview: 'Water, Power and People: A South Asian Manifesto on the Politics and Knowledge of Water.' Its three authors are, respectively, Bangladeshi, Imtiaz Ahmed, Nepali, Ajaya Dixit, and Indian, Ashis Nandy. They make the point: 'The last fifty years of water management in South Asia has been a story of unfolding disaster' (Ahmed *et al.*, 1992: 121).

The water resource controversies are the more relevant to any evaluation of international aid and development because of the enormous consumption of international funds that has occurred.

3. National Parks and Protected Areas

The mountain regions of South and Central Asia have become major tourist attractions over the last thirty or forty years. This is understandable considering the outstanding natural dramatic beauty of many parts of the region, coupled with the enormous array of local ethnic groups complete with (to Western eyes) exotic costumes and customs. It was originally believed that tourism would become an effective way of improving the economic well-being of the conspicuously poor mountain people (IUOTO, 1963; Hinch & Butler, 1996; Price *et al.*, 1997). Tourism has produced a mixture of benefits and negative impacts. Only one aspect of the extensive topic will be considered here – the alienation of local peoples' access to natural resources under the pretext of preserving bio-diversity and ensuring the inflow of foreign exchange from the development of tourism.

The first national park to be designated in Nepal (Rara National Park, 1975) involved eviction of two tiny minority groups by military force and their apparent absorption or total elimination. Designation of the world famous Sagarmatha (Mt. Everest) National Park initially threatened the destruction of the traditional Sherpa culture by similar forced expulsion. This was averted, presumably because the Sherpa people were famous world-wide as 'tigers of the snows' and heroes of the attempts to reach the summit of Everest during the 'golden age' of Himalayan mountaineering, so that they had ready access to powerful international support. Nevertheless, conflict between the Sherpa community and the central government over park management continues. Numerous examples of unfortunate tourism development policies can be cited in addition to Sagarmatha.

3.1 Kangchenjunga conservation area

The Kangchenjunga region was designated one of the World Wildlife Fund's (WWF) 'Global 2000' eco-regions and was declared a 'Gift to the Earth' on 29 April 1997. The following year a 1,650 km² section, later expanded to 2,035 km², was officially declared as the Kangchenjunga Conservation Area (KCA), to be managed jointly by the Department of National Parks and Wildlife Conservation and the WWF. The area is extremely rich in endemic plants, including 24 of Nepal's 37 species of rhododendron and a significant number of endangered animal species, such as the snow leopard, musk deer, red panda, and many species of birds.

In 1987 only 87 trekkers had reached the area and the numbers in subsequent years remained low, reaching just over 800 by 1999. The Conservation Area

plans call for 1,000 per year. These small numbers are explained by the area's remote location in extreme northeastern Nepal, the limited availability of facilities, and the very heavy annual precipitation (Gurung, 1996).

The indigenous population numbers less than 5,000 and consists of Sherpa and Limbu, the two largest groups, and Rai and Gurung. They are basically subsistence farmers practicing several forms of trans-humance and also trading with Tibet. There are four main villages which are the focus of planned ecotourism developments. Proceeds from tourism so far have made only a slight contribution to the economic base as most of the trekkers arrive in self-sufficient groups organized by Kathmandu-based trekking agencies.

Although the KCA is in the very earliest stage of its development, a survey of local residents by Müller-Böker and Kollmair (2000) indicated that 'nearly all of the interviewees had expectations that went far beyond the intended and economically feasible potential of the project.' They quote the highly critical conclusions of Pimbert and Pretty (1997) who claim that this kind of conservation area management exploits local participation in order to achieve conservation goals set by outsiders. This kind of system has no mechanism to ensure the effective transfer of control to the local people.

3.2 Annapurna conservation area project

The Annapurna Conservation Area Project (ACAP) was established in 1986 and it was estimated that year saw over 36,000 visitors. It is a large area with a great range of physical landscape types, from the subtropical lowlands, across the high snows of the Annapurna Himalaya to the arid, long, steep, bare slopes of the north. It has an ethnically very mixed population (mainly located south of the Himalayan crest) that numbers in excess of 120,000.

The creation of the ACAP represented a turning point in Nepalese tourism development and conservation policy because it is managed by the King Mahendra Trust for Nature Conservation, an autonomous NGO free from direct government interference. The Trust has a mandate to encourage local conservation activities. Of special importance is that the entry fees paid by visitors remain under the control of the ACAP. Funding is therefore available to finance activities in the area and covers about half of its total budget; the remainder is provided by the international donor community.

ACAP maintains a central office at the small town of Ghandruk and there are seven regional offices. In 1998 the staff numbered more than 200, a third being female. This has facilitated direct village involvement in conservation activities, promotion of tourism at the village level, improvements in housing, drinking water access, and waste disposal, as well as training and education.

The success of ACAP has been remarkable and has included the establishment of 159 village-level conservation and development committees, 288 mothers' groups, and 19 lodge management committees. Efforts to reduce the use of wood fuel and increase family income from the sale of handicrafts have followed. Furthermore, the sharing of know-how gained from these successful small enterprises has encouraged similar activities in other parts of Nepal. Nevertheless, as with any experimental project, there are problems and Nepal *et al.* (2002) report that 'it is sometimes difficult for the average visitor to understand where all the money goes – money which has been generated over the years from an increasing number of tourists.' The 1998 entry fee was NR 2,000 (about USD 140).

Despite this remarkable success, the most recent development has been a grave disappointment. This is the addition of Upper Mustang to the northern perimeter of ACAP with the central government retaining tight control of its management. Mustang had lagged behind most of the rest of Nepal in terms of improvements in overall well-being. Deepening poverty had caused loss of population through out-migration and its renowned Buddhist monasteries have experienced slow decay. Initially a wealthy region, Upper Mustang suffered badly with the 1959 closure of the Tibetan frontier and consequent loss of a flourishing salt trade. This was exacerbated by the central government's unwillingness to open the area to foreign visitors. These restrictions were finally lifted in 1992 when the area became the northern extension of ACAP. However, the government severely limited the form of tourism. For instance, no lodge or tea house could be constructed or operated by local people; tourist numbers were restricted to 1,000 per year; entry permits were very expensive on Nepalese standards (USD 70/person/day with a minimum stay of 10 days). Only groups accompanied by government liaison officers and trekking guides were permitted. All supplies had to be brought in from outside.

As compensation to the local residents, the government initially agreed to invest 60% of the revenues generated by tourism in local improvements. The underlying government policy seems to have been the phased introduction of tourism as the necessary infrastructure and support services were developed. Local entrepreneurship, with the construction of lodges and tea houses, so common in other tourist destinations, would then follow.

The outcome, however, is perceived as a breach of trust (Nepal *et al.*, 2002). The initial 1992 reinvestment amounted to 42% of revenues, not the promised 60%. This fell to less than 5% by 1997, despite sustained rapid growth in tourist numbers giving revenues in excess of USD 500,000. The official upper limit of 1,000 tourists per year has been disregarded and it is assumed that the government has used the opportunity for its own financial gain. Similarly, the tour operators, based in Kathmandu and Pokhara have

made significant profits as they hold a virtual monopoly. In addition, local residents have had to contend with a 300% inflation of commodity prices. Many families have come to depend on what they can earn from tourists by the humiliating act of posing for photographs and from what their children can obtain from begging.

3.3 Khunjerab National Park, Northern Pakistan

The Khunjerab National Park covers a vast area of the Karakorum Mountains adjacent to the Chinese border. It is one of the most recent to be established in Pakistan and, like the earlier parks before it (especially the Karakorum National Park) its operation has provoked a large local opposition. The primary issue here is the restricted access to natural resources, including wildlife and grazing, for the local people. Armed confrontations have occurred in the recent past. Thus, efforts were made in negotiations leading to the establishment of the Khunjerab Park to obtain local compliance, if not full cooperation. Nevertheless, local village authorities claim that they have been completely ignored by the authorities. Many feel that the National Park authority and the regional IUCN and WWF centres appear to be preoccupied with Marco Polo sheep and snow leopards. Complaints have been made that, not only has the livelihood of the local residents been ignored but there appears to be little indication of any concern for 'entire ecosystem management.' In some instances actual park boundaries are unknown. And while the Khunjerab Park management appears as a partial exception to the earlier experiences, even here locally organized groups, such as the Khunjerab Villages Association and the Shimsal Nature Trust, are opposed to the imposition of the national park system.

The outlined local opposition may seem surprising in view of the efforts of the international staff of the IUCN and WWF to achieve the participation of the local inhabitants. During the planning stages they had arranged a series of village-level workshops to facilitate dissemination of information on the potential advantages of park establishment. However, these international organizations have only an advisory role in their relationships with national governments (Lawrence Hamilton, pers. comm. 23 October 2003).

3.4 Tiger Leaping Gorge and the Yulong Xue Shan, Yunnan, China

Lijiang Old Town (Dayan) was granted World Heritage status in 1997. It is the 'capital city' of the minority Naxi people and has a history extending over more than a thousand years. It is situated below the Naxi sacred mountains of the Yulong Xue Shan (Jade Dragon Snow Mountains, 5,596 m) in northwestern Yunnan. Lijiang County and surrounding area contains some of the most impressive scenery in China, together with several distinct minority nations. This combination of impressive scenery and indigenous

cultures renders the entire area as a major tourist destination. The presence of the Tiger Leaping Gorge (see page 68 above) and the 2003 World Heritage designation for the adjacent Three Parallel Rivers National Park emphasizes this point.

The area had remained closed to both foreign and domestic visitors until 1985. In the short period since then the Chinese official policy to develop mass tourism has produced profound changes. By 2001, tourist visits exceeded 250,000 per annum, new high-grade roads, a modern airport, and high class hotels had mushroomed. The neighbouring country of Zhongdian, immediately to the west, ominously changed its name to 'Shangri-La County.' While this process has brought wealth to a few it has seriously impaired the traditional cultures and rendered the poverty of the majority the more conspicuous. The problems created by the abrupt change from the former dependency on natural resources and subsistence agriculture to rapid modernization have been exacerbated by the imposition of a logging ban that embraces the entire upper basin of the Yangtze (Jinsha Jiang). Here is yet another instance of imposition of central government policy without regard for either the needs of the indigenous people or the environment. Furthermore, as indicated in the introduction, a total logging ban based on the assumption that forestry in the upper watersheds is a threat to major national development schemes downstream (the Three Gorges Dam amongst them) lacks scientifically established proof.

4. Logging Bans and the Theory of Himalayan Environmental Degradation (THED)

As mentioned above, the only major international agency to seriously challenge the THED so far is the UN Food and Agricultural Organization (FAO/CIFOR, 2005). This is despite the fact that the Theory was seriously contested in the late-1980s and practically all relevant scholarly publications have added weight to its demise ever since (e.g., Forsyth, 1996; Blaikie & Muldavin, 2004; Ives, 2004; Hofer & Messerli, 2006). Can the FAO position be regarded as the beginning of a reversal amongst the large international agencies, or is it an accident, due to FAO's recruitment from amongst the mountain academics? Of equal importance: will FAO's challenge influence the array of national agency vested interests? There is no sign that central government agencies are in the process of re-evaluation. The logging bans in highland China, Thailand, and parts of the Indian Himalaya persist.

It is remarkable that these two interpretations of the THED remain far apart. Moreover, this is not an ivory tower contest. It affects the economy and environment of very large regions as well as the lives of millions of people: principally mountain minorities.

An additional complication is that the THED, at least in part, is being superseded by a new paradigm:

the assumed impact of global warming on mountain glaciers, especially in the Himalaya. This had developed over the last several years into yet another catastrophe theory. It is being fanned by apparently eager elements of the news media using seemingly careless, or self-serving, input from academia, consultancies, and UN agencies, such as UNEP and UNDP. Potentially large sums of money are involved, both in the form of national expenditures and international and bi-lateral aid. The links between the THED, rapid glacier thinning and retreat, and high dams in the mountains and foothills are self-evident.

I find it remarkable that several of my efforts and those of colleagues to question the alarmist predictions about glacier lake outburst floods (Icelandic: *jökulhlaup*) have been ignored both by major newspapers and scientific journals. We can still read, or learn from our television screens, that millions of people and billions of dollars worth of infrastructure are under threat from glacier lakes that are being formed because of climate warming. And when all these lives have been sacrificed and the immense property losses incurred, we are further titillated by the claim that the Ganges will be reduced to a trickle. Presumably those who survive the glacier floods will die of thirst! While climate warming is undoubtedly causing Himalayan glaciers to thin and retreat and lakes to form and cause floods (Ives, 1986; Watanabe *et al.*, 1994, 1995), many of the recent news media predictions seem intent on emphasizing the upper extreme range of available climatic models. While it is generally important to increase public awareness, there is also the negative aspect of forcing over-reaction, especially to the predicted imminence of large glacier-lake floods that prove false.

5. Conclusion

The foregoing narratives should serve to demonstrate the damage that can be caused by the imposition of assumptions (environmental myths) both onto, and by, development and aid agencies and their influence on the structuring of resource-management policy. The cost of this misdirection can be enormous, in terms of wealth, environment, and the well-being of mountain peoples. An entirely new approach is urgently required to certain aspects of international aid, environmental assessment, and the need to eradicate poverty. And while increasing attention has certainly been given to the wishes of local communities, this process must go much further in the future.

Note

- 1) One very important exception is the recent conversion of FAO/CIFOR with its 2005 publication that joins the questioning of the viability of THED (*Forests and floods: Drowning in fiction or thriving on facts?*).

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