

# Development Perspectives in Ladakh, India



Photo 1: Glaciers, deserts and oases: the triad of Ladakh's natural and cultural landscape

Photos 1, 3 and 6: M. Nüsser

During colonial rule the high mountain region of Ladakh was at the core of one important trade and transit route from the subcontinent to Central Asia. After the partition of British India in 1947 and the Sino-Indian war in 1962, trans-Himalayan trade collapsed and Ladakh became a peripheral and contested borderland. In light of continuing geostrategic importance and significant socio-economic changes, livelihood strategies have diversified although agrarian land use remains the economic mainstay.

peaceful, happy and carefree mountain community, cultural highlights and an impressive high altitude desert landscape have attracted a growing number of visitors (Photo 1). Often the focus in the description of "Little Tibet" is exclusively on Buddhist Ladakhis based on the early Tibetan influence which is reflected in local language, social organisation, architecture and art. Such accounts neglect the large proportion of Muslim population in the region and mask the complexity of identity (van Beek 2006).

A rapid expansion of the tourism sector has led to a debate on regional development paths and human-ecological perspectives. In 1991 Helena Norberg-Hodge published "Ancient Futures. Learning from Ladakh" which focuses on the negative impact

of "the modern world". The book takes up the image of an intact society which is exposed to the "invasion" of western tourists posing a threat to social and environmental sustainability through rapid "modernization" and "progress". Although the publication touches upon a wide range of development issues and challenges in the region, its description of "traditional" Ladakh draws a romanticised picture lacking historical depth and neglecting difficulties in livelihoods (van Beek 2000). Moreover the debate on development paths and environmental consequences in high mountains cannot be reduced to the growing importance as an international tourist destination. Over the last decades Ladakh has experienced substantial political and socio-economic transforma-

tion which has affected local livelihoods in multiple ways (Singh 1998).

## Phases of political and socio-economic transformation

The sparsely populated former kingdom of Ladakh had been ruled by the Maharaja of Jammu and Kashmir for more than a century before India's and Pakistan's independence in 1947 (Figure 1). The district of Ladakh – bifurcated into Leh and Kargil district in 1979 – has been incorporated into the Indian state of Jammu and Kashmir. Territorial disputes over Kashmir between the young nation states India and Pakistan had therefore direct impacts on Ladakh. Military confrontations between 1947 and 1949 led to the construction of army infrastructure in Ladakh (Leh airport) and subsequently changed the region's position from a transit node of Central Asian trade to an international borderland. In 1962/1963 border tensions with China escalated into military confrontation over the uninhabited Aksai Chin region marking the beginning of a phase of expanded geostrategic significance.

Sino-Indian tensions and the emergence of border wars between India and Pakistan in 1965 and 1971 resulted in massive investments in road construction (Photo 2). At the same time the deployment of armed forces opened up new possibilities for off-farm employment to the local population. Additional non-agrarian income sources became available with the opening of Ladakh to international visitors, and tourism was developed as a key economic sector (Singh 1998).

The current phase is characterised by a process of decentralisation. Political leaders from the region had demanded less discrimination and greater autonomy for decades when "Scheduled Tribe" status was given to eight tribes of Ladakh in 1989. The decision formally included 95% of the population from Leh and Kargil district (van Beek 2006) granting access to

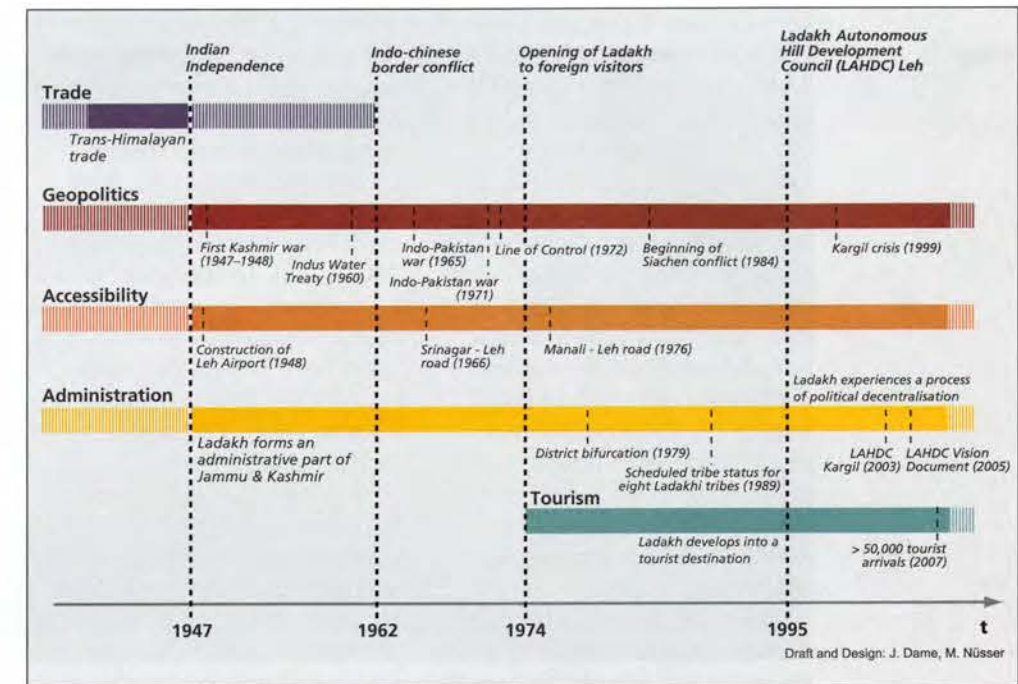


Figure 1: Phases of post-colonial development in Ladakh

a fixed percentage of government posts among other material benefits. This step has shifted a larger degree of political control to the national government while reducing the influence from Srinagar and Jammu. The government of Jammu and Kashmir has been accused of giving priority to other regions of the state which is perceived as a "step-motherly treatment" (van Beek 2006, p. 126) in Ladakh.

Political struggle and agitation for full autonomy and designation of "Union Territory" status continued. In 1995 the Ladakh Autonomous Hill Development Council (LAHDC) Leh was enacted as an elected, semi-autonomous government body at district level. Kargil had refrained from the creation of a hill council until 2003. LAHDC has received legislative and executive rights, excluding law, order and judiciary. This first step on the road to autonomy has been seen as a chance to promote Ladakhi interests and to shape future development at district level. Yet a lack of performance and the administrative dilemma that hill council decisions need ratification from the Jammu and Kashmir government have given rise to popular disillusionment (van Beek 1999). Until today the movement for the

establishment of a Union Territory continues on the political agenda. In 2002 local parties dissolved and founded the Ladakh Union Territory Front (LUTF). Despite the reformation of the Congress Party two years later, LUTF currently holds the elected majority in the hill council and frequently brings forward demands for autonomy at the national level (Ghosal 2006, The Hindu 2008).

## Environmental setting and land use patterns

Separated from the Indian subcontinent by the Great Himalayan Range and edged by the Karakorum Range to the north, Ladakh is



Photo 2: Road marker symbolizing improved accessibility and Ladakh's integration into the Indian Union

Photos 2, 4 and 5: J. Dame



characterised by a rugged topography at an average altitude of over 3,000 m (Figure 2 and Map Insert to this edition). The western and central parts of the region are dominated by mountain ranges exceeding 5,500 m and carved valleys whereas eastern Ladakh is characterised by the high altitude plateau of Changthang. The peripheral region is only accessible by road from the Indian lowland via Srinagar or Manali, crossing some of the highest motorable passes in the world (Photo 3). Yet they remain closed for approximately six months of the year during which access is only possible by plane.

Due to its location in the rain shadow of the Himalayan Range, the region has an arid climate with

an average annual precipitation of approximately 250 mm in Zaskar and less than 100 mm in the upper Indus valley (Klimeš 2003). The meteorological station in Leh (3,506 m a.s.l.) indicates a long-term average annual precipitation of 92.7 mm (Archer and Fowler 2004, p. 50). Temperatures show a high seasonal variation, with mean monthly values between 17.1 °C and 23.7 °C in July and August opposed to -15.6 °C and -5.5 °C monthly average in January and February (Singh 1998).

The vegetation of this trans-Himalayan region is dominated by desert steppes which are interspersed with riverine wetlands in the main valleys and with the high altitude wetlands of Changthang. Owing to the given climatic condi-

tions, forests and trees are virtually absent except for rare patches of juniper (*Juniperus semiglobosa*) and birch (*Betula utilis*) as well as (mostly cultivated) willow (primarily *Salix sericocarpa*) and poplar (*Populus* spp.) trees along rivers and irrigation channels (see Map Insert).

Due to the prevailing aridity, human settlements and agricultural land use are found in oases along the watercourses (Figure 3). Among a total of 0.3 % arable land (Fox et al. 1994), the majority of cultivated land depends on glacier and snow fed irrigation (*phu-lhags*), while river-based irrigation is only possible on the alluvial plains of the Indus River and its main tributaries (*rgya-shod*). Local land use sys-



Photo 3: Opened in 1973, Khardung La (Pass) is claimed to be the highest motorable road in the world



Figure 2: The State of Jammu and Kashmir, Northern India

tems rely on community-based institutions for water management, for an equitable, rotational distribution of water to the terraced fields during the short agricultural season between May and September (Labbal 2000). As double cropping is only possible below an altitude of 3,000 m, single cropping is dominant.

Although a decline in subsistence-oriented land use has been experienced over the last years, agro-pastoral activities persist as the central pillar of local livelihoods. Apart from nomadic groups in eastern Ladakh, the population lives in dispersed settlements subsisting to a great extent on combined mountain agriculture. Barley, wheat, peas and mustard are the dominant crops (Photo 4). During the summer months horticultural products, such as cabbage, turnip, potatoes, spinach, or tomatoes, diversify food consumption patterns. Moreover the cultivation of fruit trees (apricots, apples) and products from animal husbandry (especially dairy products) contribute essential elements to the local diet. Fruits and vegetables are dried for storage during the winter months. Additionally the collection of wild plants is an important supplement in April and May when provisions are reduced.

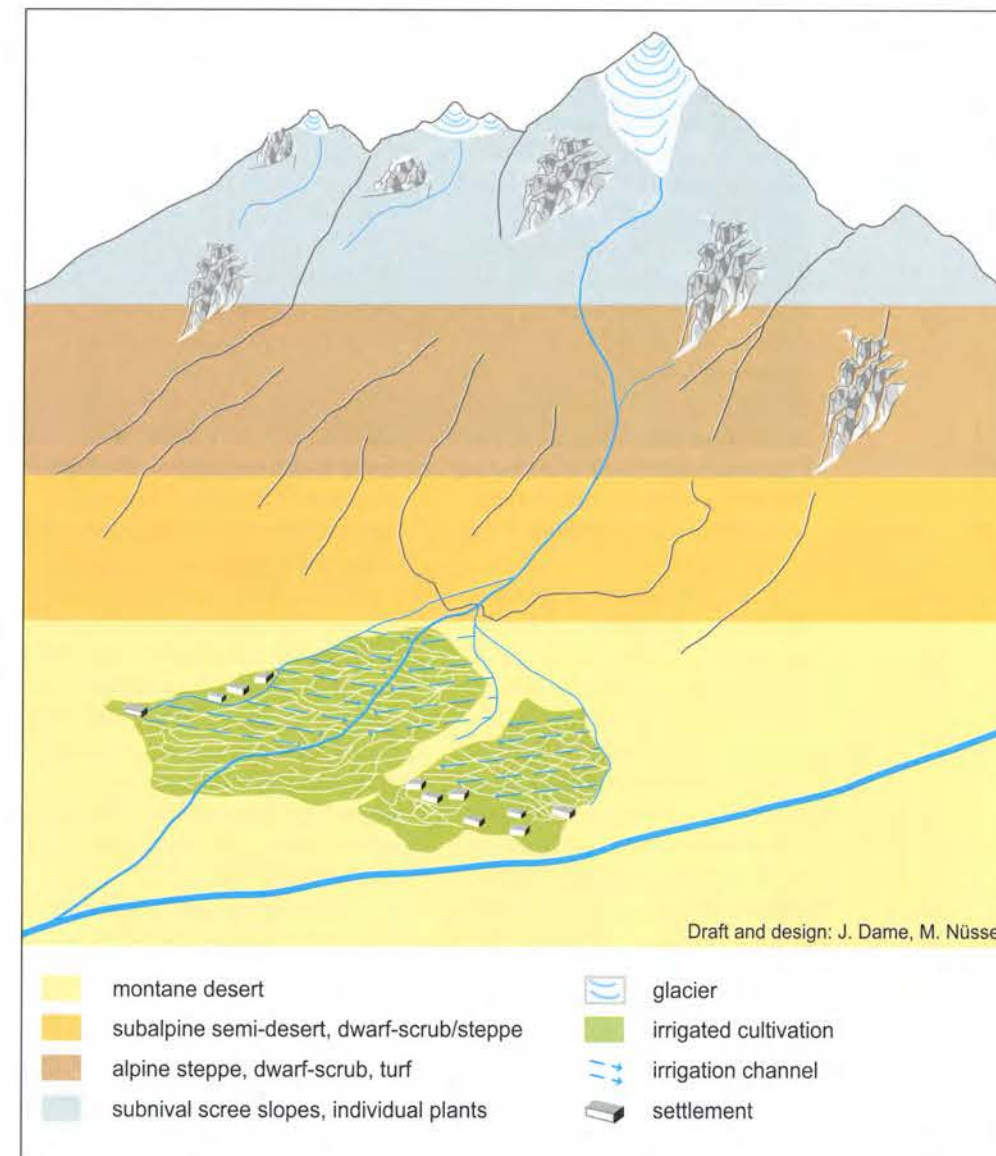


Figure 3: Glacier- and snow-fed irrigation in the arid high mountain region of Ladakh





Photo 4: Women carry a large burden of work in the agricultural sector

Animal husbandry helps to fulfil the need for manure, draught power and transportation. During the summer months high pastures (*phu*) are used as grazing grounds for yaks, goats and sheep. While in some villages the cattle are driven to the pastures on a daily basis, other villages maintain small summer grazing settlements. Dairy cattle – especially *dzomo*, a yak and cow crossbreed – are non-seasonally kept on designated pastures within the permanent settlements. In the absence of sufficient fuel wood, sun-dried animal dung is used for cooking and heating (Gutschow and Gutschow 2003, Osmaston 1994).

Recent land use changes include the introduction of fertilizers, mechanisation, increases in wage labour and adjustments of institutions of resource use (Labbal 2000, Tiwari and Gupta 2007). Agrarian production and local food consumption patterns are modified due to external impacts, such as national subsidies of basic foodstuff, rural development programmes and non-agrarian income sources.

**Non-agrarian income opportunities**

Until the closure of the Indo-Tibetan border in the early 1960s, trade offered additional income to

agricultural production. Besides the trade of luxury items from Amritsar to Yarkand, which incorporated transporters and middlemen from Ladakh, various subsistence goods were essential for peasant traders. Subsistence commodities, such as salt, butter, dried apricots and barley, were exchanged between farmers from the relatively lower region of Sham in western Ladakh and Chanspa nomads from Tibet and Changthang. Additionally *pashm*, the winter undercoat of pashmina goats which are bred on the high plateaux of Ladakh, Tibet and Central Asia, represents a lucrative trade commodity. The trade in *pashm* from the uplands to Srinagar, supplying the Kashmir shawl production, has already been referenced in historic documents from the 17th century (Rizvi 1999). Due to the present geopolitical situation, Ladakh is the only supplier of pashmina wool for the Indian shawl industry (Ahmed 2004, Rizvi 1999).

The political conflict constellation and resulting sealing of the borders ended the traditional trading economy and led to a significant military presence accompanied by infrastructure extension and new employment opportunities. Lucrative salaries attract young men to become part of the elite regiment of the Ladakh

Scouts, the Indo-Tibetan Border Police or work as a porter at Siachen glacier. The number of army personnel is currently estimated to be equivalent to one third of Ladakh's population (Rigzin 2005). Given the high demand for local agricultural produce, the cultivation of vegetables as cash crops – sold to the army and on local markets – procures additional income to rural households. Greenhouses and new storage capacities which extend the seasonal availability of vegetable products are supported through governmental horticulture programmes. Moreover a black-market for army goods, especially fuel, has started to flourish.

After the Kargil crisis in May/June 1999, the army initiated a number of civil society programmes, such as "Operation *Sadbhavana* (Goodwill)", providing education and health services to the area (Rigzin 2005). When travel restrictions for foreigners were relaxed by the Indian government, tourism started to expand in Ladakh, attracting travellers in search of trekking opportunities or a paradise, "essentially unaffected by the West" (Norberg-Hodge 1991, p. 1). The number of tourist arrivals rapidly rose to more than 20,000 by the end of the 1980s (Figure 4). The flare up of the Kashmir crisis and agitation between Buddhists and Muslims in Leh in 1989 resulted in a sudden drop of tourist arrivals followed by a relatively stable number of visitors during the 1990s.

After significant slumps in 1999 and 2002 in the aftermath of the Kargil crisis and the 11 September 2001 events respectively, the economic sector has experienced an exponential increase over the last five years. In 2007 more than 50,000 domestic and international visitors came to Ladakh. The tourism business is concentrated in a relatively short period between June and September. As income opportunities from this sector are available during the summer months, women and wage labourers take over jobs in the agricultural sector thus replacing

the workforce of men who are earning additional income, e.g., as porters or horse men in the trekking business. Yet the benefits are distributed unevenly among villages with a concentration on Leh (Photo 5 and 6). Apart from Ladakhis a large number of migrant workers from Kashmir and Nepal profits from the boom. Restaurants and souvenir shops especially in Leh are dominated by external businessmen. Future prospects assume a continuous increase in visitors. Current strategies aim at a further development of the domestic market with publicity campaigns for the Hindu Sindhu Darshan festival and the provision of low-cost airline transportation to Leh (Dawa 2008).

**Governmental and non-governmental development programmes**

In contrast to the images of Ladakh as a self-reliant economy and harmonious society, the national government has primarily seen the region as a borderland in need of economic support. After his first visit in 1949, then Prime Minister Jawaharlal Nehru attributed a "terrible economic backwardness" as a main feature of the peripheral mountain region (Aggarwal 2004, p 38). Relations

between Ladakh and the central state have been characterized by an orientation towards Delhi and large investments in development programmes. The state government of Jammu and Kashmir, however, has been confronted with resentments based on a perceived lack of political engagement in Ladakh. Since practically all administrative duties have been granted to the LAHDC, the influence of the state government has diminished (van Beek 1999). Today policies at district, state and national level as well as initiatives from non-governmental organisations decide development programmes and strategies.

Due to its specific political situation, Ladakh receives funds from government programmes to an extent which is unprecedented for many other rural areas in India. National concerns over the contested borderland are certainly a central motivation for putting the region on top of the agenda. Through national programmes administered in Delhi, Leh and Kargil district have received special attention for infrastructure enhancement implemented by the border roads organisation and rural development projects within the border area development programme (Aggarwal 2004). Among the various government schemes,

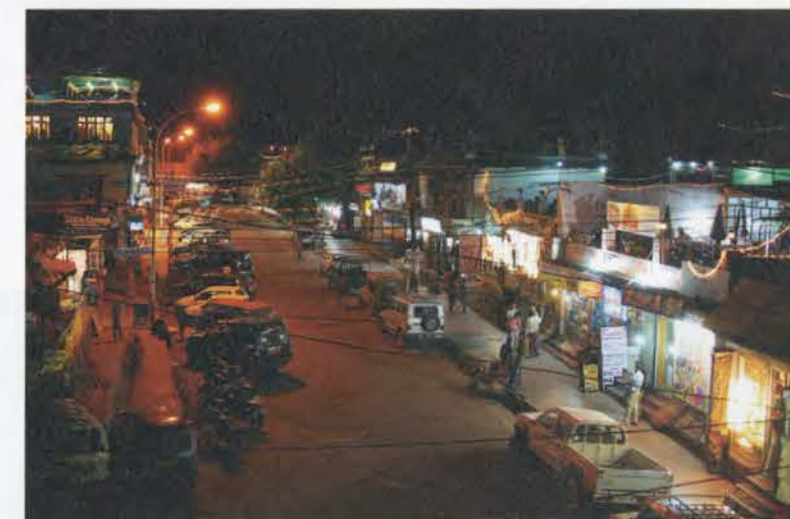


Photo 5: The traditional bazaar of Leh has changed to a booming tourist hub

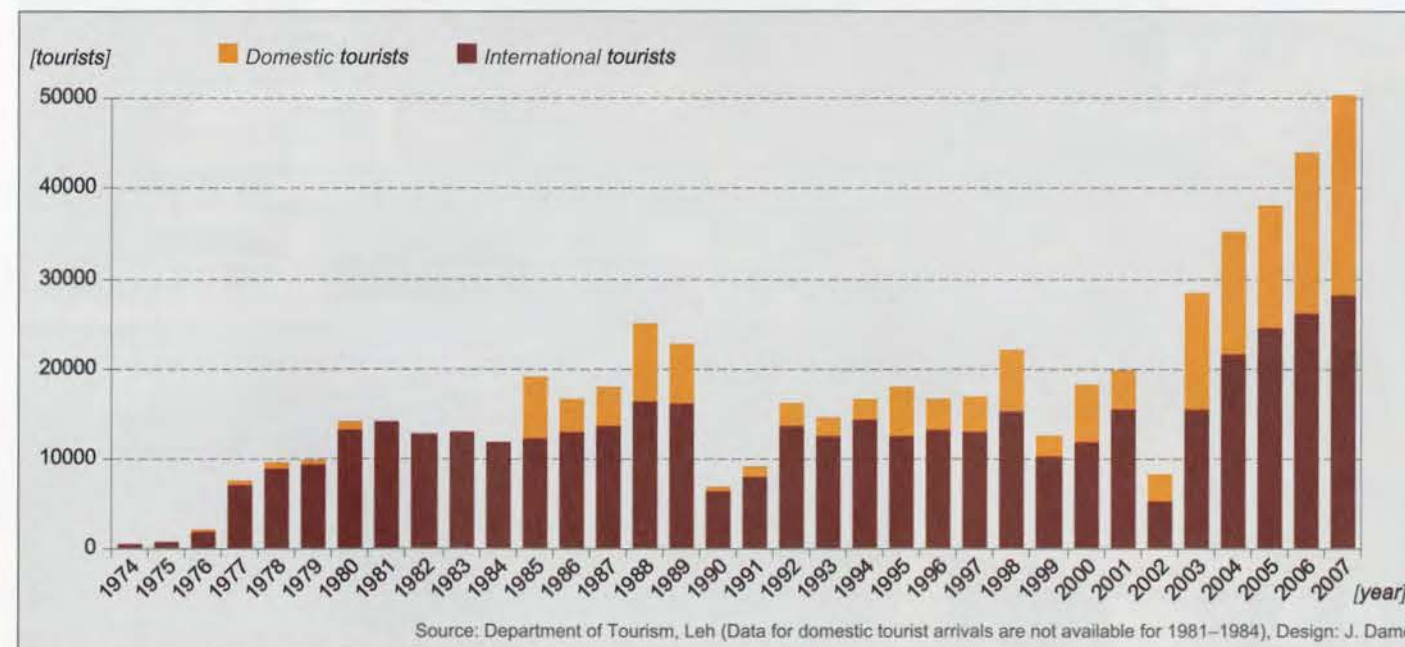


Figure 4: Tourist arrivals to Ladakh between 1974 and 2007



the introduction of the Public Distribution System (PDS) has probably provoked the strongest impact on the local economy. This policy measure was first implemented on a small scale in Indian urban centres in 1939 but since then it has risen to a central welfare and market control instrument. Its performance and reforms over the decades of its existence have been debated publicly (Mooij 1999).

While the PDS was first introduced to Ladakh as a welfare intervention in the 1960s, the number of so-called "ration stores" in the villages and the amount of food imports have increased considerably in the 1990s. Today the Food and Supplies Department attributes 100% coverage to Ladakh, counting a total of 130 ration stores in Leh district. Registered card holders receive subsidised wheat, rice, sugar and kerosene at rates which are significantly below local production

costs. These subsidised basic commodities undermine the local market for food grains. According to Ladakhi farmers fodder gives better returns than grains. The phenomenon that rice is increasingly replacing barley as a main staple of the local diet has evoked debates over the PDS as well as also over food preferences and western influence. Moreover issues of sustainable economic development and new dependencies from low-land food imports are of concern (Dawa 1999).

Despite a weakened necessity for a self-sufficient land use system, the agriculture and horticulture sector is one focus of government schemes. Here the example of irrigation schemes is chosen to illustrate changes and challenges in the implementation of co-funded development programmes. Enhanced irrigation has been a central target of rural development policies. After a period of a primarily technical approach with the

goal of "modernizing" irrigation infrastructure, reforms towards participatory approaches have been introduced by the Ministry of Rural Development in 1995. The resulting Watershed Development Programme, co-funded by the national and state governments, aimed at enhancing ownership and sustainable improvement of economic conditions. Non-governmental organisations received responsibility as project implementing agencies (Mankelow 2003).

After the opening of the region to foreigners, Ladakh has experienced a mushrooming of non-governmental organisations. NGOs based and working in Ladakh are channels for significant flows of international funds into the region (van Beek 2006, p. 134). Yet in the case of the Watershed Development Programme, struggles between all involved stakeholders in combination with the subsidised nature of the programme have created a situation lacking account-

ability and trust (Mankelow 2003). Within the recently introduced *Hariyli* ("Greening") Programme, the responsibility for project implementation has shifted from NGOs to the LAHDC departments – presumably strengthening the functions of the Hill Council. This case shows how numerous stakeholders at district, state, national and international levels shape development strategies for Ladakh.

### Discussion and outlook

Over the last decades, Ladakh has faced significant transformations in the political, economic and social sphere. These changes have affected local livelihoods and raised debates on sustainable development. Among the multitude of impact factors, border disputes and military presence, governmental programmes and subsidies, and off-farm income sources especially in the tourism sector are most prominent. Such influences have created opportunities for a region which had been noted for its economic backwardness on the one hand and its self-reliant economy on the other. At the same time a fragile web of dependencies has evolved. The case of the Kargil crisis in 1999 illustrated the impact of political erosion. The Kashmir conflict remains an unsolved issue while diplomatic appeasement and debates on the opening of border roads towards Tibet and Pakistan have taken place.

Dependence on government subsidies and a concentration on the tourism sector have to be taken into consideration. In the debates on sustainable development in the 1990s, activists, such as *Norberg-Hodge*, have argued for a special way of development for Ladakh. She has proposed a "counter-development" path for the region based on economic decentralisation, including a strengthening or even revival of a presumably self-reliant agriculture. Yet such an approach bears the danger of ignoring or undervaluing complex realities and local voices. The movement towards

autonomy aims at an administrative solution for Ladakh which creates a space for ideas from the regional level and allows for development paths with a Ladakhi perspective on how to cope with issues and challenges. In 2005 the Ladakh Autonomous Hill Development Council Leh approved a Vision Document as a roadmap for Ladakh's development. Acknowledging that the region stands at a crossroads, the vision follows the aim to be "the country's best model of hill area development" (LAHDC 2005, p. 7).

As a multitude of stakeholders at different political levels propose and implement development programmes for Ladakh, dialogue and concerted action are indispensable. Moreover dependencies and the impact of framework conditions constitute critical dimensions for unforeseen events. ■

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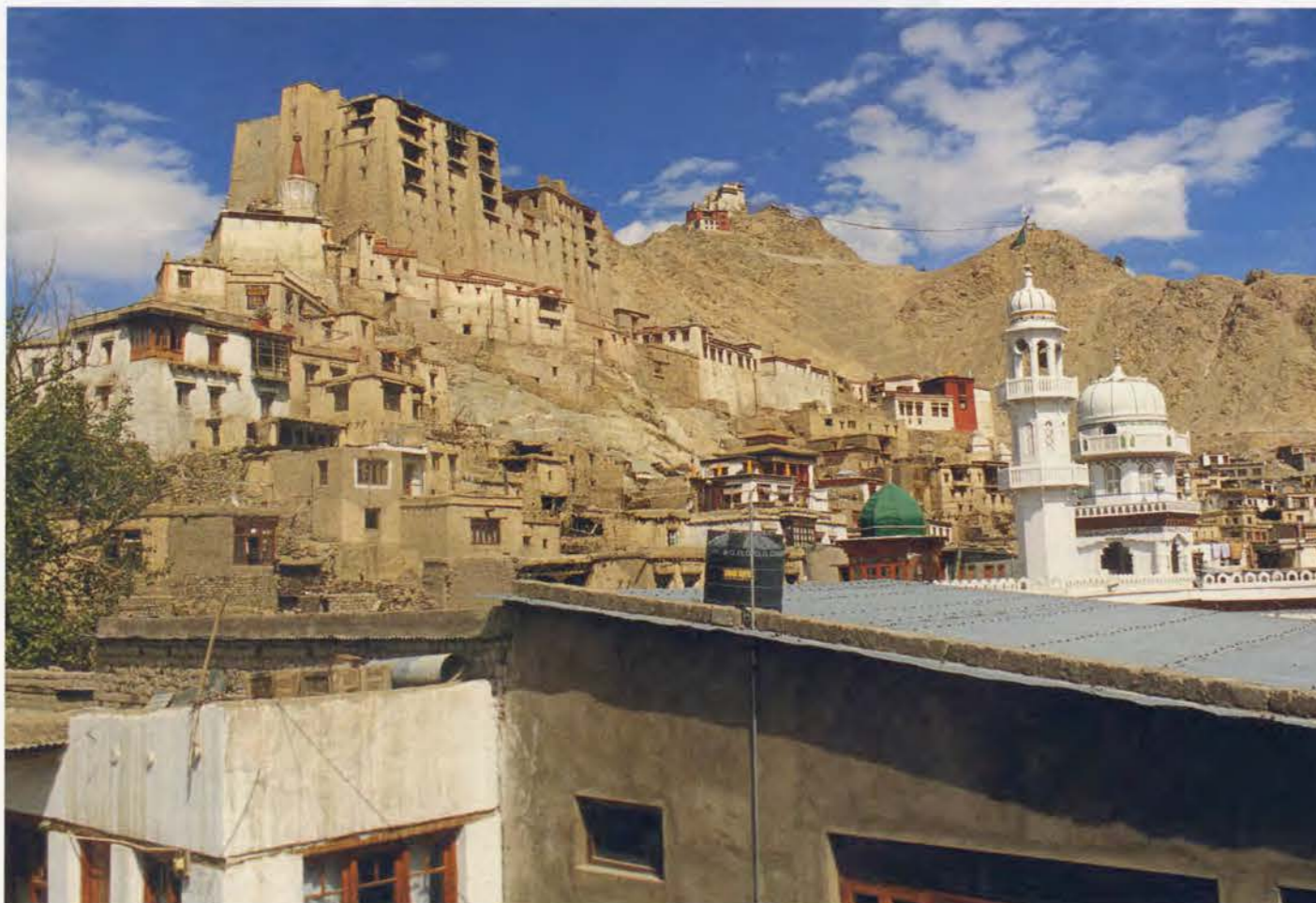


Photo 6: The old part of Leh with the palace and the Jama Masjid

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