Towards a Management Plan
for the Old Town of Leh

Structuring a Plan for the Preservation of an Endangered Townscape
and Revitalization of Traditional Social Structures
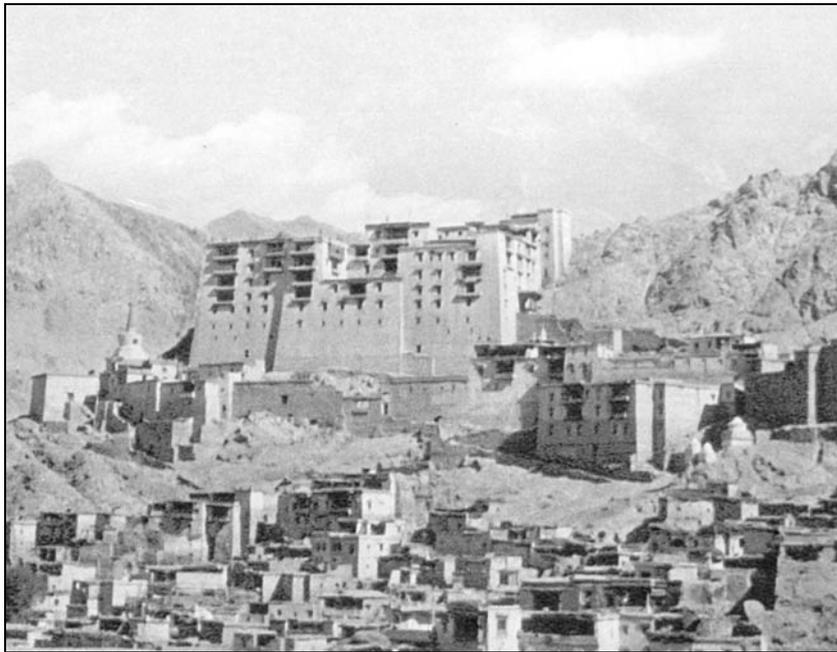
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Abstract

Leh, capital of the formerly independent Tibetan kingdom of Ladakh, stands at a crossroads of development. Its historic caravan trading links have been disrupted by political developments. Its discovery as tourist destination has led to uncontrolled urban growth and threatens to erode scarce natural resource and unravel the traditional social fabric. The local government is looking for solutions. Leh needs a management plan in order to preserve its natural and man-made resources and improve the living conditions of its residents in sustainable fashion.
The present work aims to structure such a plan by providing first of all a conceptual framework that is based on international heritage conservation conventions and local traditions. The discussions and conditions of urban conservation in Asia are briefly explored.

The architectural heritage and the social structures of the old town of Leh are analyzed – the conservation of heritage and environment and improvement of the lives of the residents are the key themes for the urban management concept.
The work proceeds to list the main issues that need to be looked at and identifies the stakeholders. Implementation in the form of an action plan is being proposed. The work explores likely engines for and actors of implementation, and looks at pilot urban rehabilitation activities implemented in recent years by an NGO. Comparisons with lessons of other historic cities in Asia complete the understanding of the *milieu* in which planning and implementation of urban management in Leh can be expected to be situated, and allow for the adoption of negative and positive role models.

Different implementation scenarios are then compared for their results within a given time frame, followed by concluding remarks.

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Abbreviations

ACHR Asian Coalition for Housing Rights

ASI Archaeological Survey of India

CEC Chief Executive Councillor

GTZ Gesellschaft für Technische Zusammenarbeit

ICOMOS International Council on Monuments and Sites

LAHDC Ladakh Autonomous Hill Development Council

LBA Ladakh Buddhist Association

LMC Leh Municipal Corporation

L.O.T.I. Leh Old Town Initiative

UNESCO United Nations Educational, Social and Cultural Organization

UNHSP United Nations Human Settlements Programme

THF Tibet Heritage Fund

Preface

From 1993 to 2000, I had the rare opportunity to live in the Tibetan capital of Lhasa. While watching the sad demolition of Lhasa's historic centre, I began to document the remaining historic buildings in the old town. Together with a small number of dedicated local and international professionals, the NGO Tibet Heritage Fund (THF) was founded at the time. The group ended up rehabilitating and preserving one important neighbourhood of old Lhasa, the inner Barkor.

Intrigued by the existence of a Tibetan territory that developed under a completely different political framework, I travelled to Ladakh for the first time in 2003. THF supplied funding to compile an inventory of buildings in the old town, and to carry out a brief socio-economic survey of the residents of the old town. In 2004 there was funding to restore one Buddhist shrine in the old town, and a local team was put together to carry out the project. This local group eventually became the Leh Old Town Initiative (L.O.T.I.), a fully registered local Indian NGO that took over management of the emerging Leh old town pilot conservation project. In October

In 2006, THF/L.O.T.I carried out further surveys and interviews with local opinion leaders. This was done together with local staff Ms Diskit Dolker and Mr. Konchok Rafstan. THF/L.O.T.I. and the sponsors of additional 2006 activities (Embassy of Finland in New Delhi, Trace Foundation, Schweizer Tibethilfe, Liechtenstein Development Service, Albert-Kunstadter-Family-Foundation and Friedrich-Naumann-Stiftung) must be thanked for their support.

The Asian Coalition for Housing Rights (ACHR) generously supported visits to three heritage cities in Asia in November 2006. Thanks are particularly due to ACHR's director general, Ms Somsook Boonyabancha, and Mr. Maurice Leonhardt for their personal support for the initiative to look at urban conservation in connection with urban poor issues. The correlation between preservation of low-cost housing and historic preservation will certainly gain importance as Asia's cities continue to develop.

Berlin, January 2006

1 Conceptual Overview

1.1 Rationale

The town of Leh, the historic capital of the former Tibetan kingdom of Ladakh, belongs to a fragile, some would say endangered, cultural and physical geography. Having recently been "discovered" as destination for local and international tourists, the town is undergoing rapid changes. In many ways, it stands at a crossroads of development, a crossroads which comparable Himalayan and Indian towns have passed decades ago. Local efforts are beginning to take shape that aim at preserving the historic centre of Leh while there is still time.

Several indicators point to the fact that the historic centre of Leh constitutes cultural heritage of universal value.

Experience from comparable towns show that sustainability and manageability of development can be quickly lost beyond recovery if development (particularly construction, tourism and waste management) is simply left uncontrolled. Therefore, a management plan is urgently needed.

The present work will explore the requirements that such a plan should fulfil.

1.2 Objectives

The present work aims to lay the ground for sustainable management, rehabilitation and conservation of Leh as a Heritage Zone.

The responsible authority, the Ladakh Autonomous Hill Development Council, LAHDC, have declared it an official policy goal to turn historic Leh into a heritage zone (Ladakh 2005-2015 Vision Statement). In a document dated 22 August 2006, the LAHDC has further defined the objectives for the sustainable management of Leh as heritage zone follows:[1]

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[1] See Memorandum of Understanding between Ladakh Autonomous Hill Development Council and Tibet Heritage Fund / Leh Old Town Initiative 22.08.2006.

- to preserve and upgrade the existing historic town structures
- to develop future programs for water and waste management
- to upgrade the infrastructure
- to help improve the life and conditions of the people of Leh
- to rehabilitate by order of priority town houses and religious monuments
- to establish a building code for the heritage zone

A management plan that would simply cover these six issues would be little more that a technical manual. Heritage management plans for historic cities, districts and sites commonly exist, but they do not necessarily include mention of the intangible heritage, i.e. the local culture and the life of the local residents. The present work aims to emphasize the "people" factor. The resulting management plan should simultaneously have the function of a master plan in that it controls the future development of the town. It must be a holistic plan providing guidance for the preservation of the authenticity of Leh while simultaneously benefiting the local residents and helping them to protect their culture and livelihoods in ways that they themselves can choose. Therefore, the aims of the future management plan can be summed up in two points:
- Rehabilitation of the old town for the present inhabitants (not primarily for tourism)
- Preservation and management of the qualities and resources of Leh - environmental, social, cultural and architectural.

Several lesser questions need to be addressed:

Heritage Values
How to gauge the heritage value of Leh? This is important when it comes to justify occurring costs as well as impositions on local property owners.

Finding comparable examples in Asia
Can Leh be compared to other historic cities that have world heritage status, as these generally have more sophisticated management systems that can serve as models? What is the experience of those cities in regards to sustainability and residents' welfare?

Is there anything like an "Asian conservation approach"?
Moving from the international context to the regional one, it is necessary to examine whether there are specifically Asian approaches to conservation, a topic that for some time now has been under discussion among UNESCO experts.

Specific local cultural context
Next it will be necessary to establish the specific local context, such as religious and cultural attitudes to conservation in general and to specific objectives and activities in particular.

Once this framework has been established, the work will proceed to identify the main threats and problems that Leh currently faces. Finally the technical and logistical requirements necessary to address these problems and to achieve the main objective will be explored. These include questions of finance and maintenance, identification of main actors and interests and architectural and ecological considerations. The plan will be action-orientated, as there is very real opportunity for local implementation of at least some of the aspects in the near future.
The resulting management plan structure is designed as tool for the local government bodies and other actors seeking to establish the heritage zone. It will be also an important source of information to the residents themselves.
        Finally, it must be explored what the other options would be, particularly what would be the scenario if there would be no or only limited intervention to manage Leh's resources and development.
Conclusions are presented in the last chapter.

1.3 Methodology

The present work corresponds to local efforts taking place in Leh, and integrates these closely. The author has participated in fieldwork, consisting of building and social surveys. The data was collected in 2003, 2004 and 2006 in the form of house-to-house visits, covering all the 200 buildings in the historic centre, as well as interviews with opinion leaders and officials. Available data includes information on social conditions of the residents, on conditions of buildings in the old town and on the infrastructure. The fieldwork was carried under the umbrella of the *Leh Old Town*

Initiative, a project founded as branch of the international NGO, *Tibet Heritage Fund*. Tibet Heritage Fund has funded most of the initial fieldwork. The Leh Old Town Initiative is partner to the local authorities in Leh for the establishment of the heritage zone.

Apart from evaluating and summarizing material collected in Leh, the present work investigates what would be the most suitable methodology for integrated conservation and development of Leh. For this research, case studies and other literature compiled under the auspices of various UN bodies was considered most authoritative.

The UNESCO's World Heritage Centre and its advisory body ICOMOS both make available a range of relevant materials on their official websites, including definitions of heritage values and internationally-accepted principles of conservation. Particularly helpful with source materials for the Asian context was the *Office of the Regional Advisor to UNESCO for Asia-Pacific*, located in Bangkok. A number of management and action plans for consultation were thus made available.

The present work has also benefited from additional fieldwork in Asia. The office of the *Asian Coalition for Housing Rights* (ACHR) in Bangkok has provided contacts to local community-based conservation efforts across Asia. ACHR has also generously supported exploratory visits to three heritage cities in Asia, the management and general conditions of which serve the present work for some comparisons. These were Lijiang in China, Hoi An in Vietnam and Luang Prabang in Laos.

2 Conceptual Framework

This chapter explores the conceptual *milieu* in which a management plan for Leh should be situated.

2.1 The International Context

2.1.1 UNESCO and related agencies

The idea of creating an international movement for protecting and even defining heritage emerged after World War II. The Convention concerning the Protection of the World Cultural and Natural Heritage was adopted by the General Conference of UNESCO on 16 November 1972. To be included on the World Heritage List, sites must be nominated by the governments of the countries where they are located. Nominated sites must be of outstanding universal value and meet at least one out of ten selection criteria (explained in the Operational Guidelines for the Implementation of the World Heritage Convention). Until the end of 2004, World Heritage sites were selected on the basis of six cultural and four natural criteria. With the recent adoption of the revised Operational Guidelines for the Implementation of the World Heritage Convention, only one set of ten criteria exists. Even though no intentions exist so far to nominate Leh as World Heritage, the UNESCO criteria are useful to examine the heritage value of Leh. Therefore they are reproduced below:

Box 2.1: UNESCO World Heritage Selection criteria

Properties nominated for the World Heritage List should have one of these qualities:
i. to represent a masterpiece of human creative genius;
ii. to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
iii. to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
iv. to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
v. to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

vi. to be directly or tangibly associated with events or living traditions, with ideas, *or* with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
vii. to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
viii. to be an outstanding example representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
ix. to be an outstanding example representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
x. to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

Source: http://whc.unesco.org/pg.cfm?cid=57, updated 01 Dec 2006.

As basis for the preservation of World Heritage, UNESCO principally relies on the 1964 International Charter for the Conservation and Restoration of Monuments and Sites, often known simply as the Venice Charter.[2] This document is mainly concerned with principles for technical intervention as part of conservation and excavation projects. Perhaps its most well-known component is the concept of authenticity, stipulating for example that the results of interventions (such as replacements) must always be distinguishable.[3]

   In the following decades, UNESCO and its advisory bodies and regional chapters have created a rich catalogue of literature, case studies, and assistance programs.

The general trend in development work since the 1970s towards more community participation has also affected the general approach to historic conservation. Considerations of economic development and community participation began to be linked with conservation.

A very important document for the present context is the ICOMOS International Charter for the Protection of Historic Towns, adopted in 1988. This goes beyond the comparatively static principles for monument preservation outlined in the Venice charter, particularly by stating that historic cities are living entities that inevitably must

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[2] http://portal.unesco.org/shs/en/ev.php-URL_ID=6099&URL_DO=DO_PRINTPAGE&URL_SECTION=201.html.
[3] ibid., Article 12.

change. Following is a selection of seven of the original 25 principles, chosen for their relevance to the present work (emphasis in *italics* by author).

Box 2.2: ICOMOS International Charter for Protection of Historic Towns

1. […] As living entities, and subject to cultural, economic and social evolution, *historic towns and districts must inevitably change*, as they have done in the past.
3. The principles set forth in the Venice Charter apply to historic towns and districts as long as it is understood that *the priority objective of protection is rehabilitation*.
5. The protection of historic towns and districts must satisfy the needs and aspirations of residents. It must not only meet the demands of contemporary life, but also assure the preservation of cultural and architectural values.
6. The *success* of a protection plan *depends on the participation of the residents*, which must begin as soon as preliminary studies are undertaken and continue throughout the protection process.
8. Wherever possible, local life styles should be preserved and encouraged. New uses of space and new activities should be compatible with those already existing, and the creation of 'museum' towns and districts destined only for tourists must be avoided. The rights and aspirations of the population must be respected, as its social and economic activities often depend on the organization of the setting.
19. The rehabilitation of a historic town or district *must satisfy present needs and aspirations* and meet those of the future, especially social demands. Social and economic measures must be taken to encourage the residents to remain in the town or district concerned.
20. The residents must be informed and their interest in the protection process awakened so that their participation will stimulate the efforts of public authorities. Technical and financial assistance must be available to encourage action on the part of the residents and reduce the inconveniences of the protection process.

Source: Larkham 1996 289-292.

As an inter-governmental agency, UNESCO is mostly ill-suited to implement projects based on its own recommendations. UNESCO activity depends entirely on the government in charge of a site. UNESCO was for example unable to prevent the demolition of Shoel Village in Lhasa in 1995, even though Shoel village had been listed as part of the Potala Palace monument zone as World Heritage in 1994.[4]

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[4] See Alexander 2002 for a summary description of these events.

2.1.2 Other agencies involved in international conservation – the pioneering experience in Bhaktapur, Nepal

Due to the limitations of UNESCO as part of the UN system outlined above, the emergence of third party actors in urban conservation has become a very important phenomenon.

The German Agency for Technical Cooperation, GTZ, is such a third-party actor, today active in urban conservation projects in Eastern Europe, Asia and the Middle East.[5] The Bhaktapur Development Project (BDP) in Nepal (1974-1986) is often considered as the mother of urban conservation projects in the developing world.[6]

In 1974 German experts and Nepalese bureaucrats from Kathmandu began with the restoration of individual buildings in the medieval city of Bhaktapur. In 1979, local residents of Bhaktapur organized strikes against the project with two major demands:

- More social security and permanent employment for the artisans involved in the project.
- Demand for consultation and participation in the decision making process of the BDP.

Both the German and the Nepali professionals from the capital Kathmandu were looked upon as alien intruders and accused to upset the traditional cultural, political, and social structures.

At the same time, in the (public and professional) debate about development co-operation a growing concern was expressed about the technocratic character of many development projects which required too many German experts as implementers having too little "spread effects" and no sustainability. Beyond this problem, the specific criticism of the BDP was extended to the unanswered question of who would bear the responsibility and the cost for maintenance and operation after the eventual termination of the project. On top of all, questions about the basic needs orientation, consideration of women, disadvantaged target groups, and appropriate technologies and standards were raised. The BDP had to undergo serious scrutiny by new criteria and priorities of changing development policies.

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[5] See GTZ 2006 for recent GTZ Old City projects.
[6] The following synopsis of the Bhaktapur is based on Reichenbach 2006 and on interviews with participants during a site visit to Bhaktapur in 2004.

In August 1979 the project was modified to include the following policies:

- the people of Bhaktapur at all levels needed to be more intensively involved in the planning and decision making;
- a social communication study should be conducted in order to identify what was influencing attitudes, thoughts, behaviour, practices and decision making of the people of Bhaktapur;
- a more permanent communication team should continue to explore new ways of entering into better co-operation with town people, groups and local authorities;
- communication should be institutionalized as an ongoing process since isolated information and motivation campaigns had proven to be ineffective;
- targets and programs of physical implementation needed to be reconsidered to allow the Nepal and the German teams to communicate with and to respond to the needs and opinions of the target groups and to enhance their participation.

The GTZ termed their new approach "integrated urban development", describing the attempt to organize urban development activities in a way that integrates the entire spectrum of actors and government agencies.[7]

2.1.3 UN Habitat

Another important initiative has been the Second United Nations Conference on Human Settlements in Istanbul 1996, known generally as Habitat II. During the course of the conference, characterized by the inclusion of a wide range of NGOs, several important key themes emerged. The need for shelter had been named one of the key challenges for the 21st century. The basic criteria established by Habitat II for improving mankind's living environment included the "conservation, rehabilitation and maintenance of buildings, monuments, open spaces, landscapes and settlement patterns of historical, cultural, architectural, natural, religious and spiritual value" (Habitat II declaration, paragraph 11). [8]

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[7] Summarized after Reichenbach 2006.
[8] www.unhabitat.org/downloads/docs/2072_61331_ist-dec.pdf

This made sense, not in the least because historic and traditional urban districts are often low-rent areas on which urban poor and low-income groups depend for affordable housing. A range of positive effects for society resulting from adequate urban conservation and rehabilitation are being explored in subsequent chapters of this work.

Habitat II has helped to establish the important correlation between housing and urban conservation. On the basis of the *Habitat agenda* declaration, the concept of shelter does not need to be exclusively linked to problems of slum dwellings; and urban conservation cannot be seen only as a concern of rich countries to preserve historic architectural details.

The concept of "integrated urban conservation", a term already used by GTZ to describe the Bhaktapur Development Project, [9] has subsequently been seen by donor agencies and NGOs as a strategy to contribute to the Habitat II agenda and the UN's Agenda 21. [10]

A management plan for Leh should ideally follow the "integrated" or holistic approach, by combining conservation approaches with housing considerations. One of the aims of urban management for Leh should be the preservation affordable housing, and the local resident community should become one of the main actors in planning and implementation, involved from an early stage as ICOMOS recommends. One of the principal aims of the management plan can be defined as enabling "integrated urban conservation".

2.2 The Asian Dimension

Asia has many cities that are as old or even older than major European cities. Urban Planning was pioneered in India and China. [11] The more surprising that today the appreciation of urban conservation in Asia differs remarkably from that in Europe. This fact becomes apparent by the simplest stroll through most Asian capitals: the Asians

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[9] See Reichenbach 2006.
[10] The Agenda 21 was adopted on the United Nations Conference on Environment and Development in Rio de Janeiro in 1992, know as the "Earth Summit". Agenda 21 articulates a range of desirable policies and concepts for human development, see UNHSP 2004.
[11] For a general introduction to city planning in ancient China and India, see respectively Steinhardt 1990 and Vasudev 2005, 79-92, as well as Kotkin 3-16. Steinhardt is one of the most prolific experts on ancient Chinese city planning, and Vasudev publishes the results of a recent Indian academic conference about the subject.

have achieved spectacular success in recent years in economic growth and urban reconstruction, achieving or surpassing Western standards, but have rarely bothered to preserve historic city centres. As a result, some talk already of the phenomenon of the "disappearing Asian cities".[12]

A South-Korean participant to the UNESCO Shanghai Symposium on Conservation of Historic Asian Cities in East Asia in 1998 began his presentation with the following introduction:

"*When I arrived in New York for the first time, I was startled to discover that the authorities there have listed buildings for historic conservation that are as young as 50 years old. In my country, we have demolished buildings that were 500 years old.*"[13]

2.2.1 Addressing specific Asian conservation needs

The UNESCO Office of the Regional Advisor for Culture in Asia and the Pacific situated in Bangkok has launched important regional initiatives and case studies, which will be drawn upon for comparison later on.[14]

Important to mention here is the initiative, "Cities of Asia – Heritage for the Future", launched in 1996. The most recent opportunity for exchange between different Asian conservation projects provided by UNESCO was the 2006 conference, "Asian Approach to Conservation".[15]

The question arises whether a specifically Asian Approach to Conservation exists, or whether such an approach should at least be developed. Among the most persistent criticism often heard about the UNESCO's World Heritage Program is that it is too Euro-centric. The concepts of "authenticity" (as proposed by the 1964 Venice Charter) and of "universal value" (1972 World Heritage Convention) are particularly subject to controversy. Critics ask for non-European approaches that could be better understood and followed by local people.

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[12] See Logan 2002 for a detailed discussion of this idea.
[13] Notes taken by author during conference.
[14] Official website: www.unescobkk.org
[15] www.unescobkk.org/uploads/media/ AAHM_Research_Conference_Program_final.pdf. This subject is a frequent topic of discussion within UNESCO circles, see also: www.unescobkk.org/fileadmin/user_upload/culture/Asian_Academy/newsletters/ newsletter_sep06.pdf.

The 1994 Nara Document on Authenticity was an important attempt to expand concepts seen by some as being too narrowly designed for European contexts. The result of a conference carried out on Asian soil, the Nara Document deals with the concepts of heritage diversity.[16] It acknowledges both tangible and intangible expression as part of heritage (article 7), and prescribes that heritage properties must be considered and judged within the cultural contexts to which they belong (article 11). Authenticity judgments may therefore be linked to "a great variety of sources of information" (article 13). [17] The Nara Document considerably broadens the definition of authenticity given in the Venice Charter by proscribing considerations of use, function, setting and traditions of sites.[18]

The discussion to broaden or refine UNESCO criteria and definitions re-emerged repeatedly, prominently at the 2003 Suzhou meeting of the World Heritage Committee.[19]

In the eyes of many, the Nara Document has cautiously opened the road to regional and even local interpretations of authenticity as benchmark for conservation of heritage. That still leaves the definition of what makes heritage, and therefore the important selection process for World Heritage, open to criticism.

2.2.2 Interpreting the World Heritage criteria

Authors such as Rudolff have argued that while the present definitions for World Heritage criteria are indeed insufficient, any modification would probably make selection and justification more difficult and would require new and more detailed guidelines. Rudolff proposes that a site to be nominated as World Heritage needs to match three concepts: eligibility, manageability and credibility. The 1972 convention influences the interpretation and confirmation of two of them, eligibility and credibility.

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[16] Nara Conference on Authenticity in Relation to the World Heritage Convention.
[17] www.international.icomos.org/naradoc_eng.htm
[18] An important contribution to the Nara Conference was made by the Indian-born and educated Prof. Galla, who proposed that authenticity should be community-grounded and balanced with reconciliation of different communities, see Galla 1995.
[19] See Rudolff 2006, 112-113, also based on interview with Chinese participant Mr. Guo Zhan (ICOMOS China) by author in Beijing 2003.

Investigating the manageability would, in the opinion of Rudolff, enhance the credibility of the World Heritage List.[20]

However, this would probably be seen by some smaller and poorer countries that lack capacity to develop comprehensive management plans prior to listing as further discrimination in favour of rich Western countries, some of which have long dominated the World Heritage list.

Given the difficulties of reaching consensus within the UN system, tinkering with the World Heritage system could lead to modifications spinning out of control. Many of the current generation of Asian leaders for example attach little importance to the concept of authenticity, and have a record of turning their World Heritage Sites into little more than historic theme parks. Residents are not involved; in many cases they are simply relocated and forced to live in new satellite towns so that they do not interfere in the running of the site as a tourist attraction (see the example of Lijiang, chapter 6.4.2). [21]

While such transformations cannot be prevented under current World Heritage procedures, at least they also cannot obtain legitimacy. For the aims of sustainable urban management for Leh, theme park conservation is clearly not appropriate. By detaching local communities and so living local culture from sites, the heritage value is destroyed. Further, the aim of the present paper is to find a way to benefit the residents in the process of urban management, and to preserve Leh as a living historic city along the principles of the ICOMOS Historic Town Charter.

2.2.3 Reconciling "universal values" and the applicability of European experiences in conservation

The counter argument to criticism of the World Heritage process being too Euro-centric is that the values of heritage are universal. As such they transcend any continental or national boundaries. The current imbalance of the World Heritage List, where a few wealthy countries have listed the majority of sites, does not mean that some countries' heritage is less universal than that of others, but that some countries have a greater

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[20] See Rudolff 2006, 115-117.
[21] For discussions about the conservation concept of Lijiang in China that touch upon the theme park concept, see Li & Kammeier 2006 and Alexander & Leonhardt 2006.

need for refining their national heritage conservation mechanisms and accessing the necessary funds and capacities. The generous funding and huge bureaucracies for dealing with conservation set up, for example, by the governments of France and Japan cannot be easily replicated by most other countries.

Therefore, rather than talking about an Asian approach to conservation, it seems more profitable in the present context to talk about specific Asian needs for conservation.

Conservation projects in any case need to be developed and refined individually, on a case-by-case basis according to local needs and conditions. Therefore, rather than looking at European conservation vs. Asian conservation, it might make more sense to look at Indian conservation, Chinese conservation etc. Even within such huge countries as India and China, different regions might require very different heritage management systems.

The present work tends to follow this latter school of thought, and will look for adequate heritage management tools within the local context, while using the concepts of universal value and authenticity within cultural diversity as basis.

With growing prosperity and increasing importance of tourism, perceptions in Asia seem to be changing in favour of more urban conservation, and many historic Asian cities now have special authorities for urban conservation or heritage management. Since the mid-1960s, campaigns for and discussions about urban conservation have taken place in Japan. Professor Masaru Maeno, Tokyo National University of Fine Arts and Music Dept. of Architecture, is an early Asian advocate for conservation.
He began in 1965 to campaign for the preservation of Tokyo's traditional timber buildings, which were rapidly replaced by high-rises at the time. He succeeded in preserving one quarter close to Tokyo's Ueno Park. His approach has since spread to other Japanese cities. Today Professor Maeno is the head of the Japanese chapter of ICOMOS, the UNESCO advisory body.

Even though the present work tends to ignore calls for a specifically Asian approach to heritage management, Professor Maeno's approach is useful for remembering that not all conservation initiatives and policies are developed in Europe. With its emphasis on people, the approach is also an early pioneer of sustainable and community-based urban conservation.

Box 2.3: Community-based conservation principles by Prof. Maeno

Three Principles for the Preservation of Historical Buildings
1 Liveability
People live in houses, cities and towns. When the house or the city starts to deteriorate or become inconvenient, people tend to abandon them.
This fact is confirmed by history. In some cases, preservation is not useful for the people and they might start hating the attempt to preserve their town or their buildings. Instead of preserving for preservation's sake, one had to consider the needs f the residents first. Don't victimize people who live in historic buildings.
2 Environment [&] Cleanliness
Dirtiness, air pollution and vacant houses are dangerous signals for architecture and town preservation. It is a signal that the people who own them or live there have no interest in them.
3 Visible Value
People will not be proud of the architecture of their houses, cities and towns unless they understand its value. Not everyone is aware of the value of his surroundings. However when the residents understand the value they take care of it and become proud.
Helping the residents to realize this value is a foremost task. To preserve a building or a town effectively it is important to have good reasons for its selection and to determine its use after the preservation.
When the residents are not able to preserve something using only individual or community resources they should be helped by local, state or national government. Preservation cannot be people's responsibility alone.
Preservation and revitalization of vernacular architecture should be based on these ideas.

Source: Anzorena 2000, 55-60.

2.3 The National Context - India

India is often described as a sub-continent because it is home to many diverse cultures and languages (126 official languages). It is also home to an ancient civilization and birthplace of two world religions (Buddhism and Hinduism). Today India is proud to be the world's largest democracy, and as a developing country it has achieved very high growth rates in recent years (9.2% GDP growth on year ago from December 2006).[22]

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[22] The Economist, Emerging Market Indicators, December 23 2006.

India ranks 127 out of 177 on the United Nations Human Development Index in 2005, classified as medium human development.[23] Unlike many other Asian countries, India has very lively and critical media, a local NGO culture, and a functioning legal system.

India ranks 70 out of 163 on Transparency International's Corruption Perception Index.[24] A stifling bureaucracy and endemic corruption are locally regarded as some of the country's major challenges. The emerging middle class is seen as major hope.[25]

Released from colonial dominion in 1947, India has since then striven to re-organize administration of its many regions along linguistic and secular lines. These efforts have met with varying degrees of success. Indian administration of Muslim-majority Kashmir is widely seen as an unqualified disaster, and the Muslim-majority of the Kashmir valley (like several so-called hill tribes in the north-eastern states) has been campaigning since decades for greater autonomy and even outright independence.

Because India is a democracy, it will be possible to base a management plan for Leh on community participation. In other Asian countries, for example China, this would be very difficult to realize. The downside is that India traditionally has a weak government, which often makes it difficult to enforce policies, and therefore special consideration has to be given how implementation of a management might be achieved in Leh.

2.3.1 The Archaeological Survey of India

India is home to one of Asia's oldest and largest (by size of employees) conservation agencies, the Archaeological Survey of India (ASI). The ASI is an attached office under the Department of Culture. Founded in 1861, it is responsible for

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[23] UNDP Human development indicators, UNDP website (last updated: September 2005), http://hdr.undp.org/reports/global/2005/pdf/HDR05_HDI.pdf. Further development-related information on India can be found in a recent report by the Asian Development Bank, at www.adb.org/Documents/Books/Key_Indicators/2006/pdf/IND.pdf, 3.01.2006.
[24] www.transparency.org/policy_research/surveys_indices/cpi/2006, 3.01.2006.
[25] See Briefing: Manufacturing in Asia, in: The Economist January 13 2007, 66. This article confirms the impression gained by the author while working in India over the past three years, based on local newspaper articles and discussions with businessmen, shopkeepers, students and academics.

archaeological research, scientific analysis, excavation of archaeological sites, conservation and preservation of protected monuments and areas of national importance, maintenance of site museums and overall regulation of legislations related to antiquities and art treasures.

Box 2.4 Administrative structure of the ASI

The ASI has its own head designated as Director General. An Additional Director General, two Joint Director General and 17 Directors assist the Director General in performing his duties. ASI in India is organized in 24 Circles. Each Circle is headed by a Superintending Archaeologist (S.A.), who is further assisted by Deputy Superintending Archaeologist (Dy.S.A.), Deputy Superintending Archaeological Engineer (Dy.S.A.E.), Assistant Superintending Archaeologist (A.S.A.), Assistant Superintending Archaeological Engineer (A.S.A.E.), Assistant Archaeologists (A.A.) and Conservation Assistants (C.A.). For conducting specialized archaeological researches there are 6 Excavation Branches, 1 Prehistory Branch, 1 Building Survey Project, 2 Temple Survey Projects, 2 Epigraphy Branches, 1 Science Branch and 1 Underwater Archaeology Wing.

The ASI administers 3636 monuments, operating both at Union and at State level.

Source: http://asi.nic.in.

India has 26 sites the World Heritage list (all under management of the ASI). None of these is a living historic city. Ladakh has no World Heritage site, but there is a local chapter of the ASI because there are several nationally-protected monuments: the Leh royal palace and Alchi monastery.

2.3.2 UNESCO Delhi Initiative for Indian Cities of Living Heritage

In September 2006, the UNESCO Delhi office, on initiative of director Minja Yang, launched the UNESCO Network for Indian Cities of Living Heritage. This is an important initiative aimed at addressing the present lack of attention in India for preservation of historic cities, particularly living cities and not just archaeological remains.[26] The Network aims to build up capacity by promoting partnerships between Indian and European heritage cities.[27]

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[26] The ASI generally deals with preservation of archaeological remains of historic cities on a high professional level; see for example the management plan for Hampi, Thakur 2006.
[27] Agenda of the Conference launching the Network for Indian Cities of Living Heritage, UNESCO Delhi office, September 2006.

Leh became one of the founding members, and hopes to find a partner city in the next meeting planned for 2007.

2.4 The Local Context – Tibetan attitudes towards preservation

In Tibetan Buddhism, there is respect for buildings founded or frequented by important spiritual masters. Therefore, in both Tibet and Ladakh, important monastic chapels, temple halls and meditation caves are often comparatively well-preserved. So there is a local tradition of conservation that can be built on.[28]

However, this tradition concerns mainly religious architecture. There is no comparable tradition concerning residential buildings. In fact, among Tibetans there is a long-held aversion to moving into an old house that was not previously owned by one's own family. This is connected to a widespread belief in ghosts: people in the Himalayas widely believe that ghosts frequent old buildings and ruins. Therefore, rehabilitating historic buildings for rental use by other people is not an easy option. Fortunately, migrant renters seem to be unaffected by belief in ghosts. There is also no local tradition that speaks against restoring one's own ancestral home, so working with owners/occupiers is not subject to such concerns.

2.5 Conclusion chapter 2

This chapter has explored the milieu within which the proposed management should be developed. The international principles of conservation as proposed by UNESCO provide important reference tools, if interpreted on the basis of the Nara Document on Authenticity. The concepts most suitable for Leh are the principles offered in the ICOMOS Historic Town Charter, and the Japanese concept of liveability in conservation. A specifically Asian approach to conservation still awaits definition. Regionally and locally, there are precedents for historic conservation so that the management plan for Leh can be partly based on local concepts. Community-participation is not only desired by compatible with the Indian political system, but implementation of policies described by a management plan might be a challenge.

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[28] See Alexander 2005 and Alexander & De Azevedo 1998.

3 The City of Leh: from former royal capital to tourism destination

3.1 Kingdom of Ladakh

Ladakh is an autonomous region within India's State of Jammu & Kashmir. Located on the western edge of the Himalayan plateau with an average altitude of above 3000m, Ladakh is a very barren region. It is characterized by a generally dry climate with warm summers and long, extremely cold winters (-25 degrees Celsius is common during wintertime in Leh). The economy is based on farming (highland barley, potatoes, apricots are the traditional crops), animal husbandry (donkeys, yaks, cows) and trade. Leh remained an important caravan crossroads for inner Asian trade until 1947.[29]

The State of Jammu & Kashmir has two capitals, Srinagar in the summer and Jammu in winter. Within India, Jammu & Kashmir State is regarded as a middle-of-the-road performer, not on the forefront of economic growth or technical innovation, but also not gripped by entrenched rural poverty like Bihar.[30]

Ladakh was formerly an independent Tibetan kingdom, founded on the western edge of the Himalayan high plateau in the 9th century by descendents of the last king of the central Tibetan empire. The Namgyal dynasty ruled Ladakh until the mid-19th century.

Ladakhi cultural identity is based on Tibetan language and religion, and Ladakhis share many customs and cultural traits with their relatives in central Tibet. The Ladakhis retained their independence over centuries even when neighbouring Buddhist kingdoms and regions of Central Asia converted to Islam (Chinese Turkestan, Baltistan, Tangut / Xixia), and central India became the Delhi Khanate.[31]

In the 1840s Ladakh was finally conquered by the army of the Maharaja of Jammu, and the last Ladakhi king was deposed. When India gained independence in 1947 Ladakh simply became part of the new state of Jammu & Kashmir, the last region of British India to join the Indian Union. The emerging state of Pakistan immediately laid claim to Kashmir including Ladakh, and occupies part of it since 1948. The two parts

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[29] Rizvi 2001 is the standard source on the pre-independence trade patterns of Ladakh.
[30] India Today ranks it 11 out of 20 in its annual ranking of the performance of India's states, *State of the States*, September 11 2006 issue.
[31] The history synopsis is based on Francke 1999, Petech 1977 and Keay 2001.

of Kashmir are to this day separated by an informal cease-fire line. This "Line of Actual Control" is occasionally subject to outbreaks of hostilities (the latest being the Siachen Glacier War of 1999).

China built a road through a largely uninhabited slice of Ladakhi territory in the early 1960s, and the subsequent discovery of this fact by Indian intelligence (spotting trucks on satellite images where no road was known to have existed) has led to two brief border wars between China and India. China to this day administers a slice of Ladakh known as Aksai Chin, which is officially claimed by India.

The Indian army built the first-ever road to central Ladakh in the early 1960s and also founded an airport during this time. Parts of Ladakh, particularly a large part of the kingdom of Zangskar, still have no road access to this day.[32]

Fearful of being drawn into the violent and seemingly irresolvable Kashmir conflict, and resentful of loosing their heritage and identity under the rule of Muslim-majority Kashmir, the Ladakh Union Territory Front was formed. This is a local political movement campaigning for Ladakh achieve Union Territory status, which would make it a special region directly under Delhi.[33]

India presently has seven Union Territories.[34]

In 1995, following some of the worst communal tensions in Ladakh in recent history, the region was granted semi-autonomy by the central government as an "Autonomous Hill District". This was a model originally designed to calm insurgencies among independence-seeking hill tribes in India's far eastern regions.[35]

Since autonomy has arrived, the Ladakhis can elect their own local administration, the Ladakh Autonomous Hill Development Council (LAHDC). The last elections in late 2005 were won by the Ladakh Union Territory Front, which still campaigns for Ladakh to separate from Jammu & Kashmir state.[36]

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[32] ibid.
[33] Ghosal 2006, 26-27 summarizes the history and political philosophy of the LUTF.
[34] Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Havelli, Daman & Diu, Delhi, Lakshadweep Island, Pondicherry (officially renamed Puducherry in 2006), source: http://goidirectory.nic.in/stateut.htm, 3.01.2006.
[35] Ladakh had semi-autonomy since 1989, see van Beek 1995, 7-15.
[36] See Ghosal 2006, 26-27.

Illustration 3.1: Satellite-based map of Ladakh
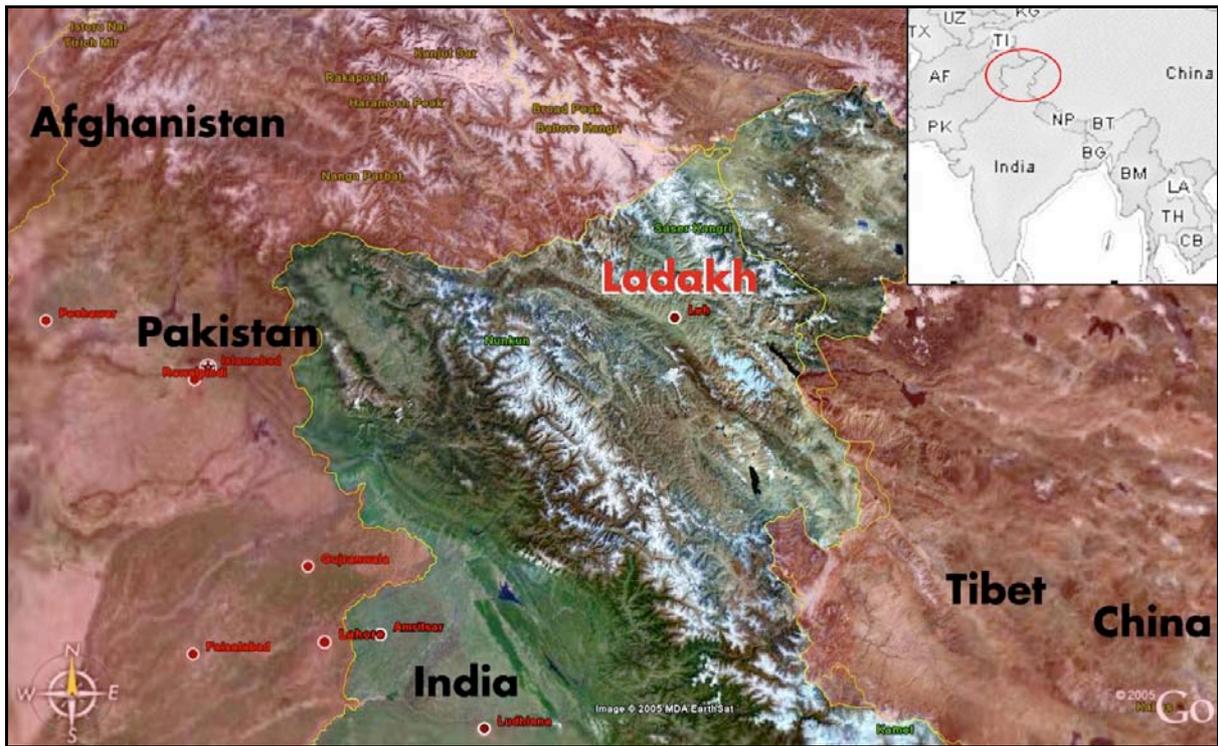
Source: Google Earth, key by author.

Illustration 3.2: Panoramic Photo of Leh
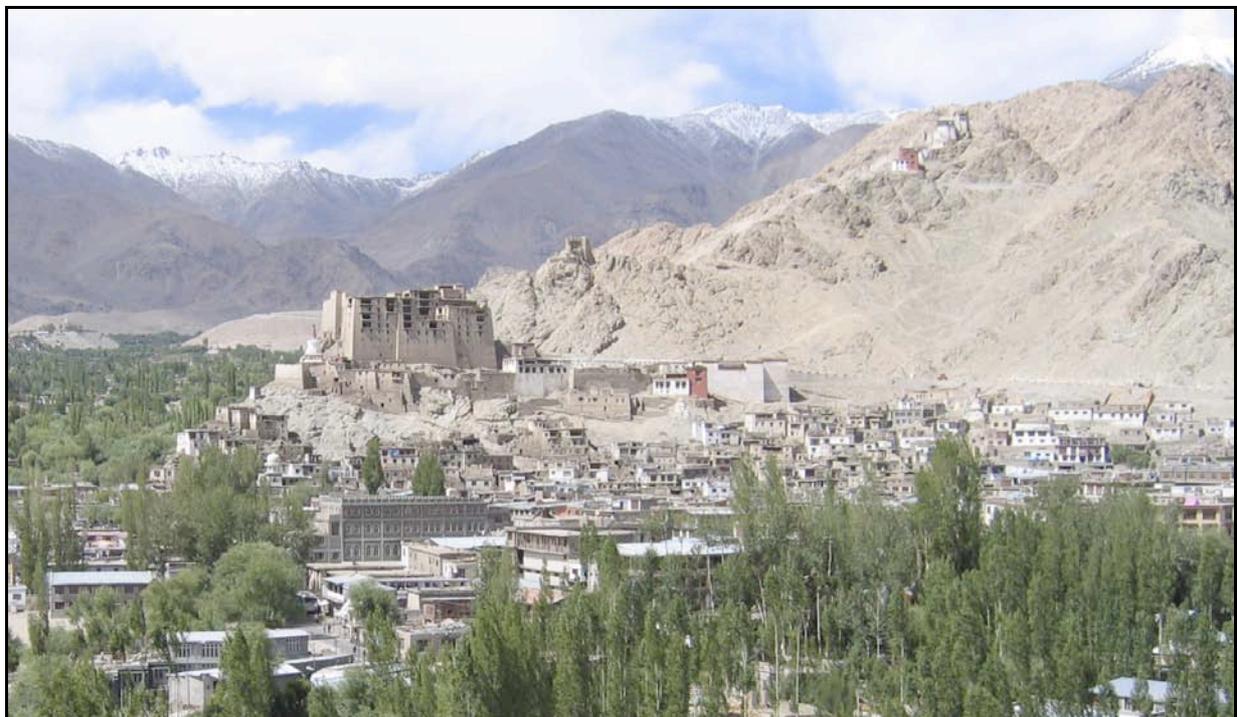
Leh Palace   Red Maitreya Temple   Tsemo Tower

Source: author 2004.

Illustration 3.3: Map of Leh

Source: THF Leh office.

Illustration 3.4: Satellite image of Leh old town

Source: Google Earth, 17 January 2007.

3.2 Leh City Profile

Leh lies at an altitude of 3500m above sea level. It became a royal domain for the first time in the early 15th century, when king Dragpa Bumdey (r. ca. 1400-1440)[37] founded two Buddhist temples on the site of the present town.

In the 16th century king Tashi Namgyal (r. ca.1520-1540)[38] added a fortified tower-cum-palace and Buddhist temple on the Tsemo peak above Leh.

At the turn of the 17th century Leh became a proper royal capital when king Senge Namgyal (r. ca. 1590-1630)[39] built the Lachen Pelkhar palace. He is said to have invited leading Ladakhi families to settle within the fortified town below the palace. Remnants of the city walls from that time still exist. This fortified town was built on the slope of a hill, reflecting the need at the time to preserve arable land. All over Ladakh and many parts of Tibet the earliest human settlements were built on the edge of mountains and hills, as arable land was always scarce.

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[37] *Grags pa 'bum lde* in the official Wylie Transcription System for Tibetan.
[38] *bKra shis rnam rgyal.*
[39] *Seng ge rnam rgyal.*

In the mid-19th century, when the king was deposed and the main bazaar was built, Leh was transformed from an imperial city to a commercial city.[40]

Today the town has long since outgrown the 17th century boundary walls, and many of the former fields have been built over. This reflects changes in life-style and economy. Leh officially became a city only in 2005, and is visibly still expanding. Because the administration is in the process of being built, there is no up-to-date definition of the official boundaries of Leh, and little official data.

3.2.1 Demography

Leh has a permanent population of 35,000 inhabitants. 2000 people live in the old town. There is a huge floating population during the short summer season (June to October), when temporary migrant workers and tourists treble the population size. Ladakh's population density is very low, India's lowest, and even though there are no exact figures for Leh (because there is no official definition of the city area), the population density in Leh must be one of the lowest for a regional capital in India.

3.2.2 Urbanization trends

The city is growing uncontrolled and unplanned. Therefore, there are no up-to-date maps and figures available showing the current size of the town. The urban growth is private-driven as people make their former fields available for development. The law in the State of Jammu & Kashmir prevents outsiders from acquiring land, so Ladakhis either develop themselves or work with outside partners.

3.2.3 Transport

There is a public bus system; many destinations in the city centre can be conveniently reached on foot. Private car ownership is low but rising. For six to eight months every year, Ladakh is accessible only by airplane. The passes thaw around May and freeze over around October. Young people and entrepreneurs are therefore enthusiastic users of the Internet, for many people an important link to the rest of the world.

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[40] See for example Kotkin 2006, 13-16 for a typology of historic cities.

3.2.4 Housing

In traditional Ladakhi society, renting accommodation was an unknown phenomenon, as people built their own houses. With the change in economy, rural migrants from other parts of Ladakh increasingly move to Leh, where they cannot afford to buy land and so need to rent housing. The old town is one of the prime areas where cheap housing can be found.

3.2.5 Infrastructure

Leh has clean and drinkable water, taken from mountain aquifers. However, the distribution system is lacking. There are only five public water taps in the central area. As a result, residents of central Leh get less than 10% of the drinking water amount recommended by the Indian government (100 lpd) by tap. [41]

The government generates electricity using hydropower schemes, but these tend to silt up so that an old giant diesel generator in the centre of town has to be turned on every evening. Despite these efforts, blackouts are common, and many houses have no electricity two days per week.

The municipality operates an efficient garbage collection and recycling scheme.

3.2.6 Economy

Compared to many rural areas of India, Ladakh is relatively affluent. Dire poverty is virtually unknown, as every family as a rule owns a piece of land.

The economy has undergone several important changes. Agricultural produce, long one of the mainstays of Leh's economy, is disappearing from the fertile Leh valley. Inner Asian trade was the second important pillar of Leh's economy, as Leh is situated at a crossroads of caravan trading routes plying between the Punjab, Chinese Turkestan, Tibet and Central Asia regions.[42] This trade has collapsed following the Indian partition of 1947 and the Sino-Indian border wars of the 1960s. Leh has successfully transformed itself into a service economy, at first providing services to Indian army contingents on their way to disputed border regions, and now to international and national tourism. Tourists come to Leh to take a shower, hire a

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[41] See Alexander 2005 (2), 7.
[42] Rizvi 2001 describes the pre-1947 Trans-Himalayan trade patterns in great detail.

guide, buy supplies, eat Pizza and check their e-mails, in-between trekking tours to the Himalayan mountains.

The local government has yet to cash in on the tourist market, and so far depends on handouts from the State and Central government for their budget.

3.2.7 Environment

Ladakh is an important water shed, and the government has made environmental protection a priority. There is no commercial logging, and several large tracts of land are nature preserves. However, water sources are insufficiently protected from encroachment.

3.2.8 Governance

Leh was only upgraded to municipality in 2005, before that it was a "Notified Area". The Municipal area is under a mayor who in near future will be directly elected. However, the administration is still weak. Generally in India, the government sector is underdeveloped and the private sector is very important. The administration provides garbage collection and is working on expansion of services.

Participation is highly-developed; residents elect an area representative, local councillors who join the cabinet of the Ladakh government, and key officials.

3.2.9 Social issues

Leh has a very low crime-rate (about one crime per year). There is a dense social network where people help and assist each other, even across sectarian lines. However, this network is noticeably disintegrating. Compared to other regions of India, women have a high social standing and there are no hurdles to women managing independent households and businesses.

3.2.10 Health

Health care is good in Leh and easy to access. It is subsidized (emergency treatment only costs 1 Rupee, about 2 European cents). Outside of Leh, because of the mountainous terrain, health care facilities are not evenly distributed.

3.2.11 Education

There is universal enrolment in Leh. However, there are no higher education facilities in Ladakh. In order to enrol at colleges and universities, young Ladakhis have to move to other Indian cities, for which they get a government subsidy. Literacy among young people is very high, but considerably lower among older generations and in the countryside. Young Ladakhis have to learn up to four different alphabets in the course of their education (Tibetan and Urdu for primary education, and Hindi and English for higher education).

3.2.12 Cultural Environment and Heritage

The old town of Leh consists of 200 historic buildings. There are also nine important Buddhist temples and monasteries, and two mosques. The NGO THF has made in an inventory of historic buildings in Leh.[43]

3.3 People in the old town

The management proposal will focus on the old town, the area that the local government wants to turn into a heritage zone. Therefore most data collected just concerns the old town's residents. The important relation between old town and modern city is covered where necessary.

Involving the people is the key strategy for the present work. Who are the people living in old Leh? What are their interests and aspirations? The success of any

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[43] www.tibetheritagefund.org, Leh Database, online since December 2004.

intervention or management plan for Leh will depend on the planner's knowledge of the people living there.

Working according to a similar philosophy, THF have begun their activities in Leh by conducting extensive social and architectural surveys. Before that, there was only very little data available about the old town.

3.3.1 Social Surveys

According to the results of the social surveys carried out by THF/L.O.T.I., several facts about the residents of old Leh are known.

3.3.1.1 Occupational structure

30% of households depend on a government job for their livelihood.
69% were earning their income on the private job market; most of the people surveyed had no regular job but did different jobs throughout the year, depending on availability.

3.3.1.2 Average monthly household income

The average household in the old town has 3 people. The average monthly household income according to the survey for over 50% of all households is between 2000 and 6000 Indian Rupees, i.e. between 37 and 111 Euro. According to the classification of HUDCO, the Indian government's Housing and Urban Development Corporation, this qualifies as Low Income Group (LIG).[44] The lower end of the scale is below the official UN poverty line (less than 1 US$ income per day per person). Many residents are able to supplement their low cash income because their relatives in the countryside send them agricultural and animal produce. Many of the persons interviewed could not give an exact income figure, as they relied on the informal job market for their income, and so had no fixed income.

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[44] http://hudco.nic.in/frame.htm, 3.01.2006.

Illustration 3.5: Income Structure
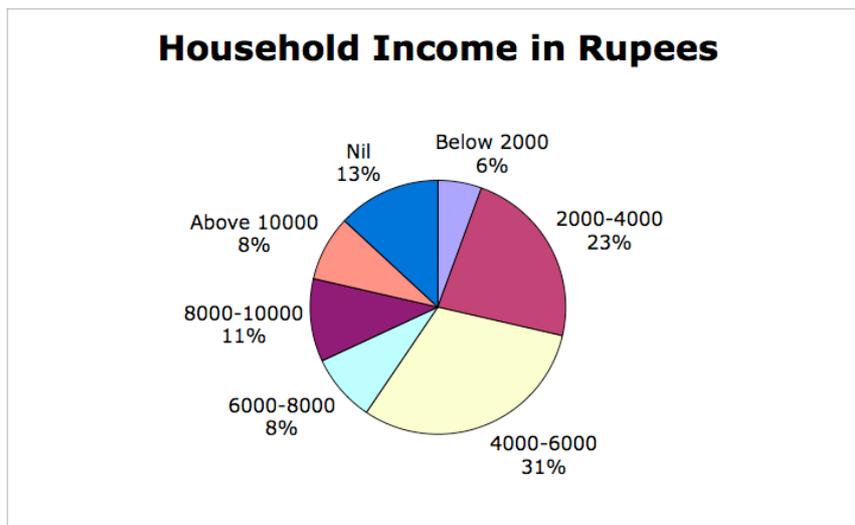
Adapted from Dolker 2004.

3.3.1.3 Factors important for the interpretation of social survey data

The number of residents in the old town is subject to seasonal fluctuation. Many young people go for education to other cities in India during the winter, but come back for the warmer season under a special arrangement with several educational institutions. During the warm season, soon after the passes open in May or June, many migrant workers come to Leh and rent rooms in the old town. They leave their rooms very early in the morning and come back late, sometimes holding several jobs per day. It has been difficult for THF to collect sufficient data on the migrants. It will be necessary to conduct a new social survey specifically targeting migrant workers in the future.

Migrants mainly come from the Kashmir and Dogra valleys in Jammu & Kashmir state, from Bihar, Punjab and Gujarat, and from Nepal (there is visa-free travel between India and Nepal).

3.3.1.4 Residential patterns

Over 60% of all buildings in the old town are inhabited by the owners, either exclusively (37%) or with some rooms rented out (26%). 27% of all buildings are

rented out entirely, with the owner living permanently elsewhere (usually outside of the old town). 10% of all buildings are vacant, often in very dilapidated condition.

Illustration 3.6: Building use in Leh old town
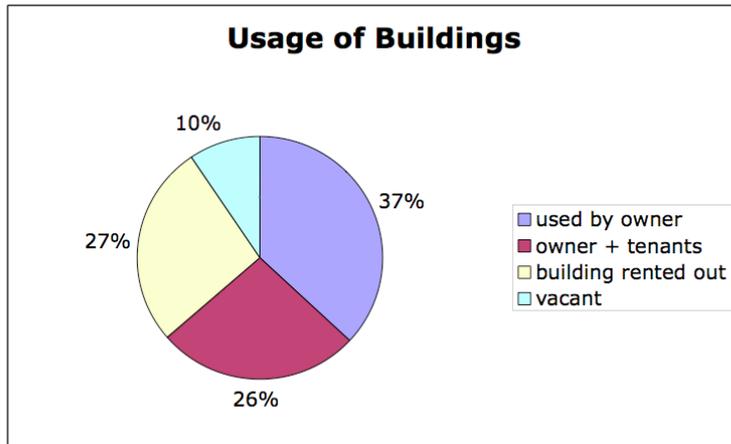
Adapted from Dolker 2004.

3.4 Buildings in the old town

The buildings of historic Leh reflect the ancient cultural ties to Tibet. The town can be described as being built in traditional Tibetan architecture. The Tibetans have built few cities, mostly trading centres, as the majority of Tibetans traditionally lived in the countryside as farmers or nomadic herders. A sizeable percentage of the population lived as monks in large monasteries, which often took the appearance of small towns. With the recent changes in Tibet following the Chinese occupation, many traditional Tibetan towns have changed beyond recognition. Therefore Leh is an important example of historic Tibetan urban architecture.

THF identified 189 traditional or historic buildings in the old town. The historic buildings fall into three categories:
- defensive and administrative structures
- religious buildings and structures
- residential buildings

The basic architecture of all three categories is similar – an internal timber frame, flat roof and walls built from stone, adobe mud bricks or rammed earth. The advent of

glass in the late 19th century revolutionized façade design. Previously, windows were very small only.

3.4.1 Building Typology

In line with the typology used for THF project inventory (see Annex 3 for a more complete typology), the main characteristics are summarized in the box below.

Table 3.1: Leh Building Typology

1 Defensive and Administrative Structures (2 plus city wall fragments)
Only two such structures have survived, the Leh palace (17th century) and the Tsemo Tower (15th century). These are the most unique and precious monuments, landmarks of historic Leh. There are also three remaining sections of the 17th century city walls.

2 Religious monuments (16)
These reflect the Buddhist majority in the population.
2.2.1 Major monasteries (2)
2.2.2 Smaller temples (4)
2.2.3 Private shrines (1)
2.2.4 Chapels inside other monument (2)
2.2.5 *Stupa* monuments (5)
2.3 Muslim places of worship (2)

3 Historic and traditional residential buildings (171)
These are built in standard Tibetan-Himalayan architecture, and the wealthier homes are very similar to the upper class homes in historic Lhasa.
3.1 Homes of the aristocracy and wealthy trader (27)
3.2 Homes of well-to-do traders and lower aristocracy (30)
3.3 Ordinary homes (114)

4 Modern residential buildings
So far, examples are concentrated along the edge between the old and modern town. They are built generally with concrete frame and infill of mud bricks or concrete bricks, often to a different scale than the historic buildings, which makes them stand out. Many have few Ladakhi characteristics, and could be found all over India. Local regulations stipulate that the windows have to follow traditional Ladakhi-Tibetan designs, this has produced varying results.

Source: author, based on work done for THF 2003-2004

Illustration 3.7: Building type examples
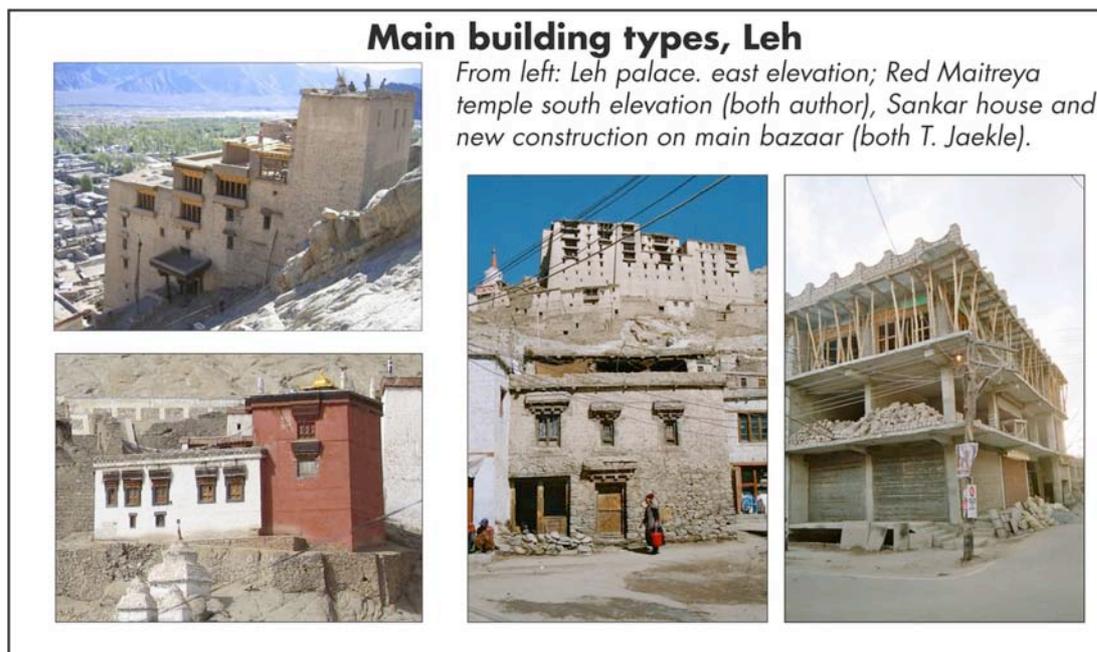
Source: author and THF office Leh.

3.5 Assessment of the building stock in the historic city

3.5.1 Building use and condition

The THF survey found that only a quarter of buildings in the old town are in good or very good condition, while over 50% of all buildings are in poor to bad condition. [45] Since only 10% of buildings are vacant, this means that a lot of very dilapidated houses are still inhabited. To prevent further loss of historic fabric, an emergency intervention scheme for houses on the verge of collapse needs to be organized.

Illustration 3.8:
Building condition in the old town
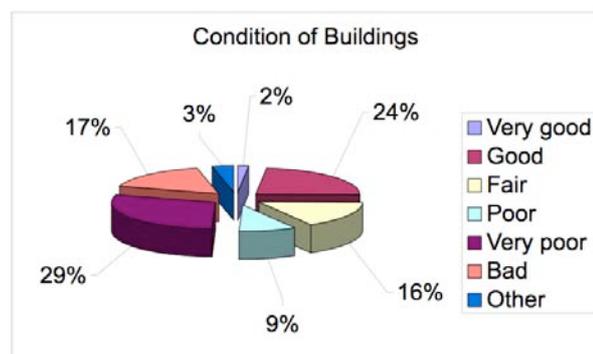
Adapted from Dolker 2004.

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[45] The survey results are summarized in Dolker 2004 and Alexander 2005 (2).

75% of all the houses in the old town are used for residential purposes. 11% have a mixed residential and commercial use, and only 2% are purely commercially used. This means that there are only very few tourism–related activities in the old town.

Illustration 3.9:
Building use in the old town
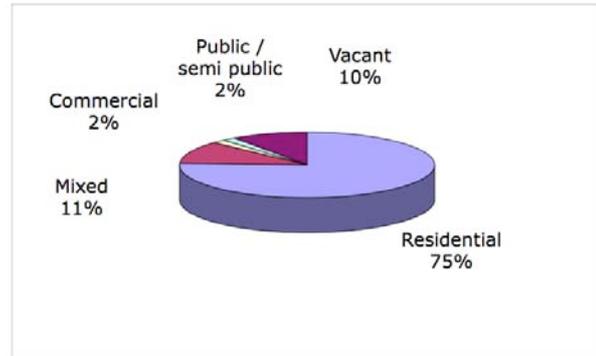
Adapted from Dolker 2004.

Illustration 3.10: Leh land use map
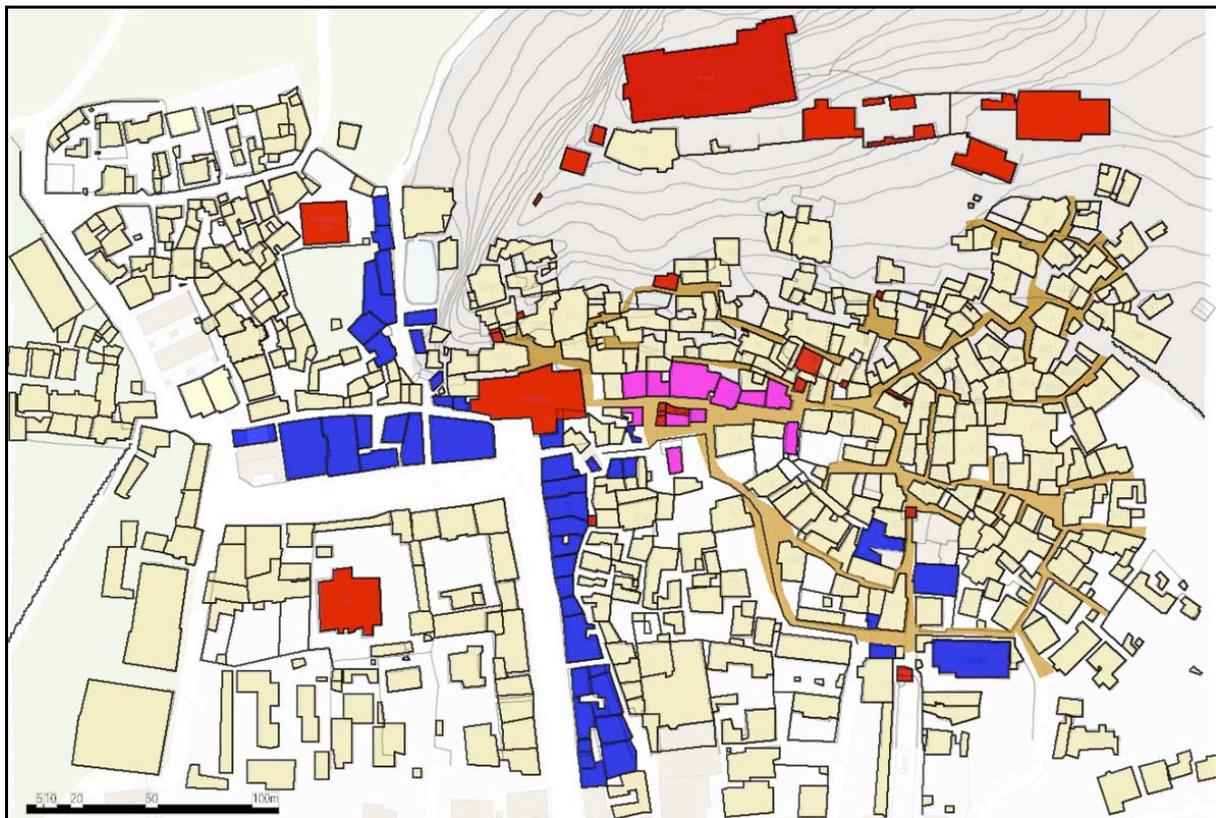
Source: author, based on THF survey and map.

Key

🟥	*Religious use*
🟦	*Commercial use*
⬜	*Mixed use*
🟪	*Residential*
🟫	*Pathways in the old town*

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3.5.2 Qualities of the traditional architecture

Traditional Tibetan homes are built with locally available materials to fit the local geographical and climatic conditions. They are designed to withstand tremors by making the inner timber frame flexible, the ground floor very heavy and the upper floors and ceilings very light. There were no damages to buildings during the 2005 earthquake in Kashmir.

The buildings can also preserve heat – during day, the mud bricks absorb sunlight, and at night can radiate warmth for several hours. Straw and other organic materials are used to further insulate walls and floors.

3.5.3 Problems

The main problem of most of the old residential houses is that they no longer conform to the changed life style of the occupants. Most people in Leh no longer keep animals, and so regard the stables on their ground floors as a whole floor of wasted space. People also prefer to cook with bottled gas and no longer operate their clay stoves (fired with dried cow dung).

The availability (and affordability) of new construction materials on the market has also led to a change of design preferences – people now can have and generally want bigger windows because glazing is easily available. New houses are usually built with a concrete frame, which is then filled in with adobe mud bricks. A mud house without concrete frame, even though it will probably withstand tremors just as well, is now regarded as backwards and unfashionable by some people.

If the buildings are to be preserved as residential homes, then they need to be improved. According to resident's opinions gathered during conversations with house owners in Leh, the improvements need to include the following points:

- increase window size or add more windows (old houses are too dark)
- improve the clay mixes for interior plasters and floors
- improve the composting storage and collection system
- improve bathrooms and kitchen spaces (the mud surfaces used presently are not waterproof and decay fast)

- prevent leakage and rain damage to roofs and parapets

Improvements reflecting the changed life-style and aspirations of the residents of Leh could extend the life-span of the historic and traditional buildings. The ground floors could be radically re-designed. The heat retaining facilities could still be improved. The toilet composting system is ecological, but collection is messy and there is a lot of leakage from the composting vault. The roof construction needs to reflect a perceived increase in rainfall in Ladakh.

3.6 Measuring Leh against the UNESCO criteria for universal values

Leh is significant from the points of view of a historian, social anthropologist, architect and researcher of Himalayan cultures and religions. Leh is particularly an example of a Tibetan town built with Tibetan building technologies and aesthetic preferences. Its design reflects the inner-Asian trade links of the pre-Indian independence time. Important design influences have been the Tibetan design examples for administrative palace residences, the houses of the Lhasa nobility and the Buddhist temples of Tibet and northern India. There are very few historic Tibetan towns preserved, after the demolition of much of the centre of Lhasa by the Chinese authorities in the 1990s, Leh is perhaps the most significant example of Tibetan traditional townscape.

As such, Leh confirms to the UNESCO World Heritage criteria ii., iii., iv., v. and vi. (see chapter 2.1 for the list of criteria):

Leh exhibits an important interchange of human values on developments in architecture, technology, monumental arts and town planning through its blend of Tibetan, Kashmiri and indigenous Ladakhi preferences (criteria ii.);
Leh bears exceptional testimony to a cultural tradition that is on the verge of disappearing (and which has already disappeared from much of the Tibetan plateau) (criteria iii.);
Leh is an outstanding example of a type of architectural ensemble that illustrates (a) significant stage(s) in human history, namely the time when Tibetan cultural and economic preferences dominated the entire Himalayan realm, from the Mongolian borderland to the edge of the valley of Kashmir (criteria iv.);

Leh is an outstanding example of a traditional human settlement that is representative of human interaction with the environment especially when it has become vulnerable under the impact of irreversible change (criteria v.);

Leh is directly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance, in this case with the Tibetan Buddhist tradition that has become a significant world-wide spiritual influence (criteria vi.).

3.7 Conclusion chapter 3

Leh contains universal values, and preservation of these values justifies intervention. The old town is a significant asset for Leh, the management of which is in the interest of the citizens of Leh. However, at present the residents of old Leh are poor, and their homes are decaying.

Ladakh is a marginal region within India; the heritage of Leh is at present underrated nationally but recognized locally.

4 Issues and Actors

In accordance with the overall philosophy of the present approach to the development of a management plan (outlined above), the main problem issues and the stakeholder analysis are both discussed in one chapter. These two topics are interrelated, and identification of the interrelations is an important part of the strategy for involving local communities and actors in the urban management process.

4.1 Main Issues

The issues identified often concern the entire town, not just the old town. However, strategies for tackling the issues are being discussed more in-depth on the level of the old town only, in line with the scope and focus of this work.
The issues were identified based on the extensive community surveys undertaken by THF/ L.O.T.I. in the old town of Leh. 189 households were covered - almost every household in the old town. Questions asked included naming the biggest problems that residents face. The author has participated in some of the surveys, and has carried out further interviews with residents and government officials.

4.1.1 Lack of management mechanisms and planning framework

There is no official master plan for Leh. At present, the city is growing uncontrolled, and there are no mechanisms calculating future needs in housing, waste management, resource management, electricity generation and other vital areas. There are not even proper maps. The last mapping and planning was undertaken on initiative from the state government of Jammu & Kashmir in the early 1990s. Undertaken without local participation and neglecting several crucial issues, the master plan produced at the time by the State government's planners was rejected by the Ladakh government.[46]
Nothing else has come in its place.
This issue concerns the entire town.

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[46] The present author was given opportunity to see the 1990 Jammu & Kashmir Development Plan for Leh, and agrees with the judgment that the plan is inadequate, as it does not deal with many of the problem issues identified here.

4.1.2 Infrastructure deficiency

All of Leh suffers from insufficient water supply and frequent power back outs. In the old town, water supply is particularly severe, as there are only five public taps serving over a thousand people. Four of the five taps only have water for half an hour in the morning. The modern town is served by the old irrigation channels, which now serve to drain grey water, intended to be cleaned in fields of trees and shrubs but with most of it disappearing in the dry grounds below the city. In the old town, there is no functioning drainage system except for one dysfunctional channel that also carries the main water pipe. So grey water often accumulates in puddles on alleyways. Water supply cannot be increased before a drainage system is built.
Fortunately, all the toilets in the old town are of the traditional composting system. They are emptied manually when full and contents used as fertilizer or disposed off in one of the dumps (due to decline in agriculture in the valley). In the modern town, toilets with septic tanks have become very popular, and all the guesthouses (of which there must be over 300) have water-flush septic tank toilets, aggravating the water shortage for the other residents.
This issue concerns the entire town, but has a bigger impact on the old town.

4.1.3 Decay of historic structures

The historic structures of Leh, the palace, the temples and the old town area, must be considered an important resource for the town, whose preservation is vital to the long-term economic interests of the city. The historic structures are also important for the local identity of Ladakhis, particularly in their struggle for greater autonomy from the State of Jammu & Kashmir.
At present many historic structures in the old town suffer from decay caused by lack of maintenance. Some are abandoned, many others are rented out to migrant workers. Buildings close to main roads are being demolished and replaced by concrete frame structures. The question is how the historic buildings can be rehabilitated and upgraded so that they can fulfil the aspirations of the residents. A number of important monuments are also decaying, including the White Chenrezi Buddhist temple, the Tsemo fortified tower and the Chutarangtak women's mosque. Some important Buddhist monuments are in the process of restoration, including the Gonpa Soma and

the Red Maitreya temple. The former royal palace is being restored by the Archaeological Survey of India.

Even though preservation of historic structures could benefit the entire city, the issue mainly concerns the old town because this is where the historic structures are located.

4.1.4 Economics

Leh suffers from a lack of jobs for most of the year except during harvest time and the high tourist season. There is also a lack among Ladakhis of certain technical professions, such as architects, engineers, plumbers etc., for which Ladakhis are dependent on mainland Indians. The modern town visibly generates wealth from tourism, but little of that flows either into public infrastructure or into upkeep of the old town. Residents in the old town have few skills and depend on the casual job market to earn a living.

The question is how the old town rehabilitation can generate economic opportunities for the residents and for the entire city and even region, but without displacing low-income and low-educated residents at the expense of wealthy investors.

This issue concerns the entire town.

4.1.5 Tourism

Tourism is rapidly transforming all of Ladakh – numbers of both international and national visitors are rapidly rising every year, from 527 in 1974 to over 50,000 in 2006. During the summer season July-August the entire town is transformed, being host to more visitors than regular residents. The economy depends now on tourism. This in turn transforms the physical environment, as guesthouses, restaurants, trekking agencies and internet cafes proliferate, creating problems of sprawl and straining Leh's limited resources. Three main issues have been named by locals:

- depletion of scare resources (flush toilets and warm showers for tourists);
- pollution (plastic bags, toilet paper, other non-degradable waste);
- swamping of local markets by so-called fly-by-night operators eager selling cheap souvenirs produced outside of the region.

If tourism is allowed to grow unchecked, further negative impacts can be expected. This can be best described by referring to the systematic assessment by Russo (2002).

Box 4.1: The Economic Aspect of Tourism - Destination Life Cycle

Stage	Features
Beginning	Costs greater than benefits; small number of visitors; costs concentrated in a small area; benefits spread to origin destinations.
Take-off	Benefits greater than costs; increase in visitor number; costs spread to whole municipality; benefits limited to municipality
Maturity	Costs greater than benefits; still slight increase in visitor number; high external and internal costs to municipality; benefits spread to tourist region.
Decline	Costs much greater than benefits; high external and internal costs (job losses); costs spread to tourist region; benefits spread to competing destinations

Adapted from Russo 2002, p.37.

Leh currently corresponds to the Take-off stage of tourism development. This issue concerns the entire town.

4.1.6 Environment

The explosion of tourist visitors to Ladakh creates problems on a massive scale that presently no one wants to take responsibility for. The depletion of resources has become very serious, the water level is sinking because guesthouse owners drill their own wells to fulfil tourists' demands for showers and flush toilets. Non-degradable waste such as plastic bottles, batteries etc. is generated at record levels. The question is whether those benefiting from tourism can be persuaded to invest in environmental protection to safeguard their future earnings. An important step has been taken when the Ladakh Women's Association successfully banned the use of plastic bags in Ladakh.
This issue concerns the entire town.

4.1.7 Social fabric

In the past a number of important social institutions and networks existed in Leh, like in most Ladakhi villages. These included pieces of land that were communally-owned and managed, and other items communally-owned that were available to community members in need. There were also traditions of helping each other and working together on communal projects like irrigation, house building and harvesting. In Leh, these have now mostly collapsed, and people fight bitter struggles over disputed formerly communal land, even over a few inches of empty land separating two houses. The question is how to motivate people to work together to solve issues such as insufficient infrastructure.

This issue particularly concerns the old town, where the traditional social networks are located.

4.2 Stakeholder Analysis

The stakeholders were identified during field work in Leh July-October 2006. For easier presentation, the stakeholders are divided into five groups: residents, sectarian groupings, CBOs/NGOs, commercial interests and government agencies.

The residents of the old town are the most important group to understand, because their lives are intrinsically connected to the problem issues and any attempts at intervention. The social survey has revealed that the residents of the old town are mainly poor. The wealthier families who once owned the largest houses have moved away from the old town, often by building a new home on some of their farmland. Some of the residents are seasonal migrants who depend on core area for cheap rents.

The stakeholders are further classified according to their level of relevance or operation, i.e. whether they can be found in the old town or in the entire city. The old town is very important for the identity of Leh. But it is no longer connected to neither the economy nor the daily life of most citizens of Leh. The economy depends on the main bazaar area and the guesthouse areas (mainly Changspa and Tukcha). The old area is not linked to tourism.

4.2.1 Residents (Table 4.1)

Stakeholder	Level	Characteristics	Interest in project aims	Limitations
Home owners	Old Town	Their life quality is deteriorating. The value of their homes decreases with further decay.	They should be the most motivated group to engage in upgrading and conservation, if they are allowed to modify their homes according to their needs. Those who have moved out will still be interested to preserve their ancestral homes and protect their properties as long-term investment.	They will be less motivated to participate in static conservation. Those owners who have already moved will probably never move back to the old town.
Local renters	Old Town	These are Ladakhis who have moved to Leh for better access to jobs, education or health care. Many save money to buy property of their own one day.	They have an interest to upgrade the infrastructure, and depend on the old town as prime area for cheap rents. Will be very interested in getting employment in conservation programs. They can be trusted with undertaking basic maintenance of properties, as they stay medium to long term in their rented homes.	They cannot afford to and therefore will not contribute money to upgrading.
Migrant workers	Old Town	They come from all parts of India, particularly from Kashmir, Punjab, Bihar and Uttar Pradesh, as well as from Nepal. This group is very important for the economy of Leh.	They depend on the old town for finding cheap rents. They can supply cheap labour to conservation programs.	They stay only four-five months per year in Leh, and try to maximize the money that they make for their families back home. Therefore, they try to spend as little as possible on accommo-dation. They will not be interested to partici-pate in maintenance or upgrading. Their presence in the old town aggravates the infrastructure deficiency, particularly as there are not enough toilets in the old town. Most of them do not have specialized skills.

Young people	Old town	Young Ladakhis like to wear comfortable and fashionable clothing instead of traditional attire. They prefer motorbikes for individual transport.	Their interests are similar to those of other owners and renters. They are an important source of information for current trends in society.	As a group, they show little interest in the old town.
Middle-aged and elderly	Old town	They are more conservative and try to uphold Ladakhi customs and traditions.	They can be easier appealed to for participation in the preservation of historic Leh. They are also an important source of information on customs and traditions.	

4.2.2 Sectarian groupings (Table 4.2)

Stakeholder	Level	Characteristics	Interest in project aims	Limitations
Buddhists	Old Town	This group constitutes the population majority. They are organized in the Ladakh Buddhist Association (LBA). Leh Buddhists celebrate the important Buddhist festivals, which is partly done in the old town.	They raise and donate funds for the renovation and upkeep of monasteries. They are therefore an important group for the financing of certain conservation activities. In the old town, their interests and limitations as the same as those of other owners and renters irrespective of religion.	
Muslims	Old Town	Muslims are the most important minority group in Leh. In the old town they constitute about one third of residents. The Sunni Muslims are partly organized in the Mosque Society.	In the old town, their interests and limitations as the same as those of other owners and renters irrespective of religion.	
Ladakh Buddhist Association	Entire town	The LBA is an important opinion leader.	Can be called upon to organize public participation.	Cooperation with the LBA must be balanced by cooperation with Muslim groups, otherwise there is risk of alienation.

| Mosque Society | Entire town | The Mosque Society is an important opinion leader. | Can be called upon to organize public participation. | Cooperation must be balanced by cooperation with Buddhists groups, otherwise there is risk of alienation. |

4.2.3 CBOs / NGOs (Table 4.3)

Stakeholder	Level	Characteristics	Interest in project aims	Limitations
CBOs	Entire town	The residents of the old town elect an area president who is an important liaison person between residents and government.	This structure can be incorporated into a conservation program, for example for organizing town meetings.	
NGO: The Women's Association (Ama'i Tsogpa)	Ladakh-wide	This grouping of elderly Ladakhi women aims to uphold Ladakhi traditions and protect the environment.	The Women's Association organizes volunteer labour to clean up dirty corners of the city. They can be incorporated into a conservation program, particularly with enforcing cleanliness and hygiene in the old town.	They successfully managed to close down bars and any other facilities for drinking and dancing, and are thus unpopular with young people. Because they are inherently conservative they cannot be counted upon to develop innovative new solutions.
NGO: Ladakh Gonpa Association (LGA)	Ladakh-wide	This is the association of the Buddhist monasteries of Ladakh, traditionally the largest land owners. Their ideas about society are slightly less conservative than those of the Women's Association. The large monasteries are engaged in commercial activities, and most own shops or even shopping complexes in Leh.	They will be willing to cooperate in activities that they see concerned with general improvements in Leh.	Any action requires consensus of the most important member monasteries. Efforts to involve the LGA are therefore laborious (perhaps not worth the effort).

LEDeG Ladakh Ecological Development Group	Ladakh-wide	This is one of Ladakh's oldest and most-respected local NGOs. Its aim is to promote ecologically and socially sustainable development that harmonizes with and builds upon traditional Ladakhi culture.	LEDeG can be involved in developing innovative solutions with appropriate technologies for some of the problems in the old town, based on their previous activities in promoting appropriate technologies, such as passive-solar heating designs for buildings and use of photovoltaics.[47]	LEDeG is mostly active in rural areas and has never been involved with the old town of Leh before.
NGO: Leh Old Town Initiative L.O.T.I. / Tibet Heritage Fund THF	Inter-nation-ally	THF, a German NGO, promotes preservation of Tibet's cultural heritage and sustainable development. since 1996. In 2003 THF helped to set up a Ladakhi NGO, L.O.T.I., officially registered in 2005.	THF's experience gained during the five-year Lhasa Old Town Rehabilitation Project 1996-2000 may be of relevance to Leh. THF is also able to attract outside funding.	THF remains an external actor (not so L.O.T.I.), and has had only limited success in raising funds for Ladakh so far. L.O.T.I. still lacks technical capacity.

4.2.4 Commercial interests (Table 4.4)

Stakeholder	Level	Characteristics	Interest in project aims	Limitations
Guesthouse owners	Entire town	Like in other cities in India, guesthouse owners in Leh are voluntarily organized in an association that meets regularly to discuss issues of interest.	The guesthouse owners live off tourism and are therefore interested in improving the infrastructure of Leh. A serious degradation of the natural or built environment of Leh would be damaging to their business interests. The guesthouse owners include some of Leh's most wealthy and powerful families, and seem to be in a position to influence legislation. Therefore, serious efforts to engage this group in the conservation process would be justified.	Since the old town is not an acknowledged tourism destination per se, this group is so far little interested in what happens to the old town. This can change if it can be demonstrated to them that historic Leh is part of the attraction for visitors to Ladakh. Guesthouse owners have also so far resisted efforts by the government to impose a tourism tax.

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[47] *Ecological Steps Towards a Sustainable Future*, 2006 information brochure available at the LEDeG office in Karzoo, Leh.

Trekking agency operators	Ladakh-wide	Local trekking agencies in Leh are organized in a voluntary and loose association.	They are knows to annually organize clean-ups of famous Ladakhi tourist destinations. They have demonstrated concern for the ecology and the ability to independently organize efforts to further the common public good. Therefore this group can be counted to support conservation efforts more easily than the guesthouse owners.	They operate only during the tourist season and can be difficult to find at other times, but during high season they are often to busy to respond to cooperation requests.
Locals engaged in tourism industry	Ladakh-wide	Souvenir sellers, restaurant operators, transportation agencies, tour guides etc.	Their commercial interests are intrinsically linked to any efforts aimed at preventing degradation of Leh's natural and built environment.	This grouping is entirely unorganized, and primarily concerned with earning their livelihood. Only bigger operations may possess resources useful to conservation efforts.
Regional and international tourism industry	Inter-nation-ally	These are mainly tour organizers in major Indian cities and abroad. The Leh economy depends in great deal on this category of tourists, who spend more per head than individual travellers.	If these operators can be identified (no small task) they could be persuaded to apply pressure to Leh if they see their interests jeopardized – as it would if Leh was to decay unchecked.	Difficult to identify and approach.

4.2.5 Government and inter-governmental agencies (Table 4.5)

Stakeholder	Level	Characteristics	Interest in project aims	Limitations
Leh Municipal Corporation (LMC)	Entire town	Leh's fledgling municipal administration is barely one year old.	The LMC would be an important partner for development and implementation of a management plan.	Lacks capacity to tackle the town's problems. The residents view the government generally with suspicion, deeming them incapable of solving problems.

The Ladakh Autonomous Hill Development Council (LAHDC)	Ladakh-wide		Ladakh's local authority has made conservation and proper management of Leh one of the official development targets.[48] They actively look for expertise to tackle problem issues (talking to a Mumbai-based company for improving the sanitation issue, cooperating with NGOs). The Chief Executive Councillor (CEC) and the Councillor for Public Works have both offered to be contact persons.	Electoral politics – will shy away from unpopular measures that might jeopardize re-election.
Archaeological Survey of India (ASI)	Nation-wide	The ASI is an agency under the Ministry of Culture, and has, in effect, become a ministry within a ministry. The ASI has chapters in every Indian State, and is responsible for preservation of nationally-listed monuments.	The ASI has expert architects, restorers and engineers. Cooperation with the ASI would make highly-qualified technical experts available for the management of Leh. Limited cooperation between ASI and L.O.T.I. has already taken place.	Is seldom engaged in the management of living towns. Indian bureaucracy makes cooperation between the ASI, other government agencies and non-governmental actors extremely difficult.
Delhi School of Planning	Nation-wide	This university educates town planners has been contacted by Ladakh's local government for help.[49]	In Ladakh there is no institution of higher education; cooperation with such institutions in other parts of India is a good strategy to obtain necessary capacity without having to pay for it. Students can be enlisted to help collecting data and draw maps.	Unfortunately, by the time of writing, it was impossible to find out whether the cooperation would take place and if, who in Delhi would be the counterpart for such a project.
UNESCO [self-defined inter-governmental agency]	Inter-nation-ally	Leh is not on the tentative list for World Heritage, but eligible to join UNESCO Network for Indian Cities of Living Heritage.	Leh became one of the founding members of the Indian Heritage Cities network. Aspects of Leh management would be contribution to Agenda 21 and MDGs.	Whether the network can become a tool for Leh to access management capacity and assistance remains to be seen.

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[48] See Ladakh 2025 Vision Document.
[49] Interview with CEC, Leh August 20 2006.

4.2.6 Interaction of local stakeholders with tourism (Table 4.6)

Actors & Stake-holders	Interests supportive to conservation aims	Interests conflicting with conservation aims	Evaluation
Tourists	▪ Like to see heritage (supportive to conservation aims) ▪ Like to experience authentic culture (supportive conservation aims) ▪ Bring in money	▪ Like to take showers often ▪ Like to use western-style toilets ▪ Uncontrolled usage of water damages ecology	If Leh becomes an ecological disaster, tourists are likely to go elsewhere in search of another unspoilt paradise. They would support a tourist tax if they know it helps to preserve the environment and culture that they are interested in.
Local residents who do not own guesthouses	▪ Like to see their homes modernized and infrastructure improved ▪ Like to sell services (particularly those connected with their culture, where they have an advantage over outside operators) to tourists	▪ Suffer from lack of infrastructure but would sell scarce resources to tourists in order to improve their own economic conditions	They benefit from tourism, but not as much as guesthouse owners and trekking operators. They want proper management of Leh for their own interests. They would not oppose a special tourist tax.
Guesthouse owners and other local tourism operators	▪ Depend on sustainable tourism for their livelihood	▪ Do not always understand or appreciate long-term effects	In theory reconcilable to the idea of making adjustments to the present uncontrolled system to secure their long-term interests.
Government	▪ Their job is to manage local resources ▪ Should have residents' interests in mind because of re-election	▪ By doing nothing they encourage the present dynamic process (uncontrolled tourism consumes resources	In the past too inactive, also beholden to narrow interests of guesthouse owners.
NGOs	▪ Do not depend on tourists or special-interest groups for their economic survival.	▪ So far not involved in planning issues	Have already achieved ban on plastic bags and can help to turn tourism into ecotourism.

4.3 Conclusion chapter 4

Seven major issues that a management plan needs to address have been described. The main actors and stakeholders and their interests have been identified. Their respective interests are overwhelmingly complementary to the aims of the Leh management project. But many of them will need to be convinced to take on an active role in the rehabilitation and management of Leh.

The work can now proceed to formulate an intervention strategy.

5 Aims and Strategy

Many of the problems facing Leh are connected to lack of a management framework. Others are related to a continuing decay of the old town. Therefore, solutions are mainly found on these two levels, i.e. contributing to a management framework or as activity to be implemented.

Every management strategy and activity is being measured against the overall aims of the management plan as defined in the first chapter:

- Rehabilitation of Leh for the inhabitants: does the strategy contribute to sustainable upgrading of their life quality?

- Preservation of the qualities and resources (environmental, social, cultural and architectural) of Leh: does the strategy make a difference to preservation or depletion of these qualities?

Each strategy includes a consideration of how it could be financed.

Even though many of the issues identified concern the whole town, in line with the scope of the present work, activities are being mainly developed on the level of the old town. The overall planning framework deals with the town as a whole.

5.1 Intervention strategies addressing each of the seven issues

5.1.1 Lack of management mechanisms / planning framework (Table 5.1)

Aim:	Leh needs a holistic and inclusive master plan.
Strategy:	The present work attempts to structure such a plan. The local NGO, in the role of driving force of the process, will communicate the structure to the government and other main stakeholders.
Conformity to the overall aims:	Beyond the management of the old town, a master plan is also needed to address the needs of the growing modern town, which at present develops uncontrolled. Land use, building codes, waste management, and infrastructure improvement are all issues that need to be dealt with in a planning framework. Only with such a framework can life quality be improved and resources adequately managed.
Beneficiaries:	Every resident of Leh will benefit if there is a planning framework for the future development of the town.
Implementation:	The local government has acknowledged that such a plan is needed and is actively looking for technical support. Implementation hinges partly on public support, and pressure by important actors.
Output:	A framework planning document will be created with public participation and officially adopted by the authorities.

Finances:	Relatively inexpensive compared to its importance, some outside assistance seems necessary.
Time frame:	Work should start soon and completion within two years is a reasonable time frame, allowing for several rounds of public consultations. A proposal for the structure has already been made.
Indicators:	The plan will be introduced to the public within the time frame.
Level:	This is an issue of management. The management plan needs to incorporate the entire city area of Leh as well as important surrounding areas.

5.1.2 Infrastructure deficiency (Table 5.2)

Aim:	The old town infrastructure needs improvement with adequate technology.
Strategy:	Infrastructure improvements for the modern town need to be planned and implemented in a way that complements work done in the old town. Further research and cooperation with qualified and experienced technical experts is necessary. All infrastructure systems should be based on ecological principles:[50] i. Sustainable systems for wastewater treatment and sanitation ii. Conservation of resources, through lower water consumption, substitution of chemical fertilizers and minimization of water pollution iii. Integrated alternatives to conventional treatment systems iv. Promotion of recycling by safe, hygienic recovery and use of nutrients, organics, trace elements, water and energy v. Minimization of nutrient charge to surface water
Conformity to the overall aims:	Improving the infrastructure will reverse the decay of the old town and will benefit first of all the present residents. When they see their lives being improved, the residents will be better motivated to participate in the rehabilitation of the old town, because they understand that they are direct beneficiaries of such a project.
Beneficiaries:	Residents of the old town.
Implementation:	Driving force of infrastructure upgrading should be the government, as it is better to have one body coordinating such works. However, technical planning and implementation should be shared with CBOs and local NGOs. For prioritizing activities, THF/L.O.T.I. are advocating that residents can vote for priority infrastructure interventions, so that the community can feel a sense of ownership over the process and can so be easier motivated to participate in maintenance. Since Leh is small and infrastructure upgrading will take place on a comparatively small scale, community involvement in planning can be organized much easier than in larger cities.
Output:	Infrastructure investment to create a drainage system, improvement of water supply and improvement of waste management, creation of ecological master plan for Leh facilities and services.

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[50] Based on GTZ 2006 (2).

Finances:	Requires some serious investment, major share must come from government (local or national), donor assistance is possible since this a contribution to Agenda 21 and MDG 11. Accessing tourism income is recommended (e.g. taxing both tourists and guest house operators).
Time frame:	Implementation should start as soon as possible; single projects can begin even before the general planning framework is completed. A five year infrastructure upgrading program can solve several of the most pressing problems. It is unrealistic to expect that all infrastructure deficiencies can be resolved in the near future (particularly in the regional context).
Indicators:	Technical reports; targets are made public so that the population can monitor implementation progress.
Level:	This is an issue of implementation. Infrastructure improvements for the modern town need to be planned and implemented in a way that complements work done in the old town.

Details

The traditional composting system for toilets should be retained, as it is ecologically sound. It needs only minimal improvements for making storage and collection more effective. A drainage system will have to be built, to drain grey water to the wooded areas at the bottom of the town. Since the old town is situated on a slope, organizing the flow is comparatively easy. For four months per year, the drainage system will be partly frozen, but water consumption is also receding during that time. Pilot construction in 2005 of a drainage channel that is sealed with removable metal grilles has shown that most grey water is still successfully drained by such a channel during winter (taking into account that the grey water is usually slightly warm) even if it reaches the fields only in spring.

Illustration 5.1 Design for pilot drainage channel built in 2005
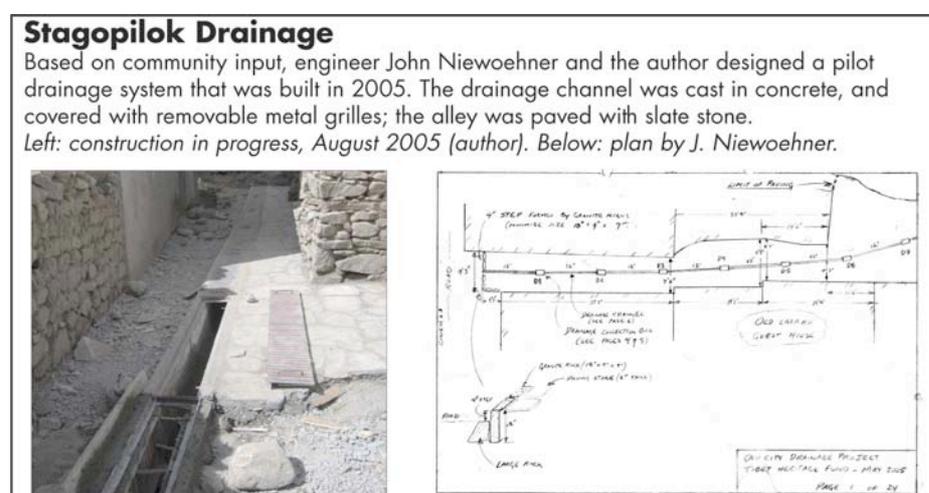
Source: THF Leh office and author.

Once all the residential alleys are fitted with such channels, and treatment is taken care of, water supply can be improved. This is easiest done by constructing a reservoir above the town that can be filled by mountain spring water. However, the reservoir would also be frozen for four months per year. This is good because less water can drain successfully during winter. If residents accept to have less water during winter, the system will work very well for eight months and with restrictions for four months. A group of experienced technical experts can work out the details.

5.1.3 Decay of historic structures (Table 5.3)

Aim:	To preserve Leh's historic buildings, an important asset of the city.
Strategy:	A building code for the old town is needed to control new construction. Infrastructure of the old town must be urgently improved. Buildings should be rehabilitated by order of priority. Proposed is to offer owners of historic buildings 50% co-financing. This will give a sense of ownership to the owners. A similar or perhaps larger contribution can be asked from the town's religious communities for preservation of monuments.
Conformity to the overall aims:	Leh's historic buildings are an important economic resource and are intrinsically linked to improvement of resident's life quality.
Beneficiaries:	Not only the residents of the old town, but all residents of Leh who benefit from tourism and infrastructure improvement funds raised out of sympathy for the historic old town.
Implementation:	Partly community-driven, partly organized by local NGOs and government agencies such as Public Works and ASI.
Output:	A fixed number of historic and traditional buildings will be rehabilitated.
Finances:	50% of the costs come from the public; remains financed by government and/or foreign assistance, perhaps in the form of private philanthropy (in the field of historic preservation, this is very common, even richer countries often depend on some form of support for historic preservation).
Time frame:	Co-financing has already begun, and should continue for at least another 5 years. Ideally, if sufficient funds can be found, upgrading should continue until all 200 buildings in the old town have seen some work.
Indicators:	Technical reports that include transparent accounting; the list of buildings to be rehabilitated should be made public so that the population can monitor implementation.
Level:	This is an issue of implementation, but management of rehabilitated buildings and infrastructure will have to be regulated by an overall framework.

Details

Leh's historic buildings are the town's most important economic assets. They generate

strong international interest, and can be utilized to find sympathy and financial resources for improving the lives of the inhabitants. Without the historic town, Leh would become just another Indian town that grows uncontrolled and has serious infrastructure deficiencies. Therefore significant efforts should be undertaken in order to preserve Leh's historic buildings.

A pilot co-financing system for upgrading residential buildings in Leh has been launched by THF/L.O.T.I in 2004. Owners of historic buildings can apply to receive 50% co-financing for upgrading of their homes. Funded by donor money,[51] four residential buildings have been upgraded so far. The rules devised by the NGO stipulate that the interior of buildings can be modernized (e.g. using concrete and tiles for bathrooms and the toilet composting system), while historic facades should be preserved as much as possible (mud plaster, flat roof, wooden door and window frames). The pilot program has been accepted by many residents, and about one dozen house owners have applied to join so far.[52]
This strategy gives the residents a sense of ownership; they become the driving force of the upgrading process. Once the infrastructure is being improved (as proposed in 5.1.2), residents' interest in maintaining their properties is likely to increase even more.

To have an NGO as partner for the co-financing program, rather than a government department makes a lot of sense in the local context as opportunities for corruption are avoided. Management of such a scheme in a transparent way is most important.

5.1.4 Economics (Table 5.4)

Aim:	The economy of Leh develops more equitably so that also the urban poor see their livelihood improved. At the same time, the economy can finance in part at least the necessary investment in infrastructure and preservation.
Strategy:	More long-term jobs need to be created in Leh, particularly jobs than can be held all year round. However, thinking about the damage afflicted by mass tourism to many historic towns and traditional societies in Asia, new jobs should be developed that are not all based on tourism. The organizations of guesthouse owners and trekking agencies and other tourism service providers need to be approached for discussions about long-term jobs for local people.

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[51] Trace Foundation (USA), Embassy of Finland in Delhi, ACHR (Thailand).
[52] See Alexander 2005(2) Leh report.

Conformity to the overall aims:	Infrastructure upgrading and building repair will generate new employment in Leh. People can specialize in traditional building construction or infrastructure construction, and will have employment for many years to come. So one outcome of the activities described above is already an improved local economy.
Beneficiaries:	All residents of Leh will benefit from sustainable economic development. Low-skilled residents will benefit from new jobs in preservation and infrastructure upgrading. Tourism industry stakeholders will benefit in the longer term.
Implementation:	Driving force should be the government, working together with CBOs, NGOs and the organizations of tourism service providers.
Output:	An economic plan for the development of Leh will be created. A new tourist tax will be collected and spent on infrastructure improvement, building maintenance and other issues related to the management plan. This must happen in a transparent way.
Finances:	Relatively inexpensive compared to its importance. The political costs of enforcing unpopular economic policies will be considered by the government.
Time frame:	An economic master plan for Leh could be completed within one year. Creation of sustainable local jobs should be made part of implementation of all the seven main issues.
Indicators:	Financial reports by the government, independent audits.
Level:	This is an issue of management. It can only be solved on the level of the entire city.

Details

Old town upgrading will require government and third party investment. An obvious source of revenue would be to impose a tourist tax. In 2005, the government collected 10US$ at the airport from every arriving foreign tourist. This money was to be used for environmental protection and infrastructure upgrading across Ladakh. However, protests by local guesthouse owners led to a quick demise of this scheme. Ladakhis critical of the scheme said that the collection and use of the funds was not transparent and would encourage corruption. However, it seems that most guesthouse owners were simply scared that such a tax would drive tourists away, even though at the time there was no vocal opposition to the scheme from tourists and international tour operators. It will be vital to revive such a scheme, otherwise the government may not be able to finance the necessary infrastructure upgrading and will so bring tourist numbers down again once conditions deteriorate beyond a certain standard. At present tourists consume scare Ladakhi resources without adequate payment. Every resident of Leh could potentially benefit from a tourist tax, but the government has to argue the case in a convincing manner.

5.1.5 Tourism (Table 5.5)

Aim:	To make tourism in Ladakh sustainable economically and ecologically.
Strategy:	Transforming the present form of uncontrolled tourism into ecotourism.
Conformity to the overall aims:	The livelihood of many residents of Leh depends on tourism, therefore sustainable tourism makes for sustainable livelihoods. Uncontrolled tourism would deplete scarce natural resources.
Beneficiaries:	All residents of Leh linked to the tourist economy; in a wider sense all residents of Leh who depend on local resources (including such vital ones as water) for which they increasingly have to compete for with tourists.
Implementation:	The government and opinion leaders need to organize roundtable talks with all major stakeholders and some technical experts to discuss ways of transforming tourism into ecotourism.
Output:	A section of the management plan deals with tourism management. Targets for tourist numbers are set; agencies and other operators will be locally certified if they comply with ecotourism standards.
Finances:	Tourists and the tourism industry need to pay for this.
Time frame:	Transforming Leh's present brand of tourism into ecotourism will take at least five years.
Indicators:	Certification of operators that tourists can check; tourist numbers develop according to the management plan.
Level:	This is at present an issue of management. This issue can only be dealt with on the level of the entire city, but special attention needs to be paid how to control tourism impact on the old town.

Details

At present tourism in Leh consumes scarce resources and is not sustainable. Yet more and more people in Leh depend economically on tourism. At the same time, tourism is seen internationally more and more as the way to finance conservation and infrastructure investments, if it is well-managed. However, the traditional view of heritage tourism, such as described by authors like Orbasli,[53] do not fit Leh – the majority of tourists here are the so-called back-packers, travelling on small budgets and always looking for the cheapest accommodation available.

Bhaktapur in Nepal was an early pioneer in Asia for an approach to limit tourism impact to those willing to pay a price – the 10$ entrance fee collected at the town gates flows into a fund are managed by a committee consisting partly of elected residents' representatives for maintenance and improvement works. However, Nepal is also a sad example of how mass tourism and massive development aid can destroy the social fabric of a traditional society. Like many poor countries that have experienced this phenomenon, Nepalese society has increasingly become divided – into sections working in tourism, or for foreign organizations or receiving foreign help,

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[53] Orbasli 2000 has five case studies of cities that attract more affluent tourists than backpackers.

and sections of people "stuck" with a local income. Political forces have successfully pitted the disenfranchised rural and urban poor against the middle class establishment, resulting in the decade-long Maoist insurgency that has brought Nepal's economy almost to a standstill.

Mass tourism has also wiped out the local social structures of the town of Lijiang in China, where the majority of long-term residents have moved out of the city in the past ten years.[54] As an example for how bad practice can become as influential as best practice, the government of Lhasa followed the example of Lijiang and currently plans to restrict living and working in the old town to people engaged in the tourism industry, threatening to eventually transform the old town into a tourism theme park.[55] In many Indian cities such as Goa, Bir, Dharamsala and Manali, foreign tourists have contributed to an erosion of local values and traditions because of the customs and dress preferences that they brought. Young local people model their life-styles on so-called foreign "hippy" tourists and make a living from doing so. If tourists stop coming, or the hippy tourists are replaced by different types of tourists, young people in these towns will experience a severe crisis of both economy and identity. Therefore, it appears necessary to avoid or at least control mass tourism in Leh, in order to avoid the concurring erosion of society. The concept of ecotourism was developed for exactly the circumstances of fragile ecologies with small traditional societies being exposed to mass tourism.

Ecotourism can be defined as: "Responsible travel to natural areas that conserves the environment and improves the well-being of local people."[56] Ecotourism is about connecting conservation, communities, and sustainable travel. This means that those who implement and participate in responsible tourism activities should follow the following ecotourism principles:[57]

- Minimize impact
- Build environmental and cultural awareness and respect
- Provide positive experiences for both visitors and hosts
- Provide direct financial benefits for conservation
- Provide financial benefits and empowerment for local people
- Raise sensitivity to host countries' political, environmental, and social climate

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[54] Alexander & Leonhardt 2006 and Li & Kammeier 2006.
[55] Interview with Lhasa City Cultural Relics Bureau director, Mr. An Li, Beijing 2002.
[56] Based on concepts proposed by an American charity, www.ecotourism.org, 3.01.2006.
[57] www.ecotourism.org/webmodules/webarticlesnet/templates/eco_template.aspx.

Bhutan has for many years shown an alternative path to uncontrolled mass tourism: charging high prices for entering the country (around 100 dollar per day) and so limiting the impact. Bhutan also uses the funds collected from this scheme to ensure that resources consumed by tourists are sustainably managed. Nepal has implemented a similar scheme for its Mustang region, charging a visitors fee of up to 300 US dollars and restricting access to a few 100 people per year. In theory the money is supposed to be used for local development projects, but in practice that has not happened yet.[58]

5.1.6 Environment (Table 5.6)

Aim:	Leh's environment must be preserved.
Strategy:	At present, there is too little awareness of the danger that Leh's environment is seriously endangered. An awareness campaign by the government (modelled on earlier successful awareness campaigns by local NGOs) would be an important first step. Religious leaders should also be incorporated.
Conformity to the overall aims:	The natural environment constitutes one of Leh's most valuable resources that must be preserved.
Beneficiaries:	Degradation of Ladakh's natural environment will have serious ecological repercussions for the rest of India and parts of Pakistan, some of whose major rivers originate in Ladakh. On the local level, apart from their natural long-term interests in having clean water and air, Ladakhis should also be aware of shorter-term effects of environmental protection: tourists presently come to appreciate a pristine, unspoilt Himalayan environment.
Implementation:	Implementation depends on broad public support, adequate technical solutions and strict government enforcement.
Output:	This is linked to infrastructure investment (see 5.1.2) and a management framework (5.1.1). The management plan must have an ecological component, to provide a binding framework for ecological resource and waste management.
Finances:	A blend of government funds, foreign assistance and money recovered from tourism is best suited to cover these expenses.
Time frame:	Protecting the environment is a task that is never completed. Where it is related to infrastructure works, or legislation, urgent environmental tasks should be completed within the next five years of interventions.
Indicators:	Individual targets set by management (or action) plan, for example to increase the percentage of garbage that is being recycled.
Level:	Protecting Leh's environment is primarily an issue of management. This issue must be solved at the level of the entire town.

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[58] According to Selter 2006 and interview on 26.12.2006 in Berlin with Elke Selter, UNESCO Kathmandu office, who has been working on both Bhutan and Mustang for the past several years.

Details

Of all the environmental issues, water management (meaning the protection of ground water) is probably the most urgent. The water sources around Leh must be protected from encroachment. Unauthorized drawing of groundwater must be checked and be made subject to fees. There should be also fees for disposal of grey water. These fees would apply not to private owners, but to guesthouse owners, and so can be described as an indirect tourist tax. Traditionally in Ladakh, grey water was treated by channelling it into orchards and woods. At present much grey water is simply disappearing in the dry ground. Planting vegetation for treating grey water would improve the desert-like environment of Leh, and help to keep the groundwater clean.

Disposal of non-degradable waste must be better managed, even though there is a lot of recycling in Leh (as everywhere in India), there are illegal waste dumping sites in side valleys of Leh. Local experts have proposed to send garbage that is not produced in Ladakh by truck to its point of origin, which is probably unenforceable. A better solution would be a proper landfill with groundwater protection and further improvement of recycling mechanisms. Logging is generally banned except in cases of wood especially grown for construction.

Air pollution is a growing problem. At present there are no emission controls on vehicles, and during rush hour traffic clouds of fumes can be seen over the main streets. India's problem often lies with implementation and enforcement – drivers could probably avoid having to install filter mechanisms by paying small bribes.

5.1.7 Social fabric (Table 5.7)

Aim:	To prevent further erosion of Leh's social structures, to strengthen these structures so that they can be utilized for preservation and management of Leh's resources.
Strategy:	Communities united across local dividing lines can best achieve the successful tackling of the most difficult issues. Provoking this realization through specifically designed projects (for example those that rely on traditional links) will pull the community together.[59]
Conformity to the overall aims:	None of the aims can be reached if society disintegrates or is split across class or sectarian lines.
Beneficiaries:	Leh society.

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[59] Arif Hasan's Orangi Pilot Project has generated considerable attention from donor agencies and NGOs in Asia for the successful mobilization of slum dwellers in a suburb of Karachi to design and build their own sanitation system, described in Hasan 2001, 147-157. Similar activities could be organized in Leh.

Implementation:	Making local communities the driving force of much of the implementation of proposed activities will result in greater local cooperation and so strengthen social cohesion. For example, local self-help groups can be evoked for infrastructure projects and housing upgrading. Arguments over ownership of previously public land need attention, it would be best to preserve the tradition of communally managed land. If communal plots of land can be seen as benefiting the entire community (for example as space for gathering together, or even just to do laundry) the traditional ownership and management structures can probably be revived. It is necessary for all agencies involved in management and implementation of activities to balance their attention to all the different social and religious groups.
Output:	Communally implemented activities (e.g. infrastructure works), public forums for discussing, formulating and evaluating plans and activities.
Finances:	Relatively inexpensive compared to its importance.
Time frame:	This is a long-term issue.
Indicators:	Evaluation of activities written by community members.
Level:	This is an issue of management. This issue mainly concerns the old town, where the traditional social networks are located. There is much less of the traditional social cohesion in the modern town, and it deserves discussion whether development of social cohesion in the modern town should be encouraged as part of the management plan.

5.2 Conclusion chapter 5

Table 5.8: Logframe summarizing goals, actors and finances

Issue / Aim	Beneficiaries	Implementation depends on	Indicators	Finances	Level
Creating a holistic manage-ment framework for Leh	All residents	Government, technical experts, broad public support and participation	Management plan is introduced to the public	Comparatively inexpensive	Management
Improving infra-structure deficiency	Primarily residents of the old town	Government, technical experts, NGOs, CBOs	Targets developed by government and communities	Blend of government funds, external assistance and tourism income	Implementation
Preserving historic buildings	Primarily residents of the old town, in the longer term the entire city	Government, broad public support, technical experts, NGOs and CBOs	List of sites eligible for assistance, transparent system of imple-mentation, reports	Owners 50% of costs, rest government, external assistance and tourism income	Implementation

Developing the economy sustainably and equitably	Particularly lower income groups and the landless	Government, NGOs, CBOs and some professional associations	Publicly accessible transparent financial reports	Inexpensive	Management
Turning Tourism into Eco-tourism	Leh residents, particularly those depending on tourism for income	Support by stakeholders, adequate technical solutions, government enforcement	Certification process for tourism operators, tourist numbers are controlled	Primarily paid for by tourism	Management
Preserving the environ-ment	North-Indian regions downriver from Ladakh	Support by stakeholders, adequate technical solutions, government enforcement	Individual targets need to be developed (e.g. percentage of recycled garbage)	Blend of government funds, external assistance and tourism income	Management
Strengthen-ing social fabric	Society as a whole	Society as a whole, needs motivation by main actors	Community members define and check targets	Inexpensive	Management

Solutions for each of the seven main issues can be found; none of them (except perhaps the last) are insurmountable on a technical level. Financing the implementation requires in some instances finding external assistance, but important shares of the necessary investment can be raised locally or recovered from tourism income. However, the success of each activity depends on having secured sufficient public support and cooperation between the different stakeholder groups.

If the proposed activities can be implemented, the vicious cycle of urban decay can be turned into the virtuous cycle of urban rehabilitation

Illustration 5.2 Cycle of urban decay vs. cycle of urban rehabilitation

Vicious Circle of Urban Decay

Dilapidation of
Old city area

increases

Area becomes
unattractive, some
people move away

Less investment
and maintenance,
loss of jobs

Old area
becomes social
ghetto

Circle of Urban Rehabilitation

Rehabilitation of
Old city area

increases

Improvement of
infrastructure &
homes

Generates employment,
improves people's
lives (protection from
gentrification provided)

Old town becomes
attractive, attracts
investment

Freely adapted from P. Herrle / Yangshuo 2005.

The next questions naturally concern the nature of implementation, and who will be the driving force for organizing implementation. This will be investigated in chapter 6.

6 Issues of Implementation

In chapter 4 the main problem issues that a management plan for Leh needs to address have been defined. These issues go beyond the issues previously defined by the government (see chapter 1). In chapter 5 strategies for dealing with the issues and for involving the main actors and stakeholders have been proposed. Any plan is only as good as its implementation and enforcement. How could implementation be achieved in the context of Leh?

As has been shown above, complex interactions between different stakeholder groups, government institutions and technical experts will be necessary to deal with Leh's main issues of concern. Many ordinary people in Leh openly doubt that the government could ever manage to organize this.
This leads to the question of who the driving force for achieving sustainable management of Leh would be.

The next question would be how implementation could be practically organized. This chapter will explore these two questions, and will investigate the experience made by a local NGO in Leh implementing pilot activities similar to some of those recommended above. This experience will be compared to that made in other cities under similar circumstances.

6.1 Driving forces

Leh's municipal administration is weak and still being developed. Its different resident communities do not yet seem to agree that rehabilitation and management of Leh require their urgent attention. A driving force will be necessary to push for action, to engage the various actors and to coordinate various efforts. Such an engine for the management of Leh must have legitimacy in the eyes of the stakeholders, so for example an elected official would qualify or someone who has technical qualifications. The person or institution has to operate with transparency, and must be easily accessible by stakeholders. The person or institution must have a minimum of technical qualifications even if detailed technical questions can be delegated to external experts. The person must be seen as not corrupt, fair in dealing with conflicting interests and dynamic in that the complex goals described above can be

reached. The person must be a good communicator, able to persuade the public to make compromises.

At present, Leh does not yet have a dynamic mayor, such as Delhi Municipality's widely admired Chief Executive Sheila Dixit, who is an ideal candidate for a driving force. The LAHDC government has to deal with the entire region of Ladakh, and at present lacks capacity to deal specifically with Leh. Unfortunately, enlightened public administrators cannot be imposed on Leh from outside. That means one has to look elsewhere for a driving force. There are no local universities, otherwise a department for research and study of urban planning could perhaps qualify, but in practice might be too detached from daily life.

CBOs are generally well-positioned to become a driving force, but at present, existing community organizations are unsuitable because they are sectarian-based.

A local NGO operating with transparency and acting as intermediate between conflicting interests would be a good candidate. For the past three years, the local NGO Leh Old Town Initiative (L.O.T.I.) has acted as a motor for pilot conservation activities in the old town.[60]

6.2 Developing an effective action plan

As has been argued above, it is absolutely imperative for Leh to have a planning framework that can be used to manage the town's future development and resources. However, the danger always remains (more so in India) that such a document will simply gather dust in local government offices. Kathmandu for example several times received foreign assistance for the compilation of a master plan, but very little has ever been implemented.[61]

The stakeholder groups ideally share most of the same interests, but in practice they are separated by many issues: those who directly benefit from tourism and those that do not, different sectarian groups, residents of the old town and those that live in areas with sufficient drinking water. A strong source of inspiration and motivation will be necessary to bring them together.

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[60] Hasan 2001 describes similar projects in Pakistan initiated by local CBOs.
[61] Personal visit to Kathmandu municipality in 2001 and interviews with architecture and planning experts working for an EU-financed master plan initiative during that time.

Further, if conditions in Leh are allowed to deteriorate further, it will become more and more difficult to reverse negative change. Concentrated action is necessary to tackle some of the most urgent issues. For example, if a large enough number of historic buildings in the old town would collapse or be demolished, it would probably become impossible to utilize the financial and technical assistance necessary to properly manage the town and reverse its decline. Leh would become yet another unattractive, medium-sized Asian town collapsing because of mismanaged rapid development.

For management and implementation of activities related to preservation of Leh's resources, as well as for public persuasion, it is proposed to organize many different activities under a singular theme. This should take the form of an action plan, implementation of which would begin immediately. In this way it can be demonstrated to the public that management of Leh's resources is directly connected to their welfare. In such a way it is also possible to stem and reverse the decay that afflicts the old town.

The action plan would have the overall aim to turn around the decay of the old town. This confirms to the overall aims of benefiting the people and of preserving Leh's resources (many of which can be found in or are linked to the old town).

6.3 The main components of the proposed action plan

The action plan would focus on urban rehabilitation activities in the old town, and have four main components:

1. Improve infrastructure and services and so gain local support quickly.
2. Provide local ownership of project though co-financing for housing upgrading, balancing conservation with satisfaction of local needs (upgrading instead of restoring)
3. Restore important public monuments such as Buddhist temples, Muslim places of worship and historic fortifications.
4. Engage local artisans and workers on a preferred basis to generate local employment and further create local goodwill.

6.4 Institutional and budgetary features

The action plan will have a fixed annual budget, and should be conceived to run for five years unless proven ineffective (annual revision). The plan will have fixed targets of numbers of residential buildings and monuments to be rehabilitated, and amount of infrastructure to be upgraded. These targets can be defined on the base of the pilot activities implemented 2004-2006.

The activities could be coordinated by the local NGO, L.O.T.I., but there should be steering committee consisting of representatives of all major stakeholder groups and government agencies (as described in 4.2). The steering committee can use rapid appraisal methods to check on the work done. An efficient way to check the implementation is to check on the targets of numbers of houses that should be rehabilitated with local co-financing – if residents don't like the work, they will not contribute 50% of their own money.

Legitimacy is important for the success of the implementation, and directly liked to transparency. A management office should be opened within the area, with fixed opening times and the possibility to meet with personnel involved in the implementation, perhaps even designated public relations spokespersons.

A list of homes eligible for co-financing should be drawn and made public, so that no one can be turned down for obscure reasons (and avoiding the possibilities of kick-backs). Specific targets can be set, for example concentrating activities in different neighbourhoods in different years, so that the residents will apply pressure for implementation. The same for infrastructure improvement, public targets should be set, so that the mayor and regional government need successful implementation for their re-election strategies.

Regarding the finances, there is no convincing argument against obtaining outside or third-party financing for implementation for at least some of the activities. Indeed, it will probably be of vital importance to identify such external funding sources. For restoration of local places of worship, local funds can probably be raised, and local residents will contribute 50% to the housing upgrading. Infrastructure requires government investment, and the 50% co-financing could be supplied by aid money, or by accessing HUDCO funds.

HUDCO, the Housing and Urban Development Corporation, is an Enterprise of the Government of India. Its objectives include:[62]

- To provide long-term finance for construction of houses for residential purposes in urban and rural areas and finance or undertake Housing and Urban infrastructure development programs in the country.
- To administer the monies received, from time to time, from the Government of India and other sources as grants or otherwise for the purpose of financing or undertaking housing and urban development programs in the country.
- To promote, establish, assist, collaborate and provide consultancy services for the projects of designing and planning of works relating to housing and Urban Development in India and abroad.

HUDCO is in principle able to provide loans to residents for upgrading, but only within a larger city- or area-wide framework, not on an individual basis.

Table 6.1 Logframe for implementing the action plan

Activity	Implemented by	Financed by	Timeframe
1 Infrastructure upgrading	Residents participate in planning and some aspects of implementation (social networks for doing public works), government implements, supervised by technical experts and NGOs	Part government, part external assistance, part tourism income, some small part raised from local community (connection fees etc.)	5-10 years, depends on systematic planning and solid concepts more than on implementation, financial contribution of tourism income part should increase with time
2 Rehabilitation of housing	Residents involved in planning and implementation, technical experts and NGOs supervise.	Part government, part external assistance, part tourism income, up to 50% contributed by residents	10-15 years to reach all buildings in old town, if prioritization is possible, in five years two central areas could be rehabilitated

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[62] http://hudco.nic.in, 3.01.2006.

3 Monuments preservation	Technical experts and NGOs coordinate, residents participate; local opinion leaders organized in religious associations become important public supporters of project.	Part government, part external assistance, part tourism income (tickets), 50% through local community and religious groups	5-10 years minimum for all major monuments (including defensive structures on hill and smaller shrines). In five years the four most important religious monuments could be restored, external assistance should be phased out in favour of local funds
4 Creating jobs through involvement of local artisans	Technical experts and NGOs supervise that they are hired on preferential basis, job application must be transparent, contractors should be excluded from the project as much as possible because of the existence of corruption networks.	As part of monument and housing rehabilitation, same as 2 and 3, but more external assistance (and tourism income) to finance training schemes etc.	External assistance should be phased out after 5 years so that artisans' involvement is paid by local funds or subsidized by locally-raised tourism income

6.5 Pilot activities

In 2003-2004, THF organized social surveys in Leh that now provide the basis for structuring a management plan. Together with local partner L.O.T.I., THF also implemented pilot activities that yield important results for tackling technical aspects of urban management for Leh. The local Ladakh autonomy government have committed themselves to a partnership with THF regarding the management of Leh via a 5-year Memorandum of Understanding, which has considerably simplified carrying out research and surveys on site.

6.5.1 Pilot building rehabilitation

In 2006, THF/L.O.T.I conducted an important pilot rehabilitation of a residential building in Leh, the Hor Yarkandi House. This was built in the first half of the Twentieth century by a trader from the Yarkand region in China, who married locally and never returned to China. The building is located in the Stagopilok neighbourhood, next to

one of the old entrance gates in form of a Buddhist *stupa*. In the 1940s a fourth floor was added to the building, making it higher than the nearby *stupa* gate. According to local beliefs, this would bring bad luck to the family. After three members of the family died under mysterious circumstances one after the other, the family abandoned the house and moved to another house nearby. After almost three decades of being vacant, the family applied to join the pilot co-financing program for building rehabilitation in the old town in late 2005. The Hor Yarkandi House stands both for the qualities and deficits of the traditional architecture. Despite being derelict for so long, the house was structurally very sound. The composting toilet system was ready for use. But the roof was leaking, and the interior surfaces of polished mud plaster had become badly eroded, in effect having turned to dust.

The building rehabilitation set itself several tasks:
a) Improve the roof and parapet to withstand rain – this was achieved by adding a layer of pure clay to the roof, which expands when exposed to water, in effect forming a layer that would let no water through. The parapet was stabilized by mixing 10% cement with the traditional mud mix, and slate stones were added for further stability.
b) Improve floor durability – this was achieved by mixing apricot juice (one of Ladakh's main agricultural products) with the mud, and the final layer was stamped and further impregnated with oil.
c) Protect bathroom and kitchen space from water damage – this was achieved by using concrete for the bathroom floor and for construction of a sink facility, both of which were fitted with drainage pipes leading to the drainage channel in the street outside.
d) Improving the toilet composting system – the composting vault was protected from seepage by a layer of reinforced concrete.

The remaining work was carried out with traditional materials and technologies – settlement in the internal timber frame was corrected, wall damage repaired with mud bricks and mud mortar. The controversial fourth floor was not rebuilt, making the building conform to local traditions. The owner provided 50% of the funding, and the building was completed to the owner's satisfaction in October 2006. To further increase the liveability of traditional homes, ways to further improve emptying of the

composting toilets should be investigated. Trying out different mixes for wall plaster, flooring and roofing should be encouraged.

The project has shown that it is feasible to rehabilitate traditional Leh houses. Local technologies and local artisans were used, and improvements were developed on the basis of locally available materials.

Illustration 6.1 Pilot housing rehabilitation

Hor Yarkandi House
A mid-20th century house located on Stagopilok alley, rehabilitated in 2006 with 50% co-financing by the owner. Intervention included structural repairs, reconstruction of collapsed top floor and improvement of bathroom and drainage facilities.
From left: ground floor plan showing composting vault and store rooms (THF), section before project (THF), mason Hanupa Dorje at work (THF, 8.2006), north elevation (author, 9.2006).

Source: THF and author.

6.5.2 Pilot Monument restoration

In 2005 the caretaker monk of the Red Maitreya temple, the venerable Ngawang Tsering, came to the local THF/L.O.T.I. office requesting assistance to repair the leaking roof. The Red Maitreya temple is an important landmark of old Leh, and assistance was provided. The initial investigation yielded the conclusion that the roof and timber frame were in reasonable condition, and only required little work to stop further roof leaks. However, underneath a coat of whitewash applied in the 1950s, historic wall-paintings were discovered. Since there are no local painting restorers in

Ladakh, THF worked together with a Romanian restorer and the Department of Restoration of the University of Applied Sciences (Technische Fachhochschule) Erfurt. In a six-month campaign in 2006, the paintings on the west wall were successfully recovered and stabilized. They are now thought to date to the founding period in the early 15th century. The completion of the project was celebrated by many local Buddhists. The project also provided basic training for two local Ladakhis in restoration, the first-ever Ladakhis to specialize in this field. By restoring a public monument, this project has demonstrated that things are improving in the old town to the general public. Perhaps more important, the project ha also begun to build up local capacity and skills which previously were not available, thus contributing to the sustainability of conservation efforts.

Illustration 6.2 Pilot monument restoration

Red Maitreya Temple
This 15th century Buddhist temple is one of the oldest and most visible monuments of Leh. Intervention including restoring two walls of original murals and roof repairs.
From left: ground floor plan (THF), south elevation (THF), FH Erfurt conservation student Hannah Pohle stabilizing historic murals (FH Erfurt 8.2006), west and north walls with conserved paintings (author, 9.2006).

Source: THF, FH Erfurt and author.

6.5.3 Pilot infrastructure improvement

As has been outlined above, infrastructure improvement for old Leh needs a comprehensive planning framework. However, pilot activities can also help to identify

adequate solutions and methods of implementation. Following the model of the Lhasa old town conservation project,[63] a model rehabilitation neighbourhood was created. It was chosen on the base of public consultation as the area of the old town that had both a very active and ready-to-contribute community, and preserved a number of important buildings. Moreover, being located around one of the historic stupa entrance gates assured that visitors and other residents of the old town would be able to easily see the work being done. The chosen neighbourhood was the Stagopilok alley. The local area leader, Mr. Namgyal, organized several community meetings. Asked to identify the biggest problem in the area, the community unanimously cited the lack of a drainage channel. Grey water was simply poured into the unpaved alley, turning much of the mud floor into a foul-smelling puddle of waste water during the summer season. Together with a professional engineer, the community chose to help building a concrete drainage channel to be covered with removable metal grilles. The metal grilles would prevent household waste to block the drainage. The alley would be paved with slate stones, a traditional Tibetan paving method. The design was submitted to the government together with a request to build a soak pit at the end of the alley. The government agreed, and the residents began to dig a channel. The building of the drainage channel was then undertaken by skilled labour, paid by donor money. When the work had been almost completed, there was still no soak pit at the end, leading to tensions within the community. Those living at the lower end of the alley feared that their homes would now be flooded with other people's wastewater. The tensions were aggravated by the fact that two different religious communities lived at the different ends of the alley. However, during a new community meeting it was unanimously acknowledged that the problem lay with the failure of the government to build the soakpit as promised. Soakpits are commonly used in Ladakh to deal with grey water, and since the drinking water comes from higher up mountain springs, they are an acceptable solution. The community meeting decided that members of every family living in the area should go to the government to petition for immediate action. The government leaders (the District Commissioner, the CEC and the head of the municipality) all were easily approached as they have regular consultation hours. They suggested holding a meeting on site the next day. Even though some residents greeted this with cynicism, the leaders came and there was a huge on site meeting with 40 residents arguing their case. The head of the municipality at the time, Dr. Dawa Lonpo, promised to start building the soakpit as

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[63] See Alexander & De Azevedo 1998.

soon as possible. Miraculously, the next morning government bulldozers began excavating the soakpit the very next morning. This proved the power of the organized community. The project was completed in late 2005, the alleyway paved and the hygienic conditions have improved considerably. The design and the method of organizing the project can be used to develop a larger plan for Leh.

Illustration 6.3 Pilot infrastructure improvement work

Stagopilok model conservation street
The Stagopilok pathway is one of the main entrance points for the old town. According to the social survey, residents were desperate for improvement of drainage and hygiene. THF/ L.O.T.I. let the community design the intervention.
From left: area plan (THF and author), community work, design of drain, area before project (April 2005) and after completion (September 2005) (all photos by author).

Source: author.

6.5.4 The Leh Heritage House

One recommendation that UNESCO often gives to emerging urban conservation projects is the establishment of a Heritage House. Thereby a suitable important historic landmark building should be converted into a publicly-accessible management office for the historic area, with displays of information about ongoing projects.[64] This demonstrates the feasibility and desirability of employing adaptive re-use for landmark buildings, and increases transparency (and therefore legitimacy) of urban conservation projects by providing a public access point.

In Leh, THF/L.O.T.I. persuaded Sankar monastery to make available a small and abandoned building in the old town that they owned as Heritage House. The house was built around five huge standing Buddha images carved in stone, and for decades was the residence of the monk caretaker of the nearby White Maitreya temple. However, when management of this temple was passed from Sankar monastery to the Goba family, Sankar monastery gave up the house. The monastery planned to eventually demolish the building, which is certainly over a 100 years old, and to build several shops on the site which could be rented out and so provide additional income to the monastery. Because of its unusual history, its prominent position on the Stalam road leading from the main bazaar through the old town up to the Leh palace, and its good state of preservation, this was a prime choice for a Heritage House. Work on the Sankar House began in April 2002. The two-storey house was more or less gutted, meaning that the division walls of the upper floor were demolished in order to create one large room instead of four small bed rooms. On the ground floor, the shrine room containing the Buddha images was left unchanged by the plaster was renewed and access to this room from the street was improved when one of the two stairways were removed. The artisans and architects involved had wondered why such a small house had two access stairs and four rooms on the upper floor, each of which was barely big enough for a bed. Roof, parapet and internal timber frame were renewed. The heritage house opened in September 2006 with an exhibition of paintings by local neighbourhood artist Gelek Goba (whose family took over management of the White Maitreya from the monk who once lived in the Sankar House). Many people from the neighbourhood came to the opening, music was played and the event was generally judged a success. For 2007, it is planned to

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[64] One of the better-known Heritage Houses is the one established in Luang Prabang in 1999 on the initiative of the World Heritage Center and French Technical Assistance to Laos. The Heritage House in Hoi An regularly hosts exhibitions about the old town of Hoi An.

alternate exhibitions by local artists with a semi-permanent exhibition about the history, culture and architecture of Leh.

6.5.5 UNESCO evaluation of the pilot work

The THF/L.O.T.I. Leh project received a UNESCO award in 2006. The UNESCO committee wrote:

Box 6.1: UNESCO Evaluation of the Leh Old Town Project

This small-scale project has catalyzed a conservation and urban rehabilitation movement in the ancient capital of Ladakh by successfully undertaking the pilot restoration of a residential neighbourhood which includes a range of building typologies. By conducting a detailed social survey alongside a conservation inventory, the needs of the population were addressed in an integrated way.
Through low-cost restoration using indigenous knowledge, skills and materials, it has demonstrated the feasibility for residents and authorities to upgrade historic quarters for modern living. Training of local workers in all aspects of the work, even in mural cleaning and stabilization, lays the foundation for the continued empowerment of the community. Contributions by homeowners and the municipal government to the conservation of private houses and public infrastructure, respectively, ensure a local investment to the work. The spin-off effects of the project are evident, with expressions of interest from other homeowners and the local government to continue with additional works to conserve other heritage structures in the Leh old town.

Source: Letter from UNESCO Bangkok Office, Office of the Regional Advisor for Culture in Asia and the Pacific, Ref.: 143.8/HA/CA422, Subject: 2006 UNESCO Asia-Winning Entry

6.6 Learning from other cities in Asia

Experience has shown that it is possible to turn around a decaying town comparatively fast if the local residents benefit from the work. If the residents see that conservation activities at least in part improve their living conditions, they will support such a project. This was the experience made in Bhaktapur in 1979. The Kathmandu valley has since provided the world with both successful (BDP) and disastrous examples of development (pollution, disintegration of social fabric, loss of the majority of historic structures in Kathmandu city). The question is whether Leh is fated to emulate either. However, Leh is likely never to receive the attention and funding made available to

Bhaktapur, but it is also not subject to the particular pressures in Kathmandu, the capital of Nepal.

Three cases of recent developments in the region significant for Leh have been identified: Lhasa in Tibet, Lijiang in China and Luang Prabang in Laos DPR.

6.6.1 Lhasa

Lhasa in the mid-1980s was a mirror-image of Leh, comparable in size, architecture, culture and status of local infrastructure. Since then Lhasa has consequently followed a certain path of development. Without the least element of local participation, the central government has built up Lhasa so that today it has 20 times the population and 15 times the size it had in 1980. More than 50% of the permanent residents are Chinese who migrated there in the 1990s. 90% of all historic buildings were demolished by the government between 1985 and 2000.[65] Lhasa dumps its waste on open landfills located on the outskirts of the city, and already suffers from air pollution. Lhasa has lost most of its cultural characteristics, most of its tangible and intangible heritage and most of its identity. Tibetan residents are disenfranchised from the political process, and suffer from unemployment. In 2003 the UNESCO took the unusual step of urging the Chinese government to review its development policies for Lhasa.

Box 6.2: UNESCO requests Review of Lhasa Urban Development Policy

> *Geneva, 14 August - A Committee monitoring the implementation of the UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage has urged the Chinese authorities to review its urban development plan for Lhasa, the Tibetan capital. The decision was taken during the 27th session of the UNESCO s world Heritage Committee held in Paris from 30 June to 5 July this year. According to that decision, the Committee made a series of recommendations to the Chinese authorities to mitigate the negative impact on the World Heritage value of this property caused by development pressures and called for a national policy to protect all remaining historic traditional buildings in Lhasa.[66]*

Source: News Update 14 August 2006, Tibet Bureau Geneva.

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[65] See Alexander and Azevedo 1998, and www.tibetheritagefund.org.
[66] News Update 14 August 2006, Tibet Bureau, Geneva.

Illustration 6.4 Demolition of historic building stock in Lhasa

*Demolition of Tromzikhang Palace, former residence of the Sixth Dalai Lama,
and surrounding historic neighbourhood in central Lhasa, photo author 1997.*

In order to develop Lhasa as a tourist destination, with the aim to increase tourist numbers to 10 million annually by 2010,[67] the government has modified its development policy. As a sob to the environment, plastic bags have been banned (a policy pioneered by Leh). By order of the government, modern buildings are decorated with some Tibetan designs to enhance "the Tibetan flavour of the city", and the Buddhist monasteries of Sera and Drepung, as well as the Jokhang temple, have seen repairs and a new tourism-oriented management. However, these measures have met with local criticism and lack community participation. They are likely to give parts of Lhasa a theme-park atmosphere without producing a significant shift in strategy similar to the one advocated by this paper for Leh.

Because of the different political circumstances, Leh will probably never emulate the recent developments of Lhasa. Nevertheless, the speed and scale of the change that today separates two cities that were very similar 20 years ago is worth considering. The main lesson for Leh is that community participation is necessary to ensure that development furthers the interest of the local population. Ladakh's democratic institutions, the local NGOs and the community groups can protect Leh from a similar fate.

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[67] BBC news bulletin December 26 2006.

6.6.2 Lijiang

Lijiang is an ancient trading town in today's Yunnan Province in South-western China. It was an important staging point for the tea trade between China and Tibet. Home to the Naxi nationality, who have their own distinct language and alphabet, Lijiang was placed already in the 1980s under national protection as one of China's historic cities. In 1997 it was inscribed on the UNESCO World Heritage List. Since then the town has experienced a massive tourist boom, and is now annually visited by 3 million tourists (the majority of which are Chinese).

Ignoring UNESCO recommendations,[68] the government has adopted a policy of turning Lijiang into a tourist city. The local fresh market in the centre of town was moved out of Lijiang, and it has become forbidden to sell non-tourist items in the old town. Residents cannot apply for assistance for restoring or maintaining their homes, but they are also not allowed to undertake any repairs themselves. As a result of these policies, most original residents have moved to newly-constructed satellite towns. The intangible heritage has almost disappeared (the local Naxi language and alphabet are also no longer taught in schools). In effect, Lijiang has become a tourist theme park.[69]

The residents have made some financial gains from renting out their old homes to Chinese souvenir sellers (selling souvenirs of which 80% are made outside of the Lijiang region), but their life-style has completely changed and their culture disappeared.

Lijiang shows the danger of focusing on a strategy that promotes tourism above all else. Worryingly, in Leh some local politicians have also floated the idea to turn old Leh into a tourist zone by relocating all the residents elsewhere. This would be the end of the local culture, as in the case of Lijiang.

The main lesson for Leh is that tourism should not be seen as the unique factor of salvation. Instead, tourism must be controlled, and balanced with other economic and development strategies.

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[68] For limitations of the Lijiang approach see Duang 2000, 15-19; for recommendations see Lijiang Reformulated Action Plan, www.unescobkk.org/index.php?id=2115 .
[69] Alexander & Leonhardt 2006, also interview November 2006 with Ms Heather Peters, UNESCO Bangkok, who has been monitoring the development of Lijiang.

6.6.3 Luang Prabang

The Democratic People's Republic of Laos shares some similarities with Ladakh and Tibet: a sparsely populated land (only 3 million inhabitants), home to a unique Buddhist culture that has been preserved partly due to the difficult mountainous terrain. The ancient (but not current) capital of Luang Prabang dates back to the 14th century, and was inscribed as World Heritage site in 1995. The numbers of international tourists increase year by year; the last available number is 600,000 in 2003. The town is small, it has only 16,000 inhabitants, and most sites can be reached by foot or on bicycle.[70]

Luang Prabang's World Heritage application came in the form of an impressive six-volume document that included an inventory of historic structures and a management plan.[71] The old customs house on the tip of the peninsula on which LP is located was converted into a Heritage House (known locally as *La Maison du Patrimoine*). From here restoration and infrastructure improvement projects are planned and implemented. France and the European Union have made funds available.

Residents complain that the entire heritage management process is too monument-oriented, and that it offers no benefits for owners of simple or poor houses.[72] Only architecturally important houses are eligible for government assistance, this excludes most of the buildings of low-income residents. This encourages gentrification: low-income families cannot raise funds to improve their homes and so prefer to sell their homes and land to rich outsiders. There is no (or only very limited) local participation in the management process.
Even sources within UNESCO say that the management plan completely lacks any mention of the intangible heritage, so that there are no mechanisms to preserve the local culture.[73]

Luang Prabang is a typical example for the Monument-type approach to conservation. This approach aims to preserve historic monuments, but tends to exclude residents. Such an approach cannot reach the goals set in the first chapter for the management

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[70] See UNESCO 2004, 5-8.
[71] Plan de Sauvegarde et de Mise en Valeur de Luang Prabang
[72] Summarized after Alexander & Leonhardt 2006 (3).
[73] Interview with Rik Ponne, UNESCO Bangkok, who is an expert on Luang Prabang and speaks the local language, 7.12.2006.

of Leh. The technical quality of conservation work, and the efficiency with which funds have been raised can be emulated by other aspiring historic cities. But Leh needs a more holistic management plan based on participation and inclusion.

6.7 Conclusion chapter 6

This chapter has seen arguments that a local NGO should become the driving force for all serious efforts aimed at reversing the current negative development trends identified in the old town of Leh.

There have been a number of pilot activities that have even attracted the attention of UNESCO. These activities are important, but without an overall management framework, their results will be only partly sustainable. Therefore, cooperation and communication between the actors already engaged in pilot activities, the various government agencies and the wider community, including all the other actors is vital.

Proposals have been presented regarding implementation of the strategies and activities identified in chapter 5. It is further advocated that an action plan should be launched, aimed at addressing the major problems afflicting the old town by way of infrastructure upgrading and housing rehabilitation. By bringing immediate benefits to local residents, the community can be won over to support the strategies needed to tackle the complex issues at the heart of sustainable management. Lessons from Nepal and pilot activities carried out in Leh point to the way in which such an action program could be organized and implemented. The pilot activities should continue as part of the action plan, within the planning framework that is in progress of being developed. This should be communicated to the main actors, and also made public to the wider resident community of Leh.

Comparisons with recent events in other heritage cities of comparable scale has shown that community participation and transparency are the keys to sustainable urban management, and that tourism can be a great danger to local culture.

7 Assessment of alternative development scenarios

In order to develop the structure for a management plan for the Leh heritage zone, several questions were raised in the first chapter. The heritage value of Leh has been measured by applying the UNESCO criteria for World Heritage listing. The experience of comparable cities with management of resources and coping with tourism has been considered, particularly those of Bhaktapur, Lhasa, Lijiang and Luang Prabang? The main threats and problems that Leh currently faces have been identified, and strategies for dealing with these issues have been developed. The technical and logistical requirements for necessary interventions have been discussed. Now it remains to be discussed how important the implementation of the strategies under a management plan is. What could be expected if nothing would be implemented? What could be expected if is there is only partial implementation? How does this compare to a reasonably complete implementation? In order to demonstrate the effects the choice of development path that must be taken by the local stakeholders will have, different scenarios will be discussed. There are two primary scenarios, "do nothing" (better known as "business as usual") and "do something", the latter in two varieties, partial and holistic implementation.

7.1 Scenario of expected results if there will be no intervention

If none (or negligibly few) of the activities proposed in chapters 5 and 6 are taken action, it is reasonable to assume that the old town will suffer from further decay. There will be an irreversible loss of historic structures if there is no intervention. The 55% of buildings that already are in poor or very poor condition will either collapse or be demolished and replaced by concrete frame structures in the next 5-10 years. This would be an irreversible change, and greatly reduce the attractiveness of Leh. Most remaining long-term residents would move out of the old town, turning the area into a ghetto for migrant workers with little public motivation for improving facilities there.
In the short to medium term, tourism numbers will increase on an annual basis. Peaking of tourist arrivals will coincide with urban and environmental degradation reaching a point of no return.

Without a planning framework, the city would continue to grow uncontrolled. Sprawl means a decline in the attractiveness of Leh, and brings with it environmental and organizational problems. Pollution and traffic congestion are some of these. If the water sources become encroached by residential construction, very serious consequences for the entire town can be expected. Without checks on pollution and waste management, and management of natural resources (including water), serious environmental decline can be expected. Valleys around Leh would become littered with garbage due to illegal dumping. Water levels will sink due to increased consumption by guesthouses, aggravating the present water shortage in poor areas of town. Agricultural production in the Leh valley will decline further. Leh would suffer from all the classical problems of rapidly growing cities in developing countries. The scale of the growth would be on a comparatively small scale, but the environment at an altitude of 3500m is also more fragile. Many of these issues are not entirely irreversible, and if they are not tackled soon, they could still be remedied at least partly in later years. But that would come at much greater economic and social costs. Local crafts would decline, and landless families and people not working in tourism-related industries would remain comparatively poor. Prices for land, water and even basic food items (due to decline of agriculture) would rise.

The example of Kathmandu shows that lack of urban management and uneven distribution of economic gains seem to be followed by political instability and an erosion of social fabric.

These consequences should not be taken lightly.

7.2 Scenario of results from a limited intervention

One scenario for a limited intervention that is likely to emerge is that government, local NGOs and donors agree on a short-term action plan aimed at managing some of the most urgent problems facing Leh. On the planning level, this would likely include a draft master plan document that leaves out many of the difficult details. As activities there would likely be some infrastructure investment and community-sponsored rehabilitation of major religious structures.

It is a common phenomenon that governments tend to shirk controversial or complex issues such as imposing a tourist tax, controlling tourist numbers. Without sufficient funding and access to technical expertise the government will find management of

both resources and waste difficult to achieve. Looking at the state of Indian cities in general, a limited intervention is indeed a very likely outcome.

The results of such an approach would be positive, particularly if the limited action plan would focus on the old town. Improvement of drainage, rehabilitation of a dozen residential buildings and restoration of two or three major monuments would stem the decline of the old town and increase its attractiveness (both for residents and tourists) in the short term. Some enlightened city officials could use the new planning framework to impose some kind of control on Leh's development.

The limitations of this approach are that the larger issues will continue to remain unchecked. Both modern and old town will continue to develop in undesirable ways, thereby jeopardizing any positive results achieved in the short term. Environmental decay and social disintegration can only be checked with a long-term holistic approach. If tourism is not controlled, certainly the most controversial issue on the agenda, serious social and environmental consequences can be expected.

In Nepal, the well-managed and immaculately preserved city of Bhaktapur stands out like an isolated island in the Kathmandu valley, which suffers from severe pollution of land, water and air. In Leh, a limited approach could conceivably lead to the result that the old town would be preserved and well-managed, while the rest of the valley continues to decay. Or the old town could become a slum inhabited by migrants, without water supply and drainage, while the government improves management of the modern residential areas where voters are concentrated.

7.3 Scenario of results from a holistic implementation

Holistic implementation would consist of completion of a strategic framework plan with public participation and cooperation of qualified technical experts, and implementation of an action program.

A planning framework in the shape of a master plan officially adopted by the authorities still does not guarantee that growth will be controlled, but it is the best strategy to achieve this. Since India has a functioning legal system, concerned citizens and NGOs could sue violators (for example in cases of serious pollution). Mayors can be held to account during election times. The master plan will also make it possible for

authorities, NGOs, technical experts and donor agencies to tackle management of some of the most serious environmental issues.

If the action plan is implemented on a large enough scale, and in a transparent fashion, there will be immediate benefits to the residents when they see their infrastructure facilities improved. This will make it possible to win over the population for some of the more controversial policies, such as a tourist tax, and perhaps increased costs for water consumption and garbage disposal.

Further loss of historic structures can be avoided because of the building rehabilitation program, and the authenticity of the old town can be preserved. The original aims can be realized. Decay of the old town, of Leh's environment and resources can be successfully reversed.

The approach would also satisfy the ICOMOS charter for the protection of historic cities, the demands made on the Bhaktapur Development Project, and many of the recommendations made by UNESCO case study groups. Therefore the holistic approach can be regarded as the most satisfying both in theory and implementation.

7.4 Conclusion chapter 7

Management plans are very important tools, particularly if they provide a framework under which many actors can contribute to reach common goals.

However, there is always the danger that management plans remain dust-gathering sheets of paper. Therefore the proposed management plan for Leh contains an action plan with fixed time table and clearly-defined targets. Planning and implementation are based on maximized local participation and local ownership. Delegating too many tasks to technical experts and bureaucrats is being avoided.

If future urban management of Leh will follow the proposed structure, and include the action plan, all major issues raised by the local government (chapter 1), local people and technical experts (chapter 4) would be addressed.

If the action-plan is implemented, events will be set in motion that can turn around the city. This process can gain enough momentum so that it becomes self-sustainable after some time, as the example of Bhaktapur has shown.

8 Conclusions

The preceding chapters have demonstrated how a management plan for Leh has be structured and which main components it needs to contain, in order to address the major issues currently facing the town as named by the local government and further identified in chapter 4. Considerations of implementation have been satisfied by a discussion of expected results and limitations of urban management activities. Implementation should ideally be based on an action plan, which has been discussed under considerations of finances and practicality. The existence of a driving force has been identified as a key element. Finally, the urgent need for developing and implementing a management plan has been demonstrated by contrasting different development scenarios for the next 5-10 years.

It has also been demonstrated that the old town of Leh has "Universal Values" as per UNESCO definition, so it would be theoretically possible to list Leh as World Heritage site. However, as experience elsewhere in the region (Lijiang and Luang Prabang as discussed in chapter 6) has shown, this is very likely to greatly increase the numbers of incoming tourists. This would increase the pressure on Leh and aggravate the current problems of resource management and the environment, without offering too many benefits to the local communities in return. Financing models for sustainable urban management of Leh can be achieved also without World Heritage status, as has been demonstrated. The World Heritage system is very limited in its approach and not flexible enough to meet the demands of a small place like Leh. In Lijiang and Luang Prabang the UNESCO plans and guidelines have also been locally criticized as being too focused on monuments and townscape while leaving out the local people. The new UNESCO initiative on Indian Cities of Living Heritage is worth watching in this respect.

Nevertheless, the proposed management plan would make Leh conform to international guidelines for heritage management, particularly the ICOMOS guidelines for rehabilitation of historic cities and various UNESCO declarations.
The holistic approach prescribed here can be of value to other Himalayan towns, such as Lo Manthang in Nepal, and some smaller, still largely intact towns in Tibet. In fact given the difficulty in implementing such projects, and the fact that the Bhaktapur approach has not been replicated elsewhere (there has never again been comparable

funding and political commitment for such projects made available), management of Leh organized along the lines described above would in fact create an important example of people-centred urban conservation in Asia. Such an outcome particularly depends on whether the dynamism of recent positive developments can be upheld.

Thanks in part to modest scale of the town, the open and democratic local political system, the emergence of actors and interest constellations that have begun to tackle vital local problems and all the other considerations described in the preceding chapters, the prospects of making Leh a positive experience in integrated urban conservation and development against the odds are quite good.

Annex 1: Indian World Heritage Sites

- Agra Fort (1983)
- Ajanta Caves (1983)
- Ellora Caves (1983)
- Taj Mahal (1983)
- Group of Monuments at Mahabalipuram (1984)
- Sun Temple, Konârak (1984)
- Kaziranga National Park (1985)
- Keoladeo National Park (1985)
- Manas Wildlife Sanctuary (1985)
- Churches and Convents of Goa (1986)
- Fatehpur Sikri (1986)
- Group of Monuments at Hampi (1986)
- Khajuraho Group of Monuments (1986)
- Elephanta Caves (1987)
- Great Living Chola Temples (1987, 2004) 12
- Group of Monuments at Pattadakal (1987)
- Sundarbans National Park (1987)
- Nanda Devi and Valley of Flowers National Parks (1988, 2005)
- Buddhist Monuments at Sanchi (1989)
- Humayun's Tomb, Delhi (1993)
- Qutb Minar and its Monuments, Delhi (1993)
- Mountain Railways of India (1999, 2005) 13
- Mahabodhi Temple Complex at Bodh Gaya (2002)
- Rock Shelters of Bhimbetka (2003)
- Champaner-Pavagadh Archaeological Park (2004)
- Chhatrapati Shivaji Terminus (formerly Victoria Terminus) (2004)

Source: UNESCO website

Annex 2: Leh Historic Building Typology

Compiled by author based on work done for THF identifying historic buildings in Leh.

1 Defensive and Administrative Structures

1.1   Leh Palace

The former royal palace is Leh's most recognizable landmark. It has the status of a nationally protected monument, and is currently restored by the Archaeological Survey of India. The former royal family have reportedly sold the palace to the Indian government, and took all their possessions with them. The designated use of the building as a museum after restoration will be difficult to achieve if the royal family cannot be persuaded to provide some antique possessions on loan.

The palace was built around 1600, modelled on the Tibetan "dzong", a regional administrative headquarter. The Leh Palace has 9 stories, and is built in stone with some of Ladakh's finest masonry work.[74]

According to a story still widely circulating, the king was so impressed by the work of the chief mason that he had the mason's right hand cut off so that no one else would be able to build a palace rivalling that of the Ladakhi king. The mason went on to build another palace with his left hand for a rival local ruler in Rutok, Tibet.[75]

The palace is ably managed by the ASI, and therefore does not need to be taken into special account for an old town conservation project. The monument buffer zone around the palace includes three historic monasteries that do need to be included in conservation planning. The ASI has signalled that it is open to informal cooperation.


Leh palace and surrounding monument zone (2006 by author).

1.2   Tsemo tower

The Tsemo tower was built in the 15th century and extended in the 16th. It has five floors and is built with rammed earth, like most of Ladakh's early fortifications.[76] It is an important landmark and a national monument, under administration of the ASI. Its day-to-day management has been given to Chemrey monastery, which operates a Buddhist shrine inside the tower. During heavy rains in September 2006, the tower was damaged and suffered a collapse at the northern entrance area.

The Tsemo tower is located high above Leh; about a 30-minute climb; and any restoration would constitute a logistical challenge.
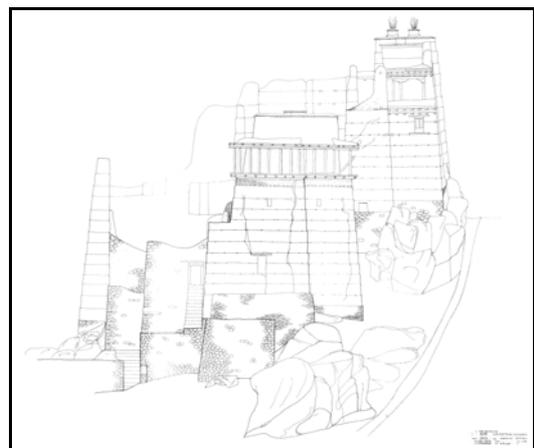
Tsemo tower, south elevation (2006 THF).

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[74] See Jest & Sanday 1982.
[75] Group of Ladakhi masons, personal communication 2004.
[76] Howard 1989 is the most comprehensive source on Ladakhi fortification architecture.

1.3   Remains of the old city walls

THF identified six sections of the 17th century rammed earth city walls, some of which have been incorporated into later residential buildings.

2   Religious Monuments

The majority of religious monuments in Leh are Buddhist monasteries and shrines. Ladakhi monasteries are generally typical examples of central Tibetan monastic architecture.[77] However, older sites in particular reflect the artistic influences of Buddhist Kashmir.[78] Kashmiri Buddhist artists have been responsible for the decoration of a number of major monuments in Ladakh in the 12th and 13th centuries. Their artistic influence prevailed until the 17th century, when the central Tibetan Gelukpa school of Buddhism provided a newly dominant stylistic influence.[79]

In total, there are nine Buddhist temples in old Leh, and two mosques. Two of these are historically of major importance, reflected in their design and location. Four of these are modest places of local worship. Two are given below as examples, the other two are located on the Tsemo Hill above the old town (Tsemo Maitreya Temple and Tsemo Gonkhang Protector Chapel). Inside the Leh Palace and the Tsemo tower there are single-room Buddhist chapels open to the public. The inventory includes the historic *stupa* gates and *stupa* monuments in Leh.

2.1   Major Monasteries

2.1.1 Gonpa Soma

The Gonpa Soma monastery was built in the 1840s, and is the youngest of the monuments in the palace vicinity. It is not built to any of the classical forms of Tibetan temples; instead, it is a sprawling building complex housing numerous shrines and residential rooms as well as a printing press for Buddhist texts. Gonpa Soma has a large open courtyard, which is used for the Ladakhi New Year celebrations. Many other public functions have been partly taken over by the new Tsuklakhang temple built in the 1950s in the Leh Main Bazaar area. Avoiding the steep climb up to the palace area, many Leh residents do not visit Gonpa Soma often and instead visit the Tsuklakhang on the important dates of the Buddhist calendar. As a result, Gonpa Soma has fallen somewhat into disrepair, with a single caretaker monk trying his best to look after the place. The walls of the courtyard have particularly fallen into disrepair. A proper restoration would be an important signal that things in old Leh are improving. Since the building is mainly for public use, donor funds could be used for the restoration. The local government promised a contribution of 1.5 lakh Rupees (ca. 3000 Euro).
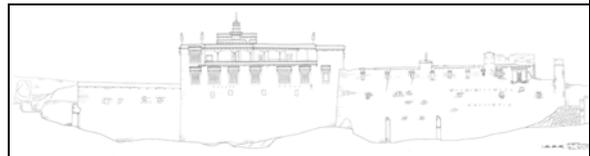
Gonpa Soma south elevation, (2006 A. Catanese/THF).

Gonpa Soma south elevation (2006 by author).

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[77] The history of the sites described is based on Gyalson 1995 and Francke 1999; Khosla 1979 is the standard source on Ladakhi monastic architecture.
[78] Shali 1993, 119-138 chronicles the development of Buddhist culture in Kashmir.
[79] Luczanits 2004, 119-126 describes the early development of Ladakhi religious art and architecture.

2.1.2 Chenrezi Lhakhang

The Chenrezi Lhakhang was built in the 17th century as main monastic assembly hall for Leh. It is built to a classical Tibetan monastery plan, with an assembly hall of 20 pillars in size, and a *sanctum* with restricted access. Like Gonpa Soma, its public functions have been partly taken over by the new Tsuklakhang in the main bazaar. As a result, even though the Chenrezi Lhakhang contains one of the biggest halls in old Leh, it is rarely used and falling into disrepair. A new use, for example as a centre for meditation courses for tourists, should be considered. Otherwise it will be difficult to finance the costly repair and maintenance.


Gonpa Soma, top: south elevation, right: west elevation with main entrance (both 2004 by author).

2.2 Smaller temples

2.2.1 The Red Maitreya Temple

Built in the 15th century, it contains the oldest preserved wall-paintings in Leh. Its prominent location close to the royal palace, making it part of the historic skyline of Leh, signifies that it probably served as royal temple for a time. The Red Maitreya temple's classical building plan was modified in the 1950s when the main hall was made smaller. Modest in size, the Red Maitreya temple nevertheless attracts a regular crowd of worshippers and contributes with its religious activities to the active religious life of Leh. THF is engaged in preservation of the wall-paintings since 2005. The Red Maitreya temple is an important public building that must be incorporated in conservation efforts.
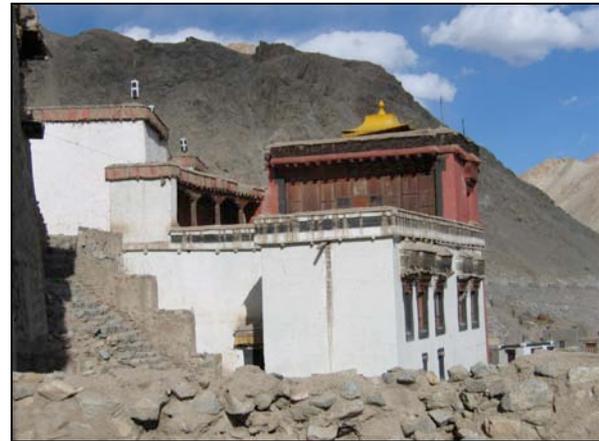
Red Maitreya, west elevation with entrance (2004 by author).

2.2.2 The White Maitreya Temple

This was built during the same time as the Red Maitreya temple, but on a much less prominent location. Serving Leh's residential community, the temple is difficult to find today, as it is located at the centre of a dense cluster of residential buildings. The White Maitreya temple's historic wall-paintings are not well-preserved. Its plan follows the classical examples of Tibetan Maitreya temples – a four pillar main hall with a portico on one side and a sanctum area on the other, where the large sitting Maitreya image is placed. The temple is managed by a lay family, and open to the public only on request. Its condition is fine, and no urgent intervention is required, but the roof is occasionally leaking.
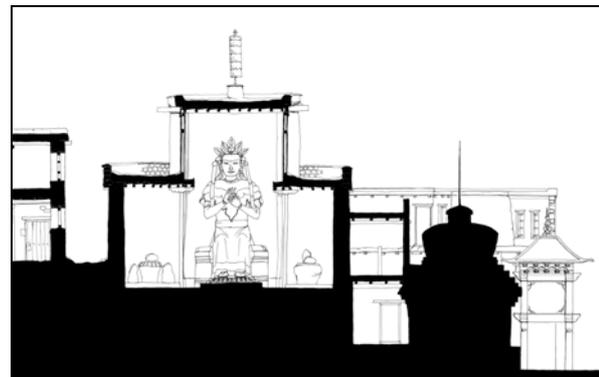
White Maitreya, section drawing (2005 T. Jaekle/ THF).

2.2.3 Private shrines

The Guru Lhakhang was founded around 1600 by 44 Buddhist families of Leh as a place for private worship. It is a simple, rectangular building with mud brick walls around a four-pillar interior timber frame. There are no windows, conform to the classical Tibetan design scheme for such chapels. In 2004, the roof was restored by THF, and some fragments of 17th century paintings have been preserved by German restorers. The Guru Lhakhang is part of the skyline of Leh, and must be incorporated into he conservation program. However, at present, the condition is fine and no urgent intervention is required.
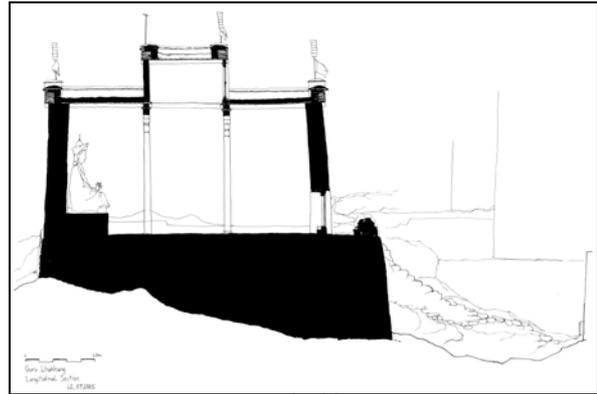
Guru Lhakhang, west-east section (2005 L. Gratz/THF).

2.2.4 Chapels inside other monuments

Inside both the Leh palace and the Tsemo tower are single-room chapels open to the public, serviced in each case by a single caretaker monk.

Chapel in the Leh palace (2004 by author).

2.2.5 *Stupa* monuments

A *stupa* is a container for relics, originally built to house the remains of the historic Buddha Sakyamuni after his cremation. They are built often on private initiative for gaining merit for the next life, and can be filled with relics of Buddhist saints, religious texts, Buddha images and other devotional items.[80] In Leh, they often take the form of gateways.
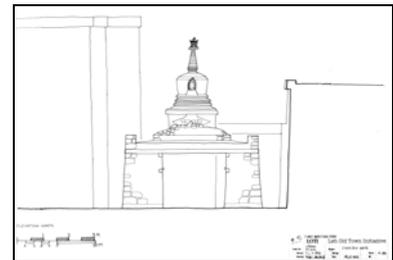
Stagopilok stupa gate (2004 T. Jaekle/THF).

2.3 Muslim places of worship

2.3.1 The Jama Masjid

This was founded around 1661 on an initiative of the Mughal emperor Aurangzeb. In the mid-1990s it was rebuilt in concrete. It is the largest structure in old Leh after the palace, and links the old town with the main bazaar area. Unfortunately, the 1990s reconstruction was out of scale. As a result, the mosque blocks the view of much of the old town from Main Bazaar. For the local Sunni community, it is the most important gathering point, and it also offers free showers for Muslim men. The mosque operators need to

Detail, Jama Masjid roof (2006 by author).

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[80] Snodgrass 1992 offers one of the most systematic discussion and up-to-date discussion of the *stupa* available in English. Khosla 1979, illustrations 166-173, also touches on the subject in the Ladakhi context. General reference must be made here to the works of the Italian Tibetologist Guiseppe Tucci, who repeatedly wrote about important Tibetan *stupa*-s and aspects of their symbolism and iconography.

be made part of the planning process for the old town, in order to check against any further expansions of the complex that would be detrimental to the visual integrity of the old town.	
2.3.3 The Chutarangtak women's mosque This is said to be almost 400 years old, but presently dilapidated and no longer in use. Members of the local Sunni community want to restore the site and reopen it; and are looking for assistance. The building preserves many historic architectural details, and professional assistance should be given to the project .	 *Chutarangtak mosque, south elevation (2006 A. Catanese/THF).*

3   Historic and traditional residential buildings

All the residential buildings in old Leh are built with the same technology: stone plinth, sometimes use of uncut stone for some walls, otherwise adobe mud bricks for most walls, built around a mostly undecorated interior timber frame. The ground floor is designed only for animals and storage, and generally has no or only very small windows. These rooms are cold and damp and thought unfit for human habitation. An important feature of traditional Leh houses is the winter kitchen. This has a sculpted and decorated clay stove in the centre, which is an important source of heating during the winter. Buddhist families have a shrine room on roof or top floor, locally known as the Choedkhang. Within the 189 buildings constituting the historic centre of Leh, several typologies can be identified.

3.1   Homes of the aristocracy and wealthy traders

These are strongly modelled on Lhasa houses of the Tibetan nobility. Their Leh counterparts have opulently decorated balconies, tracery windows and interior decorations such as wall-paintings and carvings on the timber frame. There are 27 buildings belonging to this category.

3.1.1 Munshi House This is one of the largest of the old Leh mansions, dating to the 18th century. Currently rented by an Indian NGO, it partly collapsed in 2006. The Munshi House should be urgently looked after.	*Munshi, south elevation (2004 by author).*
3.1.2 Lakruk House The Lakruk family have retained their historic political importance: the current Chief Executive Councillor of the local government comes from this family. Their ancestral home was extended in the early 20th century and since then has been meticulously preserved, making it one of the best-preserved historic structures in Leh. It can serve as a model for conservation.	 *Lakruk House, south elevation (2005 THF).*
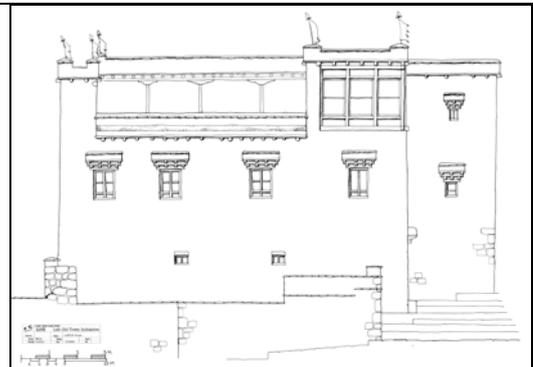
3.1.3 Shangara House

In the 19th and early 20th centuries, the Shangaras were prominent traders, travelling regularly to Lhasa. Their Leh home reflects the architectural preferences of old Lhasa. The house is in sound condition, but not well-maintained, even though some Shangara family members still live there. Both the family and the home should become involved in the conservation process.

Shangara house, south-west corner (2004 by author).

3.2 Homes of well-to-do traders and lower aristocracy

There are about 20 buildings that belong to this category, 3 of which are very dilapidated. Important examples include the Munchibhat house, the Nochung house and the Kamal Khan house. These houses all have excellent detailing, good façade designs and well-finished interiors.

3.2.1 Sofi House

The Sofi house is a two-storey dwelling by a Muslim trading family, built a little over a hundred years ago. With its wooden balcony and carved entrance gate, the house represents a blend of Tibetan and Kashmiri architectural traditions, and for this reason is one of the more important houses.

Sofi House, east Elevation (2004 by author).

3.3 Ordinary homes

Many houses in old Leh belonged to families who earned a living as farm workers, musicians or craftsmen. Their homes are generally very simple, without much detailing and rough, unpolished interiors. The majority of Leh houses, 126, belong to this category.

3.3.1 Hanupa House

A typical example for a humble residence, built to accommodate the servants of the Nochung house. Its ceilings are so low that a typical Western man could not stand upright inside, and its windows are tiny glass-less slits.

Hanupa house south elevation (2004 by author).

4 Modern residential buildings

So far, examples are concentrated along the edge between the old and modern town. They are built generally with concrete frame and infill of mud bricks or concrete bricks, often to a different scale than the historic buildings, which makes them stand out. Many have few Ladakhi characteristics, and could be found all over India. Local regulations stipulate that the windows have to follow traditional Ladakhi-Tibetan designs, this has produced varying results.

New buildings at the Leh old town Manekhang area (T. Jaekle 2004).

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